

OFFICIAL PROJECT BOOKLET

INNOVERSE 2026

GLOBAL PROJECT DIRECTORY

IDEA & INVENTION SECTION

184 ACCEPTED PROJECTS • 38 PARTICIPATING COUNTRIES

INTRODUCTION

IDEA & INVENTION SECTION

INNOVERSE 2026 brings together emerging inventors, researchers, students, educators, and innovation teams from across the world. This official project booklet presents the accepted entries in the Idea & Invention Section and reflects the diversity of ideas, disciplines, and practical solutions contributed by participating countries.

The projects featured in these pages address real needs across health, engineering, environmental sustainability, education, agriculture, digital technologies, smart systems, and other fields. Each entry is presented through a consistent structure containing the project code, inventor or team members, invention title, affiliated institution where applicable, and a concise abstract. Together, these projects demonstrate how creativity can be transformed into meaningful concepts, prototypes, and solutions with the potential to shape a better future.

For the 2026 edition, more than 530 submissions were received and carefully reviewed. This booklet documents 184 accepted projects representing 38 participating countries, highlighting the international reach of the program and the shared commitment of its participants to responsible innovation, scientific curiosity, and constructive collaboration.

The organizing committee extends its sincere appreciation to every inventor, mentor, institution, evaluator, delegate, and partner whose dedication made this edition possible. We hope this collection not only records achievement, but also encourages new partnerships, future research, and continued progress beyond the event.

STATISTICAL SCOPE

The figures stated above relate exclusively to the Idea & Invention Section. AI Challenges and Web Challenges are not included in these statistics.

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IDEA & INVENTION STATISTICAL REPORT

SCOPE: IDEA & INVENTION SECTION ONLY

AI Challenges and Web Challenges are not included in any figure presented on this page.

RECEIVED

530

ACCEPTED

184

ACCEPTANCE

34.7%

COUNTRIES

38

TOP DELEGATION

49 USA

SUBMISSION FUNNEL

Idea & Invention only

530

RECEIVED

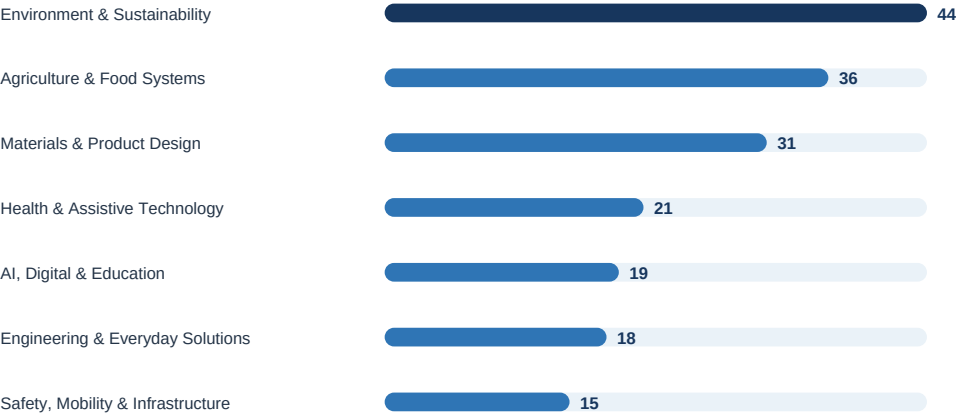
184

ACCEPTED

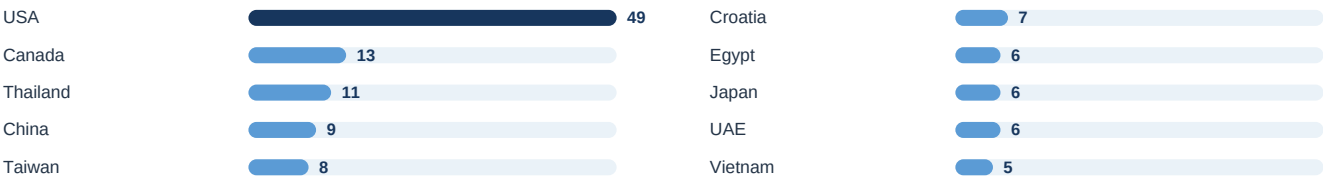
34.7% acceptance rate

ACCEPTED PROJECTS BY CATEGORY

Primary thematic category assigned from project titles



LEADING COUNTRIES BY ACCEPTED PROJECTS



COMPLETE COUNTRY DATA

ACCEPTED PROJECTS

Algeria	3	Iran	4	Romania	2
Australia	3	Italy	2	Singapore	2
Bangladesh	4	Japan	6	Spain	2
Belgium	2	Korea	4	Sweden	3
Bosnia and Herzegovina	2	Kuwait	1	Taiwan	8
Cambodia	2	Macao	2	Thailand	11
Canada	13	Malaysia	3	Tunisia	2
China	9	Mexico	3	Ukraine	1
Croatia	7	New Zealand	2	United Arab Emirates	6
Egypt	6	Oman	1	United States	49
Estonia	2	Philippines	3	Vietnam	5
Hong Kong	3	Poland	1	Yemen	2
Indonesia	2	Qatar	1		

IMPORTANT: This report excludes all entries submitted to AI Challenges and Web Challenges.

Category analysis is title-based; multidisciplinary projects are assigned to one primary category.

Idea & Invention Section | 530 received | 184 accepted

TABLE OF CONTENTS

COUNTRY	PAGE	COUNTRY	PAGE
ALGERIA	2	MALAYSIA	32
AUSTRALIA	3	MEXICO	34
BANGLADESH	4	NEW ZEALAND	35
BELGIUM	6	OMAN	36
BOSNIA AND HERZEGOVINA	7	PHILIPPINES	36
CAMBODIA	8	POLAND	37
CANADA	9	QATAR	38
CHINA	14	ROMANIA	38
CROATIA	18	SINGAPORE	39
EGYPT	20	SPAIN	40
ESTONIA	22	SWEDEN	41
HONG KONG	23	TAIWAN	42
INDONESIA	24	THAILAND	45
IRAN	25	TUNISIA	49
ITALY	26	UKRAINE	49
JAPAN	27	UNITED ARAB EMIRATES	50
KOREA	30	UNITED STATES	52
KUWAIT	31	VIETNAM	72
MACAO	32	YEMEN	73

ALGERIA

DZ.1.

INVENTORS Lina Bensalem

INVENTION Passive Night-Cooling Storage Box for Fresh Produce

INSTITUTION Tassili Applied Design Workshop

ABSTRACT Small growers often lose part of their harvest before it reaches a local market because reliable cold storage is unavailable. This project proposes a lightweight produce box that releases heat after sunset by combining a radiative upper panel with removable salt-hydrate packs. During the day, an insulated liner slows temperature gain; at night, the lid opens into a tilted position and the packs recharge without electricity. Air channels between stacked trays reduce moisture accumulation and help prevent bruising. Early tests with tomatoes and leafy vegetables showed that the interior remained noticeably cooler than an ordinary plastic crate through the following morning. The box can be assembled from locally obtainable sheets, fabric hinges, and replaceable cooling packs, making repair straightforward. The design is intended for short-term storage at farms, roadside stalls, and collection points rather than as a substitute for refrigerated transport.

DZ.2.

INVENTORS Samir Ouahmed, Yasmine Kaci, Riad Bellounis

INVENTION Sand-Tolerant Drip Emitter with a Self-Flushing Chamber

INSTITUTION

ABSTRACT Fine mineral particles can quickly obstruct low-cost irrigation emitters, leading to uneven watering and frequent replacement. The proposed emitter contains a flexible inner diaphragm and a small spiral chamber that keeps particles moving while water is flowing. When pressure drops at the end of an irrigation cycle, the diaphragm briefly reverses direction and pushes settled material toward a wider discharge opening. The mechanism uses no electronics and can be clipped apart for inspection. Prototype units were evaluated with water containing different mixtures of fine sand and organic residue. Flow rates remained more

	consistent than those of simple pinhole emitters, particularly after repeated start-stop cycles. Because the body can be injection-molded in two pieces, the concept may be suitable for small irrigation networks where filtration and maintenance capacity are limited.
DZ.3.	
INVENTORS	Nour El Houari, Walid Meziane
INVENTION	Reusable Shade Clip for Young Orchard Trees
INSTITUTION	Atlas Grove Makers Unit
ABSTRACT	Newly planted trees can suffer from intense afternoon sun, but tying shade fabric directly to a trunk may damage bark. This clip holds a small curved screen away from the trunk and rotates gradually around a ground stake as the tree grows. Breakaway tabs release the screen during unusually strong wind. The clip can be adjusted without removing the stake and accepts fabric scraps of different thicknesses. Nursery trials examined shadow position, bark clearance, and resistance to repeated opening.

AUSTRALIA

AU.1.	
INVENTORS	Tahlia Mercer, Owen Pritchard
INVENTION	Clip-On Wildlife Escape Ramp for Urban Drainage Pits
INSTITUTION	Southern Creek Community Engineering Lab
ABSTRACT	Open drainage pits and roadside sumps can trap frogs, lizards, and small mammals after rain. This invention is a modular escape ramp that clips onto existing grates without drilling or permanent modification. A textured surface provides grip when wet, while staggered side openings allow smaller animals to enter the ramp from different water levels. The ramp flexes under debris loads and returns to its original position, reducing the chance of blocking normal drainage. Sections can be joined to suit pits of varying depth, and a bright inspection marker lets maintenance crews confirm placement from above. Field mock-ups using different wall angles were used to refine the tread spacing and attachment mechanism. The device is designed as a low-cost retrofit for parks, residential developments, school grounds, and temporary

	construction drainage.
AU.2.	
INVENTORS	Mira Kwon, Declan Rowe, Priya Nair, Felix Hart
INVENTION	Heat-Aware School Bag Insert for Protecting Lunches and Medication
INSTITUTION	
ABSTRACT	Items carried in a school bag can become dangerously warm when the bag is left outdoors or inside a vehicle. The proposed insert forms a removable insulated compartment with a simple temperature-history indicator. Instead of displaying only the current temperature, a wax-based strip changes pattern after prolonged exposure above a selected threshold, helping a student or caregiver decide whether the contents should still be used. A reflective folding flap limits radiant heat, and two slim phase-change sleeves can be frozen and replaced independently. The compartment fits common backpacks and can be washed separately. Trials with simulated lunches and medicine containers compared several flap positions, sleeve arrangements, and bag colors. The design emphasizes easy interpretation, low weight, and materials that can be replaced without discarding the complete insert.
AU.3.	
INVENTORS	Keira Moss
INVENTION	Bushwalk Water Bottle Cap with Sediment Settling Pocket
INSTITUTION	
ABSTRACT	Shaking a bottle filled from a treated outdoor source can keep harmless sediment suspended and unpleasant to drink. This cap includes a small side pocket where heavier particles settle while the user carries the bottle upright. The drinking channel draws water from above the pocket and can be opened completely for cleaning. A transparent window shows accumulated material. The cap is not a purifier and is intended only to improve handling after water has already been made safe.
BANGLADESH	
BD.1.	

INVENTORS	Nafisa Tabassum, Rafiul Karim, Towhid Anwar, Mrityika Saha, Zayan Hossain
INVENTION	Floating Seedling Nursery with Adjustable Root Protection
INSTITUTION	Delta Field Learning Centre
ABSTRACT	Seasonal flooding can interrupt vegetable production by washing away young plants before they are ready for transplantation. This floating nursery uses a frame made from sealed natural-fiber tubes and a replaceable mesh bed that supports individual seedling cups. Beneath each cup, a sliding collar controls how far roots extend into the water. The collar is kept nearly closed during the first growth stage and opened gradually as the plant becomes stronger, reducing root tangling and damage during transport. A perimeter skirt calms small waves and collects floating plant debris that can later be composted. The platform can be tied to a post or guided along a short rope as water levels change. The prototype focuses on simple assembly, repair with hand tools, and compatibility with soil, coco fiber, or other available growing media.
BD.2.	
INVENTORS	Arman Kabir
INVENTION	Foot-Powered Clay Mixer for Small Pottery Workshops
INSTITUTION	
ABSTRACT	Preparing clay by hand is repetitive and physically demanding, yet electric mixers can be too expensive for a small workshop. This compact machine transfers motion from a wide foot pedal to two slow counter-rotating paddles through a protected chain drive. The user can work while seated and reverse the paddle direction by moving a simple selector lever. A removable mixing bowl locks into place without tools, allowing batches to be carried directly to a worktable. The paddle edges are rounded to reduce fiber cutting when recycled paper or natural reinforcement is added to the clay. Testing explored pedal resistance, bowl stability, and the time needed to obtain an even mixture. The final arrangement favors steady low-speed torque and parts commonly available from bicycle repair shops.
BD.3.	
INVENTORS	Sadia Rahman, Imtiaz Noor, Labiba Chowdhury
INVENTION	Color-Changing Label for Detecting Moisture Exposure in Medicine Packs
INSTITUTION	Nabodisha Materials Studio

ABSTRACT	Medicine packages may look intact even after being stored in humid conditions that can affect their contents. The invention is a small irreversible label placed inside a secondary carton rather than in contact with the medicine. It contains three printed zones that respond at different combinations of humidity and exposure time. A short moisture event changes only the first zone, while prolonged exposure produces a distinct symbol across all three. The layered coating uses a plant-derived binder and salts selected to remain stable during normal dry storage. A reference panel printed beside the indicator helps users interpret the result without an electronic reader. Accelerated chamber tests were used to compare coating thicknesses and protective films. The label is intended to support storage checks in clinics, pharmacies, delivery boxes, and household medicine cabinets.
BD.4	
INVENTORS	Farhan Adib, Nusrat Jahan, Abeer Mahmud, Samin Islam, Rupa Das, Mehedi Hasan
INVENTION	Detachable Silt Guide for Shallow Community Water Pumps
INSTITUTION	Riverbend Practical Research Group
ABSTRACT	Shallow hand pumps may draw suspended sediment after heavy rain or changes in groundwater level. This project introduces a detachable intake guide that redirects the strongest flow away from loose material at the bottom of a well. Curved fins create a gentle upward circulation before water reaches the inlet screen, while a transparent sediment cup captures heavier particles for visual inspection. The guide is lowered on the existing pipe and secured by a split collar, so the pump body does not need to be replaced. Users can remove the cup with a hooked rod and estimate when cleaning is necessary from marked levels on its side. Bench tests in a clear tank examined several fin angles and pumping rates. The device is not a purification system; its purpose is to reduce incoming silt and make maintenance needs easier to observe.
BELGIUM	
BE.1.	
INVENTORS	Noor De Smet, Elias Verhaegen
INVENTION	Reconfigurable Quiet Panel for Shared Study Tables
INSTITUTION	
ABSTRACT	Libraries and learning spaces often need to shift between group work and individual concentration during the same day. The proposed panel attaches to the edge of a table and unfolds into three acoustic surfaces. Small rotating joints allow it to form a straight divider, a corner enclosure, or a low central screen. The core is made from compressed textile

	offcuts enclosed in washable sleeves, while narrow perforations preserve airflow and visibility. A magnetic strip along the frame holds note cards, a task light, or a lightweight phone stand. Measurements made around a shared table indicated a reduction in direct conversational sound without creating a fully isolated cubicle. When folded, several panels nest together on a small trolley. The product is intended as adaptable furniture rather than a permanent architectural partition.
BE.2.	
INVENTORS	Lotte Maes, Sami El Idrissi, Pieter Claes
INVENTION	Bicycle Basket Divider That Protects Tall Groceries
INSTITUTION	Canal Quarter Mobility Workshop
ABSTRACT	Tall bottles and soft groceries often fall against each other in a bicycle basket. This flexible divider slides along two rails and locks at any position using a squeeze handle. Fold-out loops hold bottle necks, while a suspended lower panel supports delicate items above harder packages. The divider collapses flat when the basket is empty. Road simulations with different loads were used to adjust the locking teeth and damping pads. All contact surfaces can be removed for washing.

BOSNIA AND HERZEGOVINA

BA.1.	
INVENTORS	Lejla Hadzic, Marko Vukasinovic, Ena Kovacevic, Tarik Selimovic
INVENTION	Slope Garden Irrigation Divider with Mechanical Flow Memory
INSTITUTION	Neretva Hills Innovation Circle
ABSTRACT	On sloped gardens, gravity can send too much irrigation water to lower beds while upper plants remain dry. This device divides a single hose into several outlets and uses a weighted dial to store the chosen distribution mechanically. Each outlet contains an adjustable elastic valve connected to the dial by a short cam. Once balanced, the setting remains visible and can be restored after the system is dismantled for winter. A small bubble window helps the user place the divider level, and removable inlet screens can be cleaned without disturbing the

	valve settings. Garden-scale tests used containers positioned at different heights to compare water volumes over repeated cycles. The design aims to provide understandable, repairable flow balancing for household plots and small terraced gardens without sensors or a power supply.
BA.2.	
INVENTORS	Adnan Krkic, Milena Savic
INVENTION	Wood-Stove Ash Scoop with Cooling Separation Tray
INSTITUTION	
ABSTRACT	Warm ash may contain hidden embers even when its surface appears gray. This scoop empties into a matching metal tray where a perforated upper layer separates larger pieces and exposes them to air without scattering fine dust. A sliding cover closes before the tray is carried, and a heat-sensitive patch remains visible through a guarded window. The design encourages controlled cooling and inspection; it does not make hot ash safe for disposal. Handle angles were tested with several common stove-door heights.

CAMBODIA

KH.1.	
INVENTORS	Sokha Lim, Vannary Chhim, Dara Keo
INVENTION	Foldable Solar Drying Mat with Insect-Safe Vent Channels
INSTITUTION	Tonle Craft and Food Lab
ABSTRACT	Open-air drying is inexpensive but exposes sliced fruit, herbs, and fish to insects, dust, and sudden light rain. This invention combines a dark absorbent drying surface with a raised transparent cover supported by flexible ribs. Air enters through narrow side channels lined with replaceable mesh and exits near the top, creating passive circulation as the interior warms. The food rests on detachable woven trays so users can lift an entire batch quickly when weather changes. Drain grooves prevent condensation from returning to the product, and the mat folds around the clean trays to form its own carrying case. Comparative trials examined drying time, surface temperature, airflow, and insect access. The design avoids rigid glazing and bulky frames, making it practical for households or small producers who need to store the dryer

	between uses.
KH.2.	
INVENTORS	Chantha Vong, Pisey Meas, Rithy Sok, Lina Touch
INVENTION	Stackable Handwashing Container with Soap-Saving Valve
INSTITUTION	Lotus Path Community Design Room
ABSTRACT	Temporary washing stations often use more liquid soap than necessary. This container dispenses water from an upper tank while a linked thumb lever releases a small measured drop of soap from a separate chamber. Both flows stop when the lever is released. Empty units nest for transport, and the base widens when filled to reduce tipping. Field mock-ups focused on one-handed use, cleaning, and the visibility of refill levels. The valve can be removed and soaked without dismantling the water tank.
CANADA	
CA.1.	
INVENTORS	Élodie Caron, Mateo Sinclair
INVENTION	Snowmelt-Triggered Curb Marker for Hidden Storm Drains
INSTITUTION	
ABSTRACT	Storm drains can become difficult to locate beneath compacted snow, delaying clearing when rapid melting begins. The proposed curb marker remains flat during normal conditions and rises when a small chamber absorbs liquid water. A biodegradable swelling insert pushes a bright flexible flag upward through a protective slot; cold dry snow alone does not activate it. Once the area is cleared, the insert can be replaced and the flag reset by hand. The housing mounts beside the curb rather than on the drain grate, so it does not obstruct water or snow-removal equipment. Tests explored activation time with slush, rain, road salt, and repeated freeze-thaw cycles. The marker is meant to supplement maps and maintenance routines by providing a visible local cue at the moment drainage access becomes important.
CA.2.	
INVENTORS	Harleen Bains, Jonah Pelletier, Sienna Brooks, Malik Grant, Aiden Cho

INVENTION	Shared Freezer Organizer with Passive Door-Open Tracking
INSTITUTION	Northline Student Product Studio
ABSTRACT	Community kitchens and shared apartments frequently lose frozen food because packages are forgotten or the freezer door is left open. This modular organizer uses sliding date tabs, removable category baskets, and a purely mechanical exposure indicator. The indicator contains a thin wax element that moves along a marked window whenever the surrounding temperature remains above the normal freezer range. It does not require batteries and can be reset after the freezer has returned to a safe temperature and the contents have been checked. Basket handles change position when a section is full, making available space easier to see before shopping. Users tested several labeling arrangements while wearing gloves and under low light. The system is designed to improve everyday organization and awareness; it does not claim to determine the safety of individual food items.
CA.3.	
INVENTORS	Nolan Atikamek, Claire Desrosiers, Benjamin Ho
INVENTION	Interlocking Shoreline Block Made from Recovered Reed Fibers
INSTITUTION	Bluebank Circular Materials Cooperative
ABSTRACT	Temporary shoreline reinforcement often relies on heavy products that are difficult to remove after vegetation has established. This project develops a low-density interlocking block made from mineral binder, recovered reed fiber, and porous aggregate. The block has open pockets for plant plugs and internal channels that reduce wave rebound by allowing part of the water to pass through. Its tapered connection permits curved arrangements without cutting, while molded handholds support installation by small crews. Samples were subjected to wet-dry cycling, abrasion, and low-temperature exposure, and different fiber lengths were compared for crack control. The material is intended to weaken gradually only after roots and sediment begin to stabilize the site. Potential applications include demonstration wetlands, pond edges, and short restoration sections where permanent concrete barriers would be undesirable.

CA.4.	
INVENTORS	Rina Okafor
INVENTION	Tactile Recipe Timer for Cooks with Limited Vision
INSTITUTION	
ABSTRACT	Most kitchen timers communicate through small displays and identical buttons, which can be difficult to operate by touch. This invention uses three large concentric rings for hours, minutes, and short repeat intervals. Each ring has a distinct edge texture and produces a soft mechanical click at every step. A raised pointer lets the user confirm the setting without activating the device, and the remaining time can be checked by pressing the center once to receive a pattern of vibrations. Common settings may be stored on removable tactile clips placed around the outer rim. The prototype was evaluated during simple cooking tasks with sighted users wearing simulation glasses and with feedback from accessibility volunteers. The design prioritizes washable surfaces, one-handed operation, and clear tactile differences rather than voice control or a connected application.
CA.5.	
INVENTORS	Maya Cardinal, Lucas Beaulieu
INVENTION	Window Insert That Redirects Winter Condensation
INSTITUTION	Prairie Habitat Design Room
ABSTRACT	Cold windows often collect water along the lower frame, where it can damage paint and encourage mold. This clear removable insert guides condensation through shallow embossed channels into a narrow collection strip. A breathable upper gap prevents the window cavity from becoming sealed, and small color tabs indicate when the strip should be emptied. The insert attaches with reusable corner clips and can be trimmed without cracking. Tests compared channel patterns at different indoor humidity levels and showed more predictable drainage than an unmodified pane.
CA.6.	
INVENTORS	Zoe Martin
INVENTION	Portable Ice-Traction Checker for Walking Routes

INSTITUTION	
ABSTRACT	Surface appearance does not always reveal whether a winter path is dangerously slippery. This pocket tool presses a textured rubber foot against the ground with a repeatable spring force and displays the amount of sideways movement on a simple mechanical scale. It does not provide a legal safety rating; instead, it helps caretakers compare several locations and identify areas that may need attention. The handle folds over the sensing foot to keep meltwater away from other items during storage.
CA.7.	
INVENTORS	Amara Singh, Étienne Gagnon, Cole Fraser, Hana Wu
INVENTION	Reusable Packing Sleeve for Temperature-Sensitive Deliveries
INSTITUTION	Maple Junction Prototype Collective
ABSTRACT	The proposed sleeve wraps around a small parcel and combines insulation with a visible record of rough handling. Folded fiber cells slow heat transfer, while four corner capsules release a harmless dye into separate windows if the package receives a strong impact. Couriers can replace only the damaged capsule section rather than discard the sleeve. Trial shipments with mock contents were used to adjust the closures and corner thickness. The design is intended for local delivery of samples, specialty foods, and other modest temperature-sensitive items.
CA.8.	
INVENTORS	Evan Littlefox, Naomi Chen
INVENTION	Canoe Seat Pad That Maps Pressure Without Electronics
INSTITUTION	
ABSTRACT	Long periods of paddling can create concentrated pressure and discomfort, but electronic measurement systems are impractical near water. This seat pad contains a grid of small air pockets connected to narrow indicator tubes. When the user sits, pressure differences move colored liquid along protected scales at the rear edge. The pattern can be photographed, then the pad resets after the load is removed. The device supports seat fitting and posture comparison rather than medical diagnosis. Its outer cover is removable,

	textured, and designed to dry quickly.
CA.9.	
INVENTORS	Sylvie Morin, Devon Clarke, Arjun Malhotra
INVENTION	Mechanical Reminder Cap for Refillable Household Containers
INSTITUTION	Cedar Lane Circular Use Lab
ABSTRACT	Refillable containers are often discarded because people forget how long a product has been stored. This cap includes two rotating rings: one records the refill month and the other marks a recommended check interval. Opening the cap advances a small use counter, giving a rough indication of how frequently the container has been accessed. The mechanism is washable and works without ink, labels, or batteries. Several grip shapes were tested with wet hands, leading to a broad edge and raised symbols that can be read by touch.
CA.10.	
INVENTORS	Nadia Okeke
INVENTION	Adjustable Draft Seal for Uneven Door Thresholds
INSTITUTION	
ABSTRACT	Conventional door sweeps can leave gaps when a threshold is warped or sloped. This seal is divided into short overlapping segments, each supported by a small spring and a replaceable felt foot. As the door closes, the segments settle independently against the floor rather than forming one rigid line. A front cover keeps dust away from the moving parts and opens for cleaning. Smoke-pencil tests around a mock doorway showed that the segmented arrangement reduced visible air leakage while still allowing the door to move freely.
CA.11.	
INVENTORS	Liam Redsky, Camille Roy, Farah Siddiqui, Owen Park, June Walsh
INVENTION	Rain Barrel Overflow Divider for Small Gardens
INSTITUTION	North Birch Water Workshop
ABSTRACT	A sudden downpour can overwhelm a rain barrel and erode the soil beside it. This passive divider fits onto the overflow outlet and sends water between three garden zones according

	to removable internal gates. When one branch backs up, a floating flap redirects flow to the next outlet. Transparent inspection windows make leaves and sediment visible, and the body opens without tools. A scaled outdoor model was tested with variable inflow to refine the gate angles. The system helps distribute overflow; it is not intended for flood protection.
CA.12.	
INVENTORS	Sophie Aglukkaq, Marcus Lin
INVENTION	Insulated Community Notice Case with Fog-Release Corners
INSTITUTION	
ABSTRACT	Outdoor notice cases can fog after rapid temperature changes, making printed information unreadable. This case uses four replaceable corner cartridges filled with a moisture-buffering material. Air moves through the cartridges as pressure changes, while angled channels keep rain away from the paper. A small window changes color when a cartridge needs drying. The door gasket is segmented so damaged sections can be replaced individually. Climate-box tests compared fog formation after cold-to-warm transitions and repeated opening.
CA.13.	
INVENTORS	Jared McLeod, Inès Fournier, Meera Patel
INVENTION	Toolbox Insert That Counts Missing Items Mechanically
INSTITUTION	West Elm Repair Learning Hub
ABSTRACT	Shared toolboxes often become incomplete because users cannot quickly see what has not been returned. Each tool rests on a spring pad linked to a small colored tab at the front of the tray. Removing a tool raises its tab; replacing it lowers the tab without any electronics. Pads can be repositioned for different tool shapes, and a master window displays the number of raised tabs. Workshop trials focused on durability under dust, false indications, and ease of reconfiguring the tray.
CHINA	
CN.1.	
INVENTORS	(Lin Ruoxi), Gao Wen, Qiao Yiming
INVENTION	Self-Leveling Tray for Balcony Hydroponics

INSTITUTION	Minghe Youth Fabrication Studio
ABSTRACT	Small hydroponic trays on balconies can tilt as floors settle or supports shift, leaving some roots dry. The invention places the growing tray on three fluid-linked feet. When one side drops, liquid moves between the feet and raises the lower corner until the tray returns near level. A manual lock prevents movement during transport. The system uses no sensor and includes a visible bubble mark for quick checking. Lettuce seedlings were grown on several simulated slopes to compare water distribution and root development.
CN.2.	
INVENTORS	He Lanying
INVENTION	Reusable Steam Indicator Clip for Food Containers
INSTITUTION	
ABSTRACT	A sealed container may still be too hot to open safely even when its outside feels cool. This clip fits over a vent and moves a colored flag when escaping steam reaches a small bimetal strip. As pressure and temperature fall, the flag slowly returns, giving a clear visual cue without a battery. The clip can be removed for washing and adjusted for several lid thicknesses. Kitchen trials focused on visibility, response delay, and resistance to splashes rather than measuring an exact internal temperature.
CN.3.	
INVENTORS	Zhou Kai, (Luo Xinyi), Peng Shuo, Min Jia
INVENTION	Low-Cost Book Scanner Cradle with Page-Flattening Air Pockets
INSTITUTION	Jinlan Community Media Lab
ABSTRACT	Bound notebooks are difficult to photograph because pages curve near the spine. This folding cradle supports the covers at an adjustable angle while two thin inflatable pockets press gently beneath the pages. A foot bulb changes pressure without requiring the user to release the book or touch the camera. Translucent guide strips help align successive images. The cradle collapses into a flat folder and uses replaceable transparent sheets where pages make contact. Tests with bindings of different thicknesses informed the hinge positions

	and safe pressure range.
CN.4.	
INVENTORS	Tang Zixuan, Sun Meilin
INVENTION	Dust-Release Brush Head for Rooftop Solar Panels
INSTITUTION	
ABSTRACT	Dry dust often sticks between the bristles of panel-cleaning brushes and is carried across the surface. This brush head contains flexible ribs that bend during the forward stroke and snap gently when the user reverses direction, shaking collected particles into a side channel. Soft guide wheels maintain a small clearance so the rigid frame does not touch the panel. The head can be used on an extension pole and opened to replace only the worn bristle strip. Bench tests used fine mineral dust and repeated cleaning cycles.
CN.5.	
INVENTORS	Chen Yutong, Ma Rui, Luo Fei, Guo Nan, Shen Yue
INVENTION	Modular Queue Divider with Visual Waiting-Time Tokens
INSTITUTION	Qingsong Service Design Group
ABSTRACT	People waiting at temporary clinics or community counters may not know whether they can briefly leave the line. This divider dispenses a numbered mechanical token when a person enters and shows the currently served range on a large rotating drum. Tokens return through a separate slot and can be cleaned in batches. Sections clip together to guide different room layouts, and the drum can be advanced from either end. The design provides an approximate order and does not collect names, phone numbers, or other personal information.
CN.6.	
INVENTORS	Yu Han
INVENTION	Foldable Crop-Cover Support That Releases Under Snow Load
INSTITUTION	
ABSTRACT	Light garden covers can collapse onto plants when unexpected snow accumulates. This support uses crossed flexible arms held by a reusable magnetic latch. Under normal wind and rain the latch stays closed, but a heavier downward load

	releases it and lets the frame fold sideways instead of breaking. The cover remains attached near the ground and can be raised again after clearing. Load tests compared arm thicknesses and latch distances. The concept is intended for small beds and seedling rows rather than large agricultural structures.
CN.7.	
INVENTORS	Wang Jialin, Deng Qiao, (Zhao Anning)
INVENTION	Tea-Drying Basket with Humidity-Balancing Rim
INSTITUTION	Luhai Rural Product Workshop
ABSTRACT	Leaves near the edge of a drying basket often lose moisture faster than those at the center. The proposed basket has a double-layer rim that redirects a portion of the rising warm air inward. Small shutters around the rim can be opened as drying progresses, while a rotating mesh base helps mix the leaves without lifting the entire batch. Experiments with paper samples and fresh leaves were used to compare moisture patterns. The basket is hand-operated and designed to work with existing low-temperature drying rooms.
CN.8.	
INVENTORS	Liu Sihan, (Wu Jingran)
INVENTION	Porous Sidewalk Tile with a Clean-Out Channel
INSTITUTION	Yunqiao Urban Materials Room
ABSTRACT	Permeable paving can lose performance when fine debris clogs its surface. This tile includes a narrow internal channel connected to two removable edge plugs. During maintenance, a hand pump sends water backward through the pores and carries loosened particles into a collection bag. The textured top remains separate from the structural ribs, allowing different surface patterns to use the same base mold. Small pavement panels were tested with soil, leaf fragments, and repeated cleaning cycles.
CN.9.	
INVENTORS	Bao Ning
INVENTION	Desk Fan Guard That Redirects Loose Paper Instead of Blowing It Away

INSTITUTION	
ABSTRACT	A small fan can cool a person while scattering notes across a desk. This guard contains movable curved vanes that create a calm zone directly in front of the fan base while sending air toward the user above it. A paper tab on the guard helps show the boundary of the calm zone during adjustment. The guard clips onto several circular fan frames and folds for storage. Tests compared air speed at face height and movement of lightweight paper placed nearby.
CROATIA	
HR.1.	
INVENTORS	Ivana Maric, Luka Bosnjak
INVENTION	Snap-Fit Flood Barrier for Interior Doorways
INSTITUTION	Kupa Valley Design Unit
ABSTRACT	Short-duration water entry through an interior doorway can damage rooms before a permanent barrier is available. This device uses narrow interlocking boards with soft compression edges. The boards slide between two temporary side posts that tighten against the doorframe using hand levers, avoiding screws. A bottom bladder is inflated with a small bulb to follow uneven flooring. Tests on a tiled doorway examined leakage, installation time, and reuse after drying. The barrier is intended for shallow indoor water and emergency preparation, not structural flood defense.
HR.2.	
INVENTORS	Mateo Kralj
INVENTION	Olive Collection Net with a Controlled Folding Spine
INSTITUTION	
ABSTRACT	Large harvesting nets can twist or spill olives when one person tries to move them. This net contains a flexible central spine made of linked flat segments. Pulling one cord folds the edges toward the spine in sequence, forming a temporary trough that guides fruit into a container. Releasing the cord lets the net spread flat again. Reinforced openings permit anchoring around irregular trunks. Field simulations with wooden beads were used to refine the folding order and reduce places where fruit could become trapped.
HR.3.	
INVENTORS	Petra Juric, Dino Vukovic, Sara Prpic, Niko Basic

INVENTION	Quiet Closing Latch for Shared Metal Lockers
INSTITUTION	Riva Practical Mechanics Studio
ABSTRACT	Metal locker doors often slam because lightweight panels move quickly and conventional dampers are difficult to retrofit. This latch combines a small rolling catch with an air-filled silicone chamber that compresses during the final centimeters of closing. The chamber has an adjustable outlet, allowing the delay to be tuned without oil. A magnetic plate holds the door after the roller slows it. Prototype latches were cycled on doors of different weights and attached using existing ventilation slots. Individual wear parts can be replaced separately.
HR.4.	
INVENTORS	Ana Lovric, Marko Radic, Tea Grgic
INVENTION	Removable Salt-Spray Shield for Bicycle Chains
INSTITUTION	
ABSTRACT	Bicycles stored near roads or coastal areas can collect salt on the chain even when they are not being ridden. This flexible shield clips onto the frame and wraps around the exposed lower chain run while the bicycle is parked. A small absorbent strip changes color as it accumulates salty moisture, prompting cleaning. The shield folds into its own pouch and cannot remain attached during riding because a bright blocking tab prevents the pedal from turning. Exposure trials compared fabrics, clip positions, and drying time.
HR.5.	
INVENTORS	Karla Sestan, Filip Zoric
INVENTION	Stone-Wall Moisture Vent with Insect-Safe Insert
INSTITUTION	Old Mill Building Research Circle
ABSTRACT	Traditional stone walls may trap moisture behind later interior finishes. The proposed vent fits into a small mortar joint and contains a winding air path that limits direct drafts while allowing slow vapor movement. A removable fine-mesh cartridge blocks insects and captures dust for inspection. The outer cap resembles a plain mortar plug and can be turned to vary the opening. Small wall samples were exposed to controlled humidity to compare drying behavior. The device is intended as a reversible maintenance aid, not a treatment for major water intrusion.
HR.6.	
INVENTORS	Mia Perkovic
INVENTION	Handheld Tile Spacer That Releases Without Twisting
INSTITUTION	

ABSTRACT	Removing ordinary spacers after adhesive begins to set can disturb carefully aligned tiles. This tool places a thin reusable spacer between tiles and withdraws it by compressing two handles, which folds the spacer inward before lifting. Interchangeable tips provide several joint widths, and a depth stop keeps the insertion consistent. The mechanism can be operated with one hand and rinsed open. Trials with wall and floor mock-ups focused on release force and whether adjacent tile edges shifted during removal.
HR.7.	
INVENTORS	Josip Erceg, Lana Vidic, Daria Matic
INVENTION	Foldable Market Crate with a Produce-Ripeness Divider
INSTITUTION	Green Pier Design Cooperative
ABSTRACT	Mixed produce can be damaged when firmer items press against ripe fruit during transport. This crate contains a suspended divider whose tension is adjusted with two side dials. A soft indicator strip on each compartment darkens when exposed to increasing ethylene, helping a vendor decide which section to inspect first. The strip is replaceable and does not touch food. The crate folds inward after the divider is removed. Transport simulations focused on vibration, cleaning, and divider sag.
EGYPT	
EG.1.	
INVENTORS	Mariam El-Sherif
INVENTION	Evaporative Medicine Carry Case with a Dry Inner Sleeve
INSTITUTION	
ABSTRACT	A simple evaporative cooler can lower temperature, but its moisture may damage labels or packaging. This carry case separates a damp outer textile from a dry inner sleeve using a corrugated air gap. Water is added only through a marked side port, and a float closes the port when the outer layer is sufficiently wet. The inner sleeve can be removed without touching the damp surface. Warm-room trials used sealed sample containers to compare temperature and humidity. The case is designed for short transport and does not replace regulated medical refrigeration.
EG.2.	
INVENTORS	Omar Fathy, Salma Naguib, Karim Lotfi
INVENTION	Canal-Side Litter Basket That Rises with Water Level
INSTITUTION	Nile Edge Community Workshop

ABSTRACT	Fixed litter baskets near small waterways may become submerged or tear away when the water rises. This basket slides on two guide rails and is supported by sealed floats, allowing it to follow gradual changes in level. A hinged lower panel releases excessive hydraulic force during fast flow while retaining larger waste. The basket can be lifted from the bank with a hooked handle and locked in a draining position before emptying. Tank tests examined float spacing, debris retention, and behavior under angled currents.
EG.3.	
INVENTORS	Nadine Ashraf, Youssef Kamel
INVENTION	Dust-Protected Braille Label Maker for Classroom Materials
INSTITUTION	
ABSTRACT	Reusable tactile labels are useful in classrooms but many handheld embossers collect dust that makes their mechanisms stiff. This label maker encloses the punch wheel behind a rotating seal and feeds tape through a narrow brush gate. A raised alignment guide helps users position short labels by touch, while a large lever reduces the required hand force. The casing opens with two captive screws for cleaning. Prototypes were tested with paper and plastic tapes, focusing on dot consistency, spacing, and operation after exposure to fine dust.
EG.4.	
INVENTORS	Hassan Riad, Farida Mostafa, Mahmoud Elwan, Laila Samy, Tarek Amin
INVENTION	Roof Water Tank Level Flag with Night Reflector
INSTITUTION	Sun Gate Applied Projects Centre
ABSTRACT	Checking an elevated household tank may require climbing or using an electrical sensor. This device couples a protected internal float to a lightweight external flag through a magnetic slider, avoiding a hole through the tank wall. The flag moves beside a large printed scale and carries a reflector visible from below at night. A second marker shows whether the float has become stuck. Outdoor testing considered wind, mineral deposits, and alignment through different wall thicknesses. The indicator is for routine observation rather than precise volume measurement.

EG.5.	
INVENTORS	Rana Adel, Mostafa Hegazy
INVENTION	Date-Pit Composite Handle for Hot Cooking Vessels
INSTITUTION	Palm Loop Materials Studio
ABSTRACT	Ground date pits can provide a fine filler for a heat-resistant composite when combined with a suitable mineral binder. This project forms removable handles with an internal air gap and a textured outer shell. Inserts of different particle sizes were compared for strength, surface temperature, and resistance to repeated washing. A metal safety core remains inside the handle if the composite cracks. The design explores a secondary use for processing residue while keeping the handle replaceable rather than permanently attached.
EG.6.	
INVENTORS	Yara Mansour, Ahmed Selim, Nouran Hafez, Basel Saad
INVENTION	Classroom Airflow Ribbon with a Mechanical Exposure Log
INSTITUTION	
ABSTRACT	A hanging ribbon can show whether air is moving, but it does not indicate how conditions changed during a lesson. This device couples a lightweight airflow vane to a small ratchet that advances only while movement exceeds an adjustable threshold. At the end of the day, a colored scale shows the accumulated periods of stronger airflow. The counter resets with a key and uses no camera or microphone. Classroom mock-ups were used to reduce noise and prevent movement caused by people walking nearby.
ESTONIA	
EE.1.	
INVENTORS	Maarja Kask, Rasmus Oja, Anett Lepp
INVENTION	Window-Sill Herb Light with Mechanical Day-Length Dial
INSTITUTION	Koidu Home Growing Lab
ABSTRACT	Indoor herbs often receive uneven seasonal light, yet a connected controller may be unnecessary for a few pots. This compact lamp uses a clockwork dial that selects one of four daily lighting periods. Turning the dial winds the mechanism

	and moves a visible schedule band, so users can confirm the setting at a glance. Reflective wings direct light toward the plants and fold over the lamp for storage. Seedling tests compared leaf orientation and growth under different wing angles. The electrical circuit remains isolated from the watering tray.
EE.2.	
INVENTORS	Kristjan Pärn
INVENTION	Clip-On Reflective Marker That Records Snowplow Contact
INSTITUTION	
ABSTRACT	Small roadside markers are frequently bent or displaced by plowed snow, but the point of impact is not always obvious. This flexible marker has three breakaway rings that slide to marked positions when struck from different heights. Maintenance crews can inspect the ring positions and adjust future marker placement. A spring base lets the post recover from ordinary bending, and the reflector can be replaced separately. Cold-room tests examined ring movement after icing and repeated impacts.
HONG KONG	
HK.1.	
INVENTORS	Leung Hoi Yan, Marcus Yip
INVENTION	Fold-Away Drying Rack for Narrow Ventilated Windows
INSTITUTION	Harbour Lane Product Studio
ABSTRACT	Apartments with limited space often have windows that provide airflow but little room for drying small items. This rack clips to the side of a window recess and unfolds into staggered arms that remain inside the room. A sliding link keeps the arms clear of the opening path, and drip trays can be removed individually. When folded, the rack projects only a few centimeters and leaves the window controls accessible. Load and corrosion tests informed the arm spacing and choice of replaceable hinge pins.
HK.2.	
INVENTORS	(Chan Lok Yi), Ho Tsz Kit, Amina Rahman

INVENTION	Tactile Lift Queue Indicator for Busy Building Lobbies
INSTITUTION	
ABSTRACT	In a crowded lobby, a person with limited vision may find it difficult to know which lift has arrived. This portable indicator attaches beside existing call buttons and receives a short-range light signal from removable sensors placed above the lift doors. Four distinct vibration patterns identify direction and door position, while a raised switch repeats the latest signal. The system stores no movement data and does not control the lifts. A lobby mock-up was used to refine the patterns and reduce confusion during simultaneous arrivals.
HK.3.	
INVENTORS	Wong Ka Ming
INVENTION	Shared Umbrella Stand with Drip-Level Routing
INSTITUTION	East Ferry Everyday Systems Lab
ABSTRACT	Wet umbrellas in a crowded entrance can create puddles around a stand. This design gives each slot a sloped removable sleeve leading to a common transparent channel. As the reservoir fills, a float redirects new drips into a second sealed tray and raises a visible flag. Staff can remove one tray while the other remains in use. Flexible rings hold umbrellas of different diameters without pinching fabric. Trials examined drainage speed, cleaning access, and stability when several long umbrellas leaned in the same direction.
INDONESIA	
ID.1.	
INVENTORS	Devika Radithya Padmarini, Rahma Anaya Putri Subekti, Nadif Safiya Munandar
INVENTION	Munchy Garden: From Playtime to Mealtime Through Family-Supported Nutrition Education
INSTITUTION	SMA Thursina IIBS Malang
ABSTRACT	Game-based nutrition education has gained attention as an approach to support healthy eating attitudes in early childhood; however, evidence regarding the role of parental involvement in such interventions remains limited. This study examined differences in parent-reported outcomes between children who used the Munchy Garden game, a mobile game-based nutrition education application, with parental accompaniment and those who used the game independently. A quasi-experimental design was

	employed involving 30 parents of children aged 4–6 years, divided into an experimental group (n = 15) and a control group (n = 15). Parent-reported outcomes included nutrition knowledge retention, home-based eating behaviour, parent–child interaction, and interest in healthy food. Data were analysed using descriptive statistics and the Mann–Whitney U test. The results indicated significant differences between groups across all outcome domains, with higher scores observed in the experimental group. The strongest effect was found in parent–child interaction, followed by interest in healthy food. These findings suggest that parental accompaniment enhances the effectiveness of the Munchy Garden game as a nutrition education tool for young children. Incorporating parental involvement into game-based nutrition interventions may strengthen learning experiences and promote positive nutrition-related attitudes in early childhood.
ID.2.	
INVENTORS	Raisyah Almaira Syafiqah, Zahira Nadhifa Adyvka, Nurin Hafidah Azzahra, Salsabila Mustaqimah Arva' Milaika, Andi Naura Zalika
INVENTION	STRONIC: A Smart School-Based Mobile App for Collaborative E-Waste Management and Environmental Education
INSTITUTION	SMP Thursina IIBS Malang
ABSTRACT	Electronic waste (e-waste) has become one of the fastest-growing environmental challenges, while many students still lack awareness of proper e-waste management. A preliminary survey involving 100 students in Malang revealed that 78.3% did not know the correct disposal methods for e-waste, 100% disposed of e-waste in regular trash bins, and 84.2% believed that mobile applications could encourage more sustainable behaviors. To address this issue, STRONIC (Smart Tracker of Electronic Waste) was developed as a school-based mobile application using the Design Thinking approach. STRONIC integrates six core features: E-Waste Tracker & Digital Logbook, Eco-Learning Portal, School Hub & Collaboration Centre, Campaign & Challenge Manager, Smart Drop Point Map, and Impact Dashboard & Analytics. These features combine environmental education, gamification, real-time monitoring, and inter-school collaboration to promote responsible e-waste management among students. Prototype evaluation involving students and teachers demonstrated encouraging results: 92% rated the application as easy to use, 88% reported increased motivation to participate in e-waste management activities, and 85% of teachers believed the application could be integrated into classroom learning. These findings indicate that STRONIC has strong potential to enhance environmental literacy, encourage sustainable behavior, and establish a collaborative digital ecosystem for school-based e-waste management. The application also provides a scalable model for integrating environmental education with digital technology to support a more sustainable future.
IRAN	
IR.1.	

INVENTORS	Seyed Amir Mohammad Mousavi
INVENTION	Leveraging Gemini 2.5 for Advanced Patent Analysis: A Novel Hybrid Approach to Identifying Innovation and Overlap
INSTITUTION	Iranian Youth Science and Technology Center (IYSTC)
ABSTRACT	Patent analysis is the bedrock of technological innovation, yet the sheer volume and complexity of data present significant challenges. Traditional, manual methods are often error-prone and fail to keep pace with modern innovation cycles. This paper details a hybrid methodology that first leverages classical semantic similarity algorithms (TF-IDF and Cosine Similarity) to efficiently cluster high-overlap patents, and then employs Gemini 2.5 Flash's cutting-edge capabilities in Long-Context Processing and Context Caching for deep, nuanced analysis of the filtered, relevant clusters. This combined approach streamlines patent registration workflows, enhances novelty assessment, and reveals critical competitive insights.
IR.2.	
INVENTORS	Diana Jabbarian
INVENTION	Diverse
INSTITUTION	Nikoo International School
ABSTRACT	Diverse makes space education accessible through interactive lessons, quizzes, games, exams, projects, AI Q&A, constellations, sky news, birthday sky, community learning, and personalized exploration.
IR.3.	
INVENTORS	Vandad Tabatabaei
INVENTION	Game Vault
INSTITUTION	Nikoo International School
ABSTRACT	This is an AI-based platform that predicts users' tastes based on their previous gameplay. Every game, rating, and stream is pulled live from Steam and placed in one location. Users can browse, watch, upload, and go live without leaving the page.
IR.4.	
INVENTORS	Ronika Taghavi, Mohammad Hosein Jalinous
INVENTION	ROKA - AI-Based Cybersecurity Application
INSTITUTION	Nikoo International School
ABSTRACT	ROKA's vision is to make cybersecurity smarter, simpler, and accessible to everyone by combining artificial intelligence with real-time threat detection and intelligent decision support.

ITALY

IT.1.	
INVENTORS	Giulia Ferraro, Matteo Riva, Elena Conti, Paolo Greco, Nadia Bellini
INVENTION	Modular Pasta-Drying Frame with Humidity-Release Joints
INSTITUTION	
ABSTRACT	The idea grew from a practical difficulty observed in neighborhood facilities: routine handling often depends on equipment that is awkward to inspect or repair, forming the specific starting point for modular pasta-drying frame with humidity-release joints. Instead of sensors, the design relies on a sliding guide, a calibrated stop, and a mechanical flag that remains readable after use in the modular pasta-drying frame with humidity-release joints configuration. Trials included uneven surfaces and one-handed operation, with attention to stability, false indications, and access for cleaning for the modular pasta-drying frame with humidity-release joints prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the joints element of modular pasta-drying frame with humidity-release joints remaining accessible for inspection.
IT.2.	
INVENTORS	Samir Haddad, Giulia Riva
INVENTION	Footstep Energy Marker for Museum Routes
INSTITUTION	Footstep Routes Applied Workshop
ABSTRACT	During ordinary use in neighborhood facilities, small changes related to routine handling can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for footstep energy marker for museum routes. Instead of sensors, the design relies on a floating marker, a calibrated stop, and a visible gauge that remains readable after use in the footstep energy marker for museum routes configuration. Prototype checks covered repeated opening and closing as well as storage and reassembly, revealing where dirt or unintended movement could interfere for the footstep energy marker for museum routes prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the routes element of footstep energy marker for museum routes remaining accessible for inspection.
JAPAN	
JP.1.	
INVENTORS	Haruto Mori, Sato Miu, Aoi Nishimura, Ren Kobayashi, Tanaka Yuma
INVENTION	Quiet Sorting Tray for Small Electronic Components
INSTITUTION	Quiet Components Applied Workshop
ABSTRACT	A recurring maintenance problem in small delivery operations led to the design of Quiet Sorting Tray for Small Electronic Components, forming the specific starting point for quiet sorting tray for small electronic

	components. The prototype combines a porous insert with a moving band; both parts can be reached without dismantling the main body in the quiet sorting tray for small electronic components configuration. Early evaluation focused on short outdoor trials, ease of resetting, and performance after different container sizes for the quiet sorting tray for small electronic components prototype. The design remains deliberately simple so users can inspect its condition before every use, with the components element of quiet sorting tray for small electronic components remaining accessible for inspection.
JP.2.	
INVENTORS	Emi Kondo, Kenji Arai, Yui Matsuda, Kaito Fujii, Haruto Miu
INVENTION	(Amaoto) Balcony Drain Alert
INSTITUTION	Amaoto Alert Applied Workshop
ABSTRACT	The idea grew from a practical difficulty observed in local markets: weather protection often depends on equipment that is awkward to inspect or repair, forming the specific starting point for (amaoto) balcony drain alert. A floating marker changes position as conditions vary, while a patterned tab gives the user an immediate, non-electronic reading in the (amaoto) balcony drain alert configuration. Early evaluation focused on storage and reassembly, ease of resetting, and performance after different container sizes for the (amaoto) balcony drain alert prototype. The design remains deliberately simple so users can inspect its condition before every use, with the alert element of (amaoto) balcony drain alert remaining accessible for inspection.
JP.3.	
INVENTORS	Sato Nishimura, Aoi Kobayashi, Ren Yuma, Tanaka Kondo
INVENTION	Foldable Tatami Edge Support for Elderly Users
INSTITUTION	Foldable Users Applied Workshop
ABSTRACT	This project looks at routine handling from the perspective of people working in neighborhood facilities with limited space and basic tools, forming the specific starting point for foldable tatami edge support for elderly users. The main frame protects a weighted flap; an adjacent contrast marker shows when cleaning, adjustment, or resetting is needed in the foldable tatami edge support for elderly users configuration. Trials included repeated opening and closing and storage and reassembly, with attention to stability, false indications, and access for cleaning for the foldable tatami edge support for elderly users prototype. Further field use would determine the best materials for long-term durability, with the users element of foldable tatami edge support for elderly users remaining accessible for inspection.
JP.4.	

INVENTORS	Emi Arai, Kenji Matsuda
INVENTION	Reusable Bento Divider with Steam-Release Tabs
INSTITUTION	Reusable Release Applied Workshop
ABSTRACT	During ordinary use in homes and shared apartments, small changes related to routine handling can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for reusable bento divider with steam-release tabs. Its working section uses a weighted flap to redirect force or flow toward a tactile scale, keeping the response visible and reversible in the reusable bento divider with steam-release tabs configuration. Prototype checks covered changes in load and angle as well as routine transport, revealing where dirt or unintended movement could interfere for the reusable bento divider with steam-release tabs prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the release element of reusable bento divider with steam-release tabs remaining accessible for inspection.
JP.5.	
INVENTORS	Yui Fujii, Kaito Mori
INVENTION	Micro-Garden Rail That Tracks Sunlight Mechanically
INSTITUTION	Micro Mechanically Applied Workshop
ABSTRACT	This project looks at small-scale growing from the perspective of people working in homes and shared apartments with limited space and basic tools, forming the specific starting point for micro-garden rail that tracks sunlight mechanically. The main frame protects a flexible collar; an adjacent colored window shows when cleaning, adjustment, or resetting is needed in the micro-garden rail that tracks sunlight mechanically configuration. A full-size mock-up was evaluated through storage and reassembly; a second round examined repeated opening and closing and replacement of worn pieces for the micro-garden rail that tracks sunlight mechanically prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the mechanically element of micro-garden rail that tracks sunlight mechanically remaining accessible for inspection.
JP.6.	
INVENTORS	Haruto Nishimura
INVENTION	Paper Archive Box with a Mold-Risk Window
INSTITUTION	Paper Window Applied Workshop
ABSTRACT	A recurring maintenance problem in repair spaces led to the design of Paper Archive Box with a Mold-Risk Window, forming the specific starting point for paper archive box with a mold-risk window. The main frame protects a segmented seal; an adjacent inspection slot shows when cleaning, adjustment, or resetting is needed in the paper archive box with a mold-risk window configuration. Trials included wet and dry cycling

and one-handed operation, with attention to stability, false indications, and access for cleaning for the paper archive box with a mold-risk window prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the window element of paper archive box with a mold-risk window remaining accessible for inspection.

KOREA

KR.1.

INVENTORS

Minseo Park, Lee Doyun, Hana Choi, Joon Kim, Seoah Yoon

INVENTION

Desk Lamp Base That Stores and Releases Cable Tension

INSTITUTION

Stores Tension Applied Workshop

ABSTRACT

This project looks at routine handling from the perspective of people working in small workshops with limited space and basic tools, forming the specific starting point for desk lamp base that stores and releases cable tension. A flexible collar changes position as conditions vary, while a patterned tab gives the user an immediate, non-electronic reading in the desk lamp base that stores and releases cable tension configuration. The team observed the device during different container sizes, then altered the geometry before repeating the evaluation under warm-to-cool transitions for the desk lamp base that stores and releases cable tension prototype. Further field use would determine the best materials for long-term durability, with the tension element of desk lamp base that stores and releases cable tension remaining accessible for inspection.

KR.2.

INVENTORS

Daniel Kang, Yuna Seo, Taemin Kwon, Minseo Doyun, Lee Choi

INVENTION

(Hanbit) Window Vent Guide for Compact Rooms

INSTITUTION

Hanbit Rooms Applied Workshop

ABSTRACT

This project looks at building comfort from the perspective of people working in schools and community rooms with limited space and basic tools, forming the specific starting point for (hanbit) window vent guide for compact rooms. The main frame protects a weighted flap; an adjacent position ring shows when cleaning, adjustment, or resetting is needed in the (hanbit) window vent guide for compact rooms configuration. Trials included different container sizes and uneven surfaces, with attention to stability, false indications, and access for cleaning for the (hanbit) window vent guide for compact rooms prototype. Further field use would determine the best materials for long-term durability, with the rooms element of (hanbit) window vent guide for compact rooms remaining accessible for inspection.

KR.3.

INVENTORS

Hana Kim, Joon Yoon, Seoah Kang

INVENTION	Reusable Delivery Bag with a Corner Impact Record
INSTITUTION	Reusable Record Applied Workshop
ABSTRACT	During ordinary use in schools and community rooms, small changes related to local transport can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for reusable delivery bag with a corner impact record. A folding brace changes position as conditions vary, while a moving band gives the user an immediate, non-electronic reading in the reusable delivery bag with a corner impact record configuration. Trials included wet and dry cycling and routine transport, with attention to stability, false indications, and access for cleaning for the reusable delivery bag with a corner impact record prototype. Further field use would determine the best materials for long-term durability, with the record element of reusable delivery bag with a corner impact record remaining accessible for inspection.
KR.4.	
INVENTORS	Daniel Seo
INVENTION	Classroom Chair Foot That Reduces Floor Vibration
INSTITUTION	
ABSTRACT	During ordinary use in small delivery operations, small changes related to shared learning spaces can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for classroom chair foot that reduces floor vibration. The prototype combines a floating marker with a moving band; both parts can be reached without dismantling the main body in the classroom chair foot that reduces floor vibration configuration. Trials included repeated opening and closing and short outdoor trials, with attention to stability, false indications, and access for cleaning for the classroom chair foot that reduces floor vibration prototype. Further field use would determine the best materials for long-term durability, with the vibration element of classroom chair foot that reduces floor vibration remaining accessible for inspection.
KUWAIT	
KW.1.	
INVENTORS	Mariam Al-Sabah, Fahad Al-Rashid, Noor Al-Dosari, Yousef Karim, Mariam Al-Rashid
INVENTION	Sun-Heated Water Pipe Cover with a Visible Stress Band
INSTITUTION	Heated Stress Applied Workshop
ABSTRACT	The starting point for Sun-Heated Water Pipe Cover with a Visible Stress Band was the need to make water handling easier to see, adjust, and maintain in homes and shared apartments, forming the specific starting point for sun-heated water pipe cover with a visible stress band. Instead of sensors, the design relies on a flexible collar, a calibrated stop, and a visible gauge that remains readable after use in the sun-heated water pipe

cover with a visible stress band configuration. Testing compared several material thicknesses during routine transport and checked whether the reading remained clear after repeated opening and closing for the sun-heated water pipe cover with a visible stress band prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the stress element of sun-heated water pipe cover with a visible stress band remaining accessible for inspection.

MACAO

MO.1.

INVENTORS

Lei Ho

INVENTION

Compact Market Cart with Stair-Resting Supports

INSTITUTION

Compact Supports Applied Workshop

ABSTRACT

The idea grew from a practical difficulty observed in temporary service points: airflow management often depends on equipment that is awkward to inspect or repair, forming the specific starting point for compact market cart with stair-resting supports. A replaceable pad changes position as conditions vary, while a raised pointer gives the user an immediate, non-electronic reading in the compact market cart with stair-resting supports configuration. Prototype checks covered uneven surfaces as well as short outdoor trials, revealing where dirt or unintended movement could interfere for the compact market cart with stair-resting supports prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the supports element of compact market cart with stair-resting supports remaining accessible for inspection.

MO.2.

INVENTORS

Rui Carvalho, Chan I, Ana Wong, Joao Leong, Lei Carvalho, Rui I

INVENTION

Humidity-Balancing Drawer for Tea and Paper Goods

INSTITUTION

Humidity Goods Applied Workshop

ABSTRACT

This project looks at routine handling from the perspective of people working in public waiting areas with limited space and basic tools, forming the specific starting point for humidity-balancing drawer for tea and paper goods. Interchangeable contact pieces sit around a rotating sleeve, and a mechanical flag records the most important change during operation in the humidity-balancing drawer for tea and paper goods configuration. Testing compared several material thicknesses during light impact and vibration and checked whether the reading remained clear after warm-to-cool transitions for the humidity-balancing drawer for tea and paper goods prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the goods element of humidity-balancing drawer for tea and paper goods remaining accessible for inspection.

MALAYSIA

MY.1.	
INVENTORS	Aina Rahim, Kumar Velu, Jason Lim
INVENTION	Rain-Safe Motorcycle Glove Drying Case
INSTITUTION	Motorcycle Drying Applied Workshop
ABSTRACT	During ordinary use in local markets, small changes related to weather protection can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for rain-safe motorcycle glove drying case. Its working section uses a weighted flap to redirect force or flow toward a moving band, keeping the response visible and reversible in the rain-safe motorcycle glove drying case configuration. Trials included storage and reassembly and warm-to-cool transitions, with attention to stability, false indications, and access for cleaning for the rain-safe motorcycle glove drying case prototype. Further field use would determine the best materials for long-term durability, with the drying element of rain-safe motorcycle glove drying case remaining accessible for inspection.
MY.2.	
INVENTORS	Nur Izzati, Farid Hakim
INVENTION	Palm-Fiber Produce Tray with a Ripeness Window
INSTITUTION	Fiber Window Applied Workshop
ABSTRACT	This project looks at building comfort from the perspective of people working in small delivery operations with limited space and basic tools, forming the specific starting point for palm-fiber produce tray with a ripeness window. Instead of sensors, the design relies on a tensioned strap, a calibrated stop, and a inspection slot that remains readable after use in the palm-fiber produce tray with a ripeness window configuration. The team observed the device during dust exposure and cleaning, then altered the geometry before repeating the evaluation under one-handed operation for the palm-fiber produce tray with a ripeness window prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the window element of palm-fiber produce tray with a ripeness window remaining accessible for inspection.
MY.3.	
INVENTORS	Mei Tan, Arif Zaman
INVENTION	Mosquito-Safe Greywater Funnel for Garden Pots
INSTITUTION	Mosquito Garden Applied Workshop
ABSTRACT	This project looks at water handling from the perspective of people working in schools and community rooms with limited space and basic tools, forming the specific starting point for mosquito-safe greywater funnel for garden pots. The main frame protects a weighted flap; an adjacent patterned tab shows when cleaning, adjustment, or resetting is needed in the mosquito-safe greywater funnel for garden pots

configuration. Prototype checks covered short outdoor trials as well as light impact and vibration, revealing where dirt or unintended movement could interfere for the mosquito-safe greywater funnel for garden pots prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the garden element of mosquito-safe greywater funnel for garden pots remaining accessible for inspection.

MEXICO

MX.1.

INVENTORS

Valeria Rios, Diego Salazar, Ana Mendez

INVENTION

Agave-Fiber Roof Tile Clip for Windy Conditions

INSTITUTION

ABSTRACT

The starting point for Agave-Fiber Roof Tile Clip for Windy Conditions was the need to make building maintenance easier to see, adjust, and maintain in schools and community rooms, forming the specific starting point for agave-fiber roof tile clip for windy conditions. Interchangeable contact pieces sit around a weighted flap, and a contrast marker records the most important change during operation in the agave-fiber roof tile clip for windy conditions configuration. Early evaluation focused on repeated opening and closing, ease of resetting, and performance after uneven surfaces for the agave-fiber roof tile clip for windy conditions prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the conditions element of agave-fiber roof tile clip for windy conditions remaining accessible for inspection.

MX.2.

INVENTORS

Omar Cervantes, Ximena Rocha, Luis Trejo, Marisol Peña

INVENTION

Hand Cart Brake That Adjusts to Uneven Streets

INSTITUTION

Brake Streets Applied Workshop

ABSTRACT

The starting point for Hand Cart Brake That Adjusts to Uneven Streets was the need to make routine handling easier to see, adjust, and maintain in public waiting areas, forming the specific starting point for hand cart brake that adjusts to uneven streets. Its working section uses a folding brace to redirect force or flow toward a visible gauge, keeping the response visible and reversible in the hand cart brake that adjusts to uneven streets configuration. A full-size mock-up was evaluated through one-handed operation; a second round examined uneven surfaces and replacement of worn pieces for the hand cart brake that adjusts to uneven streets prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the streets element of hand cart brake that adjusts to uneven streets remaining accessible for inspection.

MX.3.

INVENTORS

Valeria Salazar, Diego Mendez, Ana Cervantes, Omar Rocha

INVENTION	Reusable Tortilla Warmer with a Moisture-Release Dial
INSTITUTION	
ABSTRACT	The idea grew from a practical difficulty observed in small workshops: moisture control often depends on equipment that is awkward to inspect or repair, forming the specific starting point for reusable tortilla warmer with a moisture-release dial. A spring-loaded tab changes position as conditions vary, while a patterned tab gives the user an immediate, non-electronic reading in the reusable tortilla warmer with a moisture-release dial configuration. A full-size mock-up was evaluated through dust exposure and cleaning; a second round examined warm-to-cool transitions and replacement of worn pieces for the reusable tortilla warmer with a moisture-release dial prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the release element of reusable tortilla warmer with a moisture-release dial remaining accessible for inspection.

NEW ZEALAND

NZ.1.	
INVENTORS	Maia Rangi
INVENTION	Rain Jacket Drying Hanger with a Wind-Safe Lock
INSTITUTION	Jacket Hanger Applied Workshop
ABSTRACT	Rain Jacket Drying Hanger with a Wind-Safe Lock was developed for local markets, where a compact response to weather protection is more useful than a complex connected system, forming the specific starting point for rain jacket drying hanger with a wind-safe lock. Interchangeable contact pieces sit around a replaceable pad, and a contrast marker records the most important change during operation in the rain jacket drying hanger with a wind-safe lock configuration. The team observed the device during storage and reassembly, then altered the geometry before repeating the evaluation under repeated opening and closing for the rain jacket drying hanger with a wind-safe lock prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the hanger element of rain jacket drying hanger with a wind-safe lock remaining accessible for inspection.
NZ.2.	
INVENTORS	Oliver Hart, Aroha Puna, Sanjay Mehta, Lucy Bennett, Maia Hart, Oliver Puna
INVENTION	Stream-Side Boot Brush with a Sediment Capture Tray
INSTITUTION	Stream Capture Applied Workshop
ABSTRACT	Stream-Side Boot Brush with a Sediment Capture Tray was developed for homes and shared apartments, where a compact response to routine handling is more useful than a complex connected system, forming the specific starting point for stream-side boot brush with a sediment capture

tray. A porous insert changes position as conditions vary, while a tactile scale gives the user an immediate, non-electronic reading in the stream-side boot brush with a sediment capture tray configuration. Testing compared several material thicknesses during light impact and vibration and checked whether the reading remained clear after one-handed operation for the stream-side boot brush with a sediment capture tray prototype. Further field use would determine the best materials for long-term durability, with the capture element of stream-side boot brush with a sediment capture tray remaining accessible for inspection.

OMAN

OM.1.

INVENTORS

Maha Al-Hinai

INVENTION

Date-Palm Shade Panel with Sand-Release Hinges

INSTITUTION

ABSTRACT

A recurring maintenance problem in garden plots led to the design of Date-Palm Shade Panel with Sand-Release Hinges, forming the specific starting point for date-palm shade panel with sand-release hinges. Instead of sensors, the design relies on a porous insert, a calibrated stop, and a mechanical flag that remains readable after use in the date-palm shade panel with sand-release hinges configuration. A full-size mock-up was evaluated through warm-to-cool transitions; a second round examined short outdoor trials and replacement of worn pieces for the date-palm shade panel with sand-release hinges prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the hinges element of date-palm shade panel with sand-release hinges remaining accessible for inspection.

PHILIPPINES

PH.1.

INVENTORS

Mika Reyes, Paolo Villanueva, Lara Santos, Jomar Bautista, Aileen Cruz

INVENTION

Flood-Rising Storage Shelf for Small Homes

INSTITUTION

Flood Homes Applied Workshop

ABSTRACT

A recurring maintenance problem in public waiting areas led to the design of Flood-Rising Storage Shelf for Small Homes, forming the specific starting point for flood-rising storage shelf for small homes. Its working section uses a floating marker to redirect force or flow toward a colored window, keeping the response visible and reversible in the flood-rising storage shelf for small homes configuration. Trials included dust exposure and cleaning and storage and reassembly, with attention to stability, false indications, and access for cleaning for the flood-rising storage shelf for small homes prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the homes element of flood-rising storage shelf for small homes remaining accessible for inspection.

PH.2.	
INVENTORS	Nico Dizon, Rhea Manalo, Mika Villanueva, Paolo Santos, Lara Bautista, Jomar Cruz
INVENTION	Rainwater Downpipe Filter with a Floating Cleanout Ring
INSTITUTION	
ABSTRACT	Rainwater Downpipe Filter with a Floating Cleanout Ring was developed for schools and community rooms, where a compact response to water handling is more useful than a complex connected system, forming the specific starting point for rainwater downpipe filter with a floating cleanout ring. Its working section uses a weighted flap to redirect force or flow toward a tactile scale, keeping the response visible and reversible in the rainwater downpipe filter with a floating cleanout ring configuration. A full-size mock-up was evaluated through warm-to-cool transitions; a second round examined storage and reassembly and replacement of worn pieces for the rainwater downpipe filter with a floating cleanout ring prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the cleanout element of rainwater downpipe filter with a floating cleanout ring remaining accessible for inspection.
PH.3.	
INVENTORS	Aileen Dizon, Nico Manalo, Rhea Reyes, Mika Santos, Paolo Bautista, Lara Cruz
INVENTION	Foldable Fish Crate Liner with a Meltwater Separation Channel
INSTITUTION	Foldable Channel Applied Workshop
ABSTRACT	Foldable Fish Crate Liner with a Meltwater Separation Channel was developed for small delivery operations, where a compact response to water handling is more useful than a complex connected system, forming the specific starting point for foldable fish crate liner with a meltwater separation channel. A segmented seal changes position as conditions vary, while a contrast marker gives the user an immediate, non-electronic reading in the foldable fish crate liner with a meltwater separation channel configuration. Trials included wet and dry cycling and warm-to-cool transitions, with attention to stability, false indications, and access for cleaning for the foldable fish crate liner with a meltwater separation channel prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the channel element of foldable fish crate liner with a meltwater separation channel remaining accessible for inspection.
POLAND	
PL.1.	
INVENTORS	Zofia Krawiec, Marek Lis, Iga Nowak, Tomasz Wrona, Lena Mazur, Zofia Lis
INVENTION	Radiator Shelf That Redirects Heat from Cold Windows

INSTITUTION	Radiator Windows Applied Workshop
ABSTRACT	A recurring maintenance problem in homes and shared apartments led to the design of Radiator Shelf That Redirects Heat from Cold Windows, forming the specific starting point for radiator shelf that redirects heat from cold windows. The prototype combines a weighted flap with a inspection slot; both parts can be reached without dismantling the main body in the radiator shelf that redirects heat from cold windows configuration. Early evaluation focused on repeated opening and closing, ease of resetting, and performance after wet and dry cycling for the radiator shelf that redirects heat from cold windows prototype. The design remains deliberately simple so users can inspect its condition before every use, with the windows element of radiator shelf that redirects heat from cold windows remaining accessible for inspection.
QATAR	
QA.1.	
INVENTORS	Dana Al-Kuwari, Nasser Al-Marri, Leila Hassan
INVENTION	Dust-Entry Indicator for Outdoor Equipment Cabinets
INSTITUTION	Entry Cabinets Applied Workshop
ABSTRACT	A recurring maintenance problem in public waiting areas led to the design of Dust-Entry Indicator for Outdoor Equipment Cabinets, forming the specific starting point for dust-entry indicator for outdoor equipment cabinets. Interchangeable contact pieces sit around a porous insert, and a colored window records the most important change during operation in the dust-entry indicator for outdoor equipment cabinets configuration. A full-size mock-up was evaluated through light impact and vibration; a second round examined routine transport and replacement of worn pieces for the dust-entry indicator for outdoor equipment cabinets prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the cabinets element of dust-entry indicator for outdoor equipment cabinets remaining accessible for inspection.
ROMANIA	
RO.1.	
INVENTORS	Ana Ionescu, Radu Stoica, Mira Pavel
INVENTION	Orchard Crate Corner That Measures Compression History
INSTITUTION	Orchard History Applied Workshop
ABSTRACT	The starting point for Orchard Crate Corner That Measures Compression History was the need to make routine handling easier to see, adjust, and maintain in local markets, forming the specific starting point for orchard crate corner that measures compression history. A weighted flap changes position as conditions vary, while a moving band gives the user an immediate, non-electronic reading in the orchard crate corner that measures compression history configuration. Prototype checks covered

	different container sizes as well as warm-to-cool transitions, revealing where dirt or unintended movement could interfere for the orchard crate corner that measures compression history prototype. The design remains deliberately simple so users can inspect its condition before every use, with the history element of orchard crate corner that measures compression history remaining accessible for inspection.
RO.2.	
INVENTORS	Dorin Ene
INVENTION	Cellar Vent Cover with a Condensation Direction Tab
INSTITUTION	
ABSTRACT	During ordinary use in garden plots, small changes related to routine handling can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for cellar vent cover with a condensation direction tab. Instead of sensors, the design relies on a segmented seal, a calibrated stop, and a mechanical flag that remains readable after use in the cellar vent cover with a condensation direction tab configuration. Prototype checks covered wet and dry cycling as well as dust exposure and cleaning, revealing where dirt or unintended movement could interfere for the cellar vent cover with a condensation direction tab prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the direction element of cellar vent cover with a condensation direction tab remaining accessible for inspection.
SINGAPORE	
SG.1.	
INVENTORS	Tan Min, Aisha Rahman, Lim Jun
INVENTION	Balcony Laundry Clip That Signals Incoming Rain
INSTITUTION	Balcony Incoming Applied Workshop
ABSTRACT	During ordinary use in temporary service points, small changes related to weather protection can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for balcony laundry clip that signals incoming rain. Its working section uses a segmented seal to redirect force or flow toward a colored window, keeping the response visible and reversible in the balcony laundry clip that signals incoming rain configuration. Testing compared several material thicknesses during dust exposure and cleaning and checked whether the reading remained clear after storage and reassembly for the balcony laundry clip that signals incoming rain prototype. Further field use would determine the best materials for long-term durability, with the incoming element of balcony laundry clip that signals incoming rain remaining accessible for inspection.
SG.2.	
INVENTORS	Kavya Nair

INVENTION	Food-Court Tray Divider with a Spill-Isolation Rim
INSTITUTION	Court Isolation Applied Workshop
ABSTRACT	A recurring maintenance problem in schools and community rooms led to the design of Food-Court Tray Divider with a Spill-Isolation Rim, forming the specific starting point for food-court tray divider with a spill-isolation rim. Instead of sensors, the design relies on a porous insert, a calibrated stop, and a moving band that remains readable after use in the food-court tray divider with a spill-isolation rim configuration. Prototype checks covered different container sizes as well as short outdoor trials, revealing where dirt or unintended movement could interfere for the food-court tray divider with a spill-isolation rim prototype. Further field use would determine the best materials for long-term durability, with the isolation element of food-court tray divider with a spill-isolation rim remaining accessible for inspection.

SPAIN

ES.1.	
INVENTORS	Lucia Serrano
INVENTION	Ceramic Planter Base with a Root-Cooling Air Path
INSTITUTION	
ABSTRACT	Ceramic Planter Base with a Root-Cooling Air Path was developed for small delivery operations, where a compact response to airflow management is more useful than a complex connected system, forming the specific starting point for ceramic planter base with a root-cooling air path. Interchangeable contact pieces sit around a floating marker, and a mechanical flag records the most important change during operation in the ceramic planter base with a root-cooling air path configuration. Prototype checks covered uneven surfaces as well as repeated opening and closing, revealing where dirt or unintended movement could interfere for the ceramic planter base with a root-cooling air path prototype. The design remains deliberately simple so users can inspect its condition before every use, with the cooling element of ceramic planter base with a root-cooling air path remaining accessible for inspection.
ES.2.	
INVENTORS	Hugo Martin, Nadia Benali, Pablo Roca, Irene Vidal
INVENTION	Market Awning Clip with a Gust-Release Indicator
INSTITUTION	
ABSTRACT	The starting point for Market Awning Clip with a Gust-Release Indicator was the need to make public-space use easier to see, adjust, and maintain in repair spaces, forming the specific starting point for market awning clip with a gust-release indicator. The prototype combines a floating marker with a contrast marker; both parts can be reached without dismantling the main body in the market awning clip with a gust-release indicator

configuration. Prototype checks covered wet and dry cycling as well as repeated opening and closing, revealing where dirt or unintended movement could interfere for the market awning clip with a gust-release indicator prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the indicator element of market awning clip with a gust-release indicator remaining accessible for inspection.

SWEDEN

SE.1.

INVENTORS

Elsa Norberg, Isak Lund, Mina Farah, Oskar Berg

INVENTION

Snow-Load Marker for Small Greenhouse Roofs

INSTITUTION

Marker Roofs Applied Workshop

ABSTRACT

The starting point for Snow-Load Marker for Small Greenhouse Roofs was the need to make winter maintenance easier to see, adjust, and maintain in public waiting areas, forming the specific starting point for snow-load marker for small greenhouse roofs. A floating marker changes position as conditions vary, while a position ring gives the user an immediate, non-electronic reading in the snow-load marker for small greenhouse roofs configuration. The team observed the device during repeated opening and closing, then altered the geometry before repeating the evaluation under warm-to-cool transitions for the snow-load marker for small greenhouse roofs prototype. The final arrangement favors understandable operation and local repair rather than disposable electronics, with the roofs element of snow-load marker for small greenhouse roofs remaining accessible for inspection.

SE.2.

INVENTORS

Linnea Dahl, Arvid Holm, Elsa Lund

INVENTION

Shared Laundry Rack with a Dryness Comparison Strip

INSTITUTION

Shared Strip Applied Workshop

ABSTRACT

Shared Laundry Rack with a Dryness Comparison Strip was developed for small delivery operations, where a compact response to routine handling is more useful than a complex connected system, forming the specific starting point for shared laundry rack with a dryness comparison strip. A weighted flap changes position as conditions vary, while a inspection slot gives the user an immediate, non-electronic reading in the shared laundry rack with a dryness comparison strip configuration. Early evaluation focused on warm-to-cool transitions, ease of resetting, and performance after routine transport for the shared laundry rack with a dryness comparison strip prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the strip element of shared laundry rack with a dryness comparison strip remaining accessible for inspection.

SE.3.	
INVENTORS	Isak Farah
INVENTION	Quiet Refillable Dispenser for Public Handwashing Stations
INSTITUTION	
ABSTRACT	A recurring maintenance problem in homes and shared apartments led to the design of Quiet Refillable Dispenser for Public Handwashing Stations, forming the specific starting point for quiet refillable dispenser for public handwashing stations. A hinged channel changes position as conditions vary, while a moving band gives the user an immediate, non-electronic reading in the quiet refillable dispenser for public handwashing stations configuration. The team observed the device during light impact and vibration, then altered the geometry before repeating the evaluation under repeated opening and closing for the quiet refillable dispenser for public handwashing stations prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the stations element of quiet refillable dispenser for public handwashing stations remaining accessible for inspection.
TAIWAN	
TW.1.	
INVENTORS	Lin Yi-Jun, Chen Bo-Han, Wu Pei, Huang Zi-Yu
INVENTION	Cycle Helmet Vent Insert with a Humidity Memory Tab
INSTITUTION	
ABSTRACT	The idea grew from a practical difficulty observed in garden plots: routine handling often depends on equipment that is awkward to inspect or repair, forming the specific starting point for cycle helmet vent insert with a humidity memory tab. The main frame protects a rotating sleeve; an adjacent colored window shows when cleaning, adjustment, or resetting is needed in the cycle helmet vent insert with a humidity memory tab configuration. The team observed the device during warm-to-cool transitions, then altered the geometry before repeating the evaluation under changes in load and angle for the cycle helmet vent insert with a humidity memory tab prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the memory element of cycle helmet vent insert with a humidity memory tab remaining accessible for inspection.
TW.2.	
INVENTORS	Mei Chang, Tsai Wen-Lin, Luo Jia-Hao
INVENTION	Night-Market Cart Light with a Mechanical Battery Check Flag
INSTITUTION	Night Check Applied Workshop
ABSTRACT	The starting point for Night-Market Cart Light with a Mechanical Battery Check Flag was the need to make public-space use easier to see,

	adjust, and maintain in neighborhood facilities, forming the specific starting point for night-market cart light with a mechanical battery check flag. Its working section uses a tensioned strap to redirect force or flow toward a patterned tab, keeping the response visible and reversible in the night-market cart light with a mechanical battery check flag configuration. Testing compared several material thicknesses during changes in load and angle and checked whether the reading remained clear after warm-to-cool transitions for the night-market cart light with a mechanical battery check flag prototype. The design remains deliberately simple so users can inspect its condition before every use, with the check element of night-market cart light with a mechanical battery check flag remaining accessible for inspection.
TW.3.	
INVENTORS	Yang Xin-Ru, Kuo Ming-De
INVENTION	Foldable Scooter Basket with a Rain-Shedding Floor
INSTITUTION	Foldable Floor Applied Workshop
ABSTRACT	The starting point for Foldable Scooter Basket with a Rain-Shedding Floor was the need to make weather protection easier to see, adjust, and maintain in garden plots, forming the specific starting point for foldable scooter basket with a rain-shedding floor. Its working section uses a hinged channel to redirect force or flow toward a visible gauge, keeping the response visible and reversible in the foldable scooter basket with a rain-shedding floor configuration. The team observed the device during uneven surfaces, then altered the geometry before repeating the evaluation under wet and dry cycling for the foldable scooter basket with a rain-shedding floor prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the floor element of foldable scooter basket with a rain-shedding floor remaining accessible for inspection.
TW.4.	
INVENTORS	Su An-Qi, Lin Bo-Han
INVENTION	Window Screen Clip That Records Typhoon Wind Release
INSTITUTION	Window Release Applied Workshop
ABSTRACT	The starting point for Window Screen Clip That Records Typhoon Wind Release was the need to make building comfort easier to see, adjust, and maintain in neighborhood facilities, forming the specific starting point for window screen clip that records typhoon wind release. The main frame protects a tensioned strap; an adjacent moving band shows when cleaning, adjustment, or resetting is needed in the window screen clip that records typhoon wind release configuration. Testing compared several material thicknesses during routine transport and checked whether the reading remained clear after light impact and vibration for the window screen clip that records typhoon wind release prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the release

	element of window screen clip that records typhoon wind release remaining accessible for inspection.
TW.5.	
INVENTORS	Chen Pei, Wu Zi-Yu, Huang Chang, Mei Wen-Lin
INVENTION	Reusable Tea Cup Carrier with a Heat-Isolation Ring
INSTITUTION	
ABSTRACT	During ordinary use in temporary service points, small changes related to thermal protection can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for reusable tea cup carrier with a heat-isolation ring. The prototype combines a porous insert with a mechanical flag; both parts can be reached without dismantling the main body in the reusable tea cup carrier with a heat-isolation ring configuration. Early evaluation focused on light impact and vibration, ease of resetting, and performance after storage and reassembly for the reusable tea cup carrier with a heat-isolation ring prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the isolation element of reusable tea cup carrier with a heat-isolation ring remaining accessible for inspection.
TW.6.	
INVENTORS	Tsai Jia-Hao
INVENTION	Compact Umbrella Dryer with a Drip-Volume Indicator
INSTITUTION	Compact Indicator Applied Workshop
ABSTRACT	The idea grew from a practical difficulty observed in schools and community rooms: routine handling often depends on equipment that is awkward to inspect or repair, forming the specific starting point for compact umbrella dryer with a drip-volume indicator. Its working section uses a weighted flap to redirect force or flow toward a inspection slot, keeping the response visible and reversible in the compact umbrella dryer with a drip-volume indicator configuration. A full-size mock-up was evaluated through storage and reassembly; a second round examined one-handed operation and replacement of worn pieces for the compact umbrella dryer with a drip-volume indicator prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the indicator element of compact umbrella dryer with a drip-volume indicator remaining accessible for inspection.
TW.7.	
INVENTORS	Luo Xin-Ru, Yang Ming-De, Kuo An-Qi, Su Yi-Jun, Lin Pei
INVENTION	Balcony Plant Tie with a Flexible Storm Release
INSTITUTION	Balcony Release Applied Workshop
ABSTRACT	The idea grew from a practical difficulty observed in homes and shared apartments: routine handling often depends on equipment that is awkward

	to inspect or repair, forming the specific starting point for balcony plant tie with a flexible storm release. Its working section uses a flexible collar to redirect force or flow toward a mechanical flag, keeping the response visible and reversible in the balcony plant tie with a flexible storm release configuration. Testing compared several material thicknesses during warm-to-cool transitions and checked whether the reading remained clear after different container sizes for the balcony plant tie with a flexible storm release prototype. Further field use would determine the best materials for long-term durability, with the release element of balcony plant tie with a flexible storm release remaining accessible for inspection.
TW.8.	
INVENTORS	Chen Zi-Yu, Wu Chang, Huang Wen-Lin
INVENTION	Shared Parcel Locker Tray with a Moisture Warning Strip
INSTITUTION	Shared Strip Applied Workshop
ABSTRACT	A recurring maintenance problem in repair spaces led to the design of Shared Parcel Locker Tray with a Moisture Warning Strip, forming the specific starting point for shared parcel locker tray with a moisture warning strip. The prototype combines a sliding guide with a tactile scale; both parts can be reached without dismantling the main body in the shared parcel locker tray with a moisture warning strip configuration. Prototype checks covered light impact and vibration as well as repeated opening and closing, revealing where dirt or unintended movement could interfere for the shared parcel locker tray with a moisture warning strip prototype. Further field use would determine the best materials for long-term durability, with the strip element of shared parcel locker tray with a moisture warning strip remaining accessible for inspection.

THAILAND

TH.1.	
INVENTORS	Theerutch Phayungthanakorn
INVENTION	BodhiMobility
INSTITUTION	Shrewsbury International School Bangkok, Thailand
ABSTRACT	BodhiMobility is a culturally adaptive assistive mobility system designed to help older adults safely transition from kneeling or floor-seated positions to standing. Inspired by daily practices common across many Asian cultures, it addresses knee strain, balance loss, fall risk, and caregiver dependence. Two devices are featured: BodhiStep, a compact motor-assisted kneeling platform for home use, and LotusLift, a reinforced dual-stage assistive lift for users needing greater support. Controlled lifting mechanisms improve stability, independence, and dignity while remaining suited to floor-based lifestyles.
TH.2.	
INVENTORS	Naravid Tejavanija

INVENTION	GOcacao: Low-Cost Cacao Fermentation Intelligence
INSTITUTION	Shrewsbury International School
ABSTRACT	GOcacao is a low-cost cacao fermentation intelligence system that helps smallholder farmers produce premium-quality fermented beans. A portable device (USD 80–130) tracks fermentation temperature as a biological signal, and a proprietary algorithm detects the natural peak and decline of microbial activity, telling farmers exactly when to turn and stop the beans. Cloud software delivers real-time alerts and verifiable batch records. In controlled trials it raised fully-fermented beans to 84.5% (vs 68% traditional) and cut batch variation to 3.5% (vs 26.8%), nearly doubling farmer income with a 1–2 month payback.
TH.3.	
INVENTORS	Narida Charanachitta
INVENTION	Seagrass Seednest
INSTITUTION	Currents Collective
ABSTRACT	Seagrass Seednest is an innovative biodegradable anchoring system designed to accelerate large-scale seagrass restoration. Current methods require divers to manually plant individual seedlings, making deployment time-consuming and labour-intensive. The Seednest secures multiple seedlings within a single biodegradable structure made from natural materials, deployed directly from a boat. Once on the seabed it stabilizes seedlings during establishment while gradually decomposing without harmful waste. By reducing extensive diving operations, it increases restoration efficiency and enables scalable recovery of degraded seagrass ecosystems.
TH.4.	
INVENTORS	Intutch Vikman Kamollertvara
INVENTION	Imagi - Creativity for Everyone
INSTITUTION	Brentwood College School
ABSTRACT	This project develops a creative stationery ecosystem built around innovative rubber stamps, interchangeable handles, a futuristic storage box, and a digital content-sharing platform. The platform enables teachers, parents, students, elderly people, and individuals with disabilities to create educational and artistic content without requiring advanced drawing skills.
TH.5.	
INVENTORS	Ranrachata Yutthasarnsiri
INVENTION	SmartWear Athlete
INSTITUTION	Ruamrudee International School
ABSTRACT	SmartWear Athlete is a wearable performance testing and training system that automatically evaluates exercise posture, counts valid repetitions, and

	tracks athletic development over time. Wearable inertial measurement sensors (IMUs) with a microcontroller capture real-time movement during sit-ups, squats, and push-ups. Machine learning algorithms analyze motion patterns to determine whether each repetition is performed correctly, so only valid reps are counted, giving an objective performance assessment. It connects wirelessly to mobile apps for immediate feedback and greater training engagement.
TH.6.	
INVENTORS	Kornsiripachara Damrongrat
INVENTION	PulmoPlay: Interactive Lung Rehabilitation System
INSTITUTION	International School Bangkok
ABSTRACT	PulmoPlay is an innovative medical rehabilitation platform that upgrades a conventional incentive spirometer into a smart, connected healthcare device. It combines airflow sensing technology, embedded electronics, wireless communication, gamification, cloud computing, and patient monitoring systems. The goal is to improve patient engagement during lung rehabilitation while providing measurable clinical data for healthcare professionals.
TH.7.	
INVENTORS	Gaweewat Thanasitnaphitkul
INVENTION	Guitar-Based Interactive Music and Cognitive Wellness Platform for Elderly Care
INSTITUTION	The Newton Sixth Form
ABSTRACT	This project develops an innovative interactive device designed to resemble a guitar while simplifying the playing experience for elderly users. The platform combines a custom-designed hardware controller and software ecosystem that enables users to enjoy music, participate in games, exercise cognitive functions, and engage socially without requiring prior musical training.
TH.8.	
INVENTORS	Jayata Tiewanorn
INVENTION	Dynamic PCB-Based Tactile Tablet for Visually Impaired Learning and Accessibility
INSTITUTION	International School Bangkok
ABSTRACT	This project aims to develop a new generation of tactile display technology that allows visually impaired individuals to perceive not only Braille text but also maps, diagrams, mathematical graphs, geometric figures, scientific illustrations, and other complex visual information through touch.
TH.9.	

INVENTORS	Titapa Simapichaicheth, Celine Boonyanusasna
INVENTION	Goldfitt: Exercise Gamify for Elderly
INSTITUTION	NIST International School / Shrewsbury International School
ABSTRACT	Goldfitt is an integrated gamified exercise system that transforms resistance training into an enjoyable, motivating experience for older adults. It comprises adjustable exercise devices, a Bluetooth-enabled control box, and the Goldfitt Web Application. Four low-impact devices (hand compression trainer, string resistance device, finger dexterity trainer, arm/leg bicycle) translate movements such as squeezing, pulling, or pedaling into game commands, letting users exercise safely while seated. The web app manages profiles, personalized goals, and real-time tracking (duration, repetitions, progress), providing motivation for users and monitoring insights for caregivers.
TH.10.	
INVENTORS	Parnpavit Nilgianskul
INVENTION	PulseIQ
INSTITUTION	Shrewsbury International School Bangkok
ABSTRACT	PulseIQ is a real-time biometric stress monitoring and personalised profiling system for competitive squash athletes. Using the RMSSD algorithm validated by Kubios HRV — the gold standard used in over 1,800 universities worldwide — it connects to a Polar H10 chest strap via Bluetooth and displays live stress levels to coaches through a traffic-light system during training. Coaches log stress spikes alongside match-score context point by point, then conduct post-session interviews to identify psychological triggers behind each physiological response. Over multiple sessions it builds a personalised stress-trigger profile per athlete, revealing hidden patterns invisible to the human eye. PulseIQ makes the invisible visible.
TH.11.	
INVENTORS	Sean Terdprisant, Akka Asavanund
INVENTION	MotoSaaS (Motorcycle Safety-as-a-Service)
INSTITUTION	International School Bangkok, Concordian International School
ABSTRACT	MotoSaaS is a Safety-as-a-Service AI application that makes motorcycle safety simpler, smarter, and cheaper. Motorcycle-related fatalities are the leading road killer in developing countries (e.g., ~80% of traffic deaths in Thailand), often involving low-income riders who are the family breadwinners. Existing \$300–3,000+ hardware-based safety sensors for bikes are unaffordable and require invasive installations that can void vehicle warranties. MotoSaaS repurposes smartphones already mounted on motorcycles into an AI-driven safety solution. Its first application detects blind-spot risks using the phone's front camera, with a modular design that supports future integration of external sensors (e.g., EEG

wearables to detect fatigue).

TUNISIA

TN.1.

INVENTORS

Amira Salem

INVENTION

Olive Basket Liner with a Bruising-Pressure Pattern

INSTITUTION

Olive Pattern Applied Workshop

ABSTRACT

The idea grew from a practical difficulty observed in homes and shared apartments: routine handling often depends on equipment that is awkward to inspect or repair, forming the specific starting point for olive basket liner with a bruising-pressure pattern. A segmented seal changes position as conditions vary, while a tactile scale gives the user an immediate, non-electronic reading in the olive basket liner with a bruising-pressure pattern configuration. Prototype checks covered repeated opening and closing as well as one-handed operation, revealing where dirt or unintended movement could interfere for the olive basket liner with a bruising-pressure pattern prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the pattern element of olive basket liner with a bruising-pressure pattern remaining accessible for inspection.

TN.2.

INVENTORS

Youssef Trabelsi

INVENTION

Solar Still Cover with a Salt-Crystal Cleanout Edge

INSTITUTION

Solar Cleanout Applied Workshop

ABSTRACT

During ordinary use in homes and shared apartments, small changes related to passive energy use can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for solar still cover with a salt-crystal cleanout edge. The main frame protects a floating marker; an adjacent mechanical flag shows when cleaning, adjustment, or resetting is needed in the solar still cover with a salt-crystal cleanout edge configuration. Early evaluation focused on storage and reassembly, ease of resetting, and performance after one-handed operation for the solar still cover with a salt-crystal cleanout edge prototype. The design remains deliberately simple so users can inspect its condition before every use, with the cleanout element of solar still cover with a salt-crystal cleanout edge remaining accessible for inspection.

UKRAINE

UA.1.

INVENTORS

Olena Koval, Maksym Hrytsenko, Iryna Bondar, Taras Melnyk, Sofia Levchenko, Olena Hrytsenko

INVENTION

Flat-Pack Window Shield for Rapid Interior Repairs

INSTITUTION	Window Repairs Applied Workshop
ABSTRACT	This project looks at building comfort from the perspective of people working in temporary service points with limited space and basic tools, forming the specific starting point for flat-pack window shield for rapid interior repairs. Its working section uses a weighted flap to redirect force or flow toward a raised pointer, keeping the response visible and reversible in the flat-pack window shield for rapid interior repairs configuration. Trials included light impact and vibration and warm-to-cool transitions, with attention to stability, false indications, and access for cleaning for the flat-pack window shield for rapid interior repairs prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the repairs element of flat-pack window shield for rapid interior repairs remaining accessible for inspection.

UNITED ARAB EMIRATES

AE.1.	
INVENTORS	Layla Al-Nuaimi, Rami Haddad, Neha Menon
INVENTION	Heat-Reflective Parcel Cover with Reusable Cooling Pockets
INSTITUTION	
ABSTRACT	A recurring maintenance problem in temporary service points led to the design of Heat-Reflective Parcel Cover with Reusable Cooling Pockets, forming the specific starting point for heat-reflective parcel cover with reusable cooling pockets. Its working section uses a flexible collar to redirect force or flow toward a raised pointer, keeping the response visible and reversible in the heat-reflective parcel cover with reusable cooling pockets configuration. Trials included dust exposure and cleaning and storage and reassembly, with attention to stability, false indications, and access for cleaning for the heat-reflective parcel cover with reusable cooling pockets prototype. The final arrangement favors understandable operation and local repair rather than disposable electronics, with the pockets element of heat-reflective parcel cover with reusable cooling pockets remaining accessible for inspection.
AE.2.	
INVENTORS	Omar Farouk, Mina Park, Yusuf Rahman, Sara Qureshi, Khalid Nasser
INVENTION	Sand-Shedding Wheel Guard for Mobility Devices
INSTITUTION	Shedding Devices Applied Workshop
ABSTRACT	A recurring maintenance problem in repair spaces led to the design of Sand-Shedding Wheel Guard for Mobility Devices, forming the specific starting point for sand-shedding wheel guard for mobility devices. Interchangeable contact pieces sit around a floating marker, and a patterned tab records the most important change during operation in the sand-shedding wheel guard for mobility devices configuration. The team observed the device during short outdoor trials, then altered the geometry

	before repeating the evaluation under storage and reassembly for the sand-shedding wheel guard for mobility devices prototype. Further field use would determine the best materials for long-term durability, with the devices element of sand-shedding wheel guard for mobility devices remaining accessible for inspection.
AE.3.	
INVENTORS	Layla Haddad, Rami Menon, Neha Farouk, Omar Park, Mina Rahman, Yusuf Qureshi
INVENTION	Solar Shade Hinge with a Manual Wind Release
INSTITUTION	Solar Release Applied Workshop
ABSTRACT	This project looks at passive energy use from the perspective of people working in small delivery operations with limited space and basic tools, forming the specific starting point for solar shade hinge with a manual wind release. A hinged channel changes position as conditions vary, while a mechanical flag gives the user an immediate, non-electronic reading in the solar shade hinge with a manual wind release configuration. A full-size mock-up was evaluated through uneven surfaces; a second round examined routine transport and replacement of worn pieces for the solar shade hinge with a manual wind release prototype. Further field use would determine the best materials for long-term durability, with the release element of solar shade hinge with a manual wind release remaining accessible for inspection.
AE.4.	
INVENTORS	Sara Nasser
INVENTION	Condensation Guide for Glass-Fronted Display Cases
INSTITUTION	Condensation Cases Applied Workshop
ABSTRACT	Condensation Guide for Glass-Fronted Display Cases was developed for repair spaces, where a compact response to routine handling is more useful than a complex connected system, forming the specific starting point for condensation guide for glass-fronted display cases. Its working section uses a porous insert to redirect force or flow toward a moving band, keeping the response visible and reversible in the condensation guide for glass-fronted display cases configuration. Trials included changes in load and angle and one-handed operation, with attention to stability, false indications, and access for cleaning for the condensation guide for glass-fronted display cases prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the cases element of condensation guide for glass-fronted display cases remaining accessible for inspection.
AE.5.	
INVENTORS	Khalid Al-Nuaimi
INVENTION	Portable Queue Canopy with a Heat-Exposure Flag

INSTITUTION	Portable Exposure Applied Workshop
ABSTRACT	Portable Queue Canopy with a Heat-Exposure Flag was developed for local markets, where a compact response to thermal protection is more useful than a complex connected system, forming the specific starting point for portable queue canopy with a heat-exposure flag. The prototype combines a tensioned strap with a mechanical flag; both parts can be reached without dismantling the main body in the portable queue canopy with a heat-exposure flag configuration. Prototype checks covered routine transport as well as short outdoor trials, revealing where dirt or unintended movement could interfere for the portable queue canopy with a heat-exposure flag prototype. The design remains deliberately simple so users can inspect its condition before every use, with the exposure element of portable queue canopy with a heat-exposure flag remaining accessible for inspection.
AE.6.	
INVENTORS	Layla Menon, Rami Farouk, Neha Park
INVENTION	Reusable Food Delivery Divider for Mixed Temperatures
INSTITUTION	Reusable Temperatures Applied Workshop
ABSTRACT	The idea grew from a practical difficulty observed in homes and shared apartments: temperature management often depends on equipment that is awkward to inspect or repair, forming the specific starting point for reusable food delivery divider for mixed temperatures. A porous insert changes position as conditions vary, while a patterned tab gives the user an immediate, non-electronic reading in the reusable food delivery divider for mixed temperatures configuration. Testing compared several material thicknesses during dust exposure and cleaning and checked whether the reading remained clear after storage and reassembly for the reusable food delivery divider for mixed temperatures prototype. The final arrangement favors understandable operation and local repair rather than disposable electronics, with the temperatures element of reusable food delivery divider for mixed temperatures remaining accessible for inspection.

UNITED STATES

US.1.	
INVENTORS	Amina Diallo, Mateo Alvarez, Priya Raman, Daniel Brooks, Sofia Petrov
INVENTION	Clip-On School Desk Organizer with a Missing-Item Display
INSTITUTION	School Display Applied Workshop
ABSTRACT	The idea grew from a practical difficulty observed in temporary service points: routine handling often depends on equipment that is awkward to inspect or repair, forming the specific starting point for clip-on school desk organizer with a missing-item display. Interchangeable contact pieces sit around a folding brace, and a position ring records the most important change during operation in the clip-on school desk organizer with a

	missing-item display configuration. Early evaluation focused on changes in load and angle, ease of resetting, and performance after repeated opening and closing for the clip-on school desk organizer with a missing-item display prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the display element of clip-on school desk organizer with a missing-item display remaining accessible for inspection.
US.2.	
INVENTORS	Minh Tran, Leila Haddad, Jordan Lee, Fatima Noor, Ethan Miller, Camila Rocha
INVENTION	Sidewalk Tree Guard with Replaceable Root-Clearance Rings
INSTITUTION	Sidewalk Rings Applied Workshop
ABSTRACT	This project looks at routine handling from the perspective of people working in temporary service points with limited space and basic tools, forming the specific starting point for sidewalk tree guard with replaceable root-clearance rings. Interchangeable contact pieces sit around a replaceable pad, and a patterned tab records the most important change during operation in the sidewalk tree guard with replaceable root-clearance rings configuration. The team observed the device during short outdoor trials, then altered the geometry before repeating the evaluation under different container sizes for the sidewalk tree guard with replaceable root-clearance rings prototype. The final arrangement favors understandable operation and local repair rather than disposable electronics, with the rings element of sidewalk tree guard with replaceable root-clearance rings remaining accessible for inspection.
US.3.	
INVENTORS	Owen Grant, Nia Okafor, Kenji Sato
INVENTION	Reusable Grocery Tote That Separates Fragile Items by Weight
INSTITUTION	Reusable Weight Applied Workshop
ABSTRACT	The idea grew from a practical difficulty observed in homes and shared apartments: routine handling often depends on equipment that is awkward to inspect or repair, forming the specific starting point for reusable grocery tote that separates fragile items by weight. The prototype combines a flexible collar with a mechanical flag; both parts can be reached without dismantling the main body in the reusable grocery tote that separates fragile items by weight configuration. A full-size mock-up was evaluated through changes in load and angle; a second round examined storage and reassembly and replacement of worn pieces for the reusable grocery tote that separates fragile items by weight prototype. The final arrangement favors understandable operation and local repair rather than disposable electronics, with the weight element of reusable grocery tote that separates fragile items by weight remaining accessible for inspection.
US.4.	

INVENTORS	Maya Cohen, Luis Herrera
INVENTION	Window Fan Insert with a Night Noise Baffle
INSTITUTION	Window Baffle Applied Workshop
ABSTRACT	During ordinary use in small delivery operations, small changes related to building comfort can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for window fan insert with a night noise baffle. Interchangeable contact pieces sit around a replaceable pad, and a position ring records the most important change during operation in the window fan insert with a night noise baffle configuration. The team observed the device during short outdoor trials, then altered the geometry before repeating the evaluation under changes in load and angle for the window fan insert with a night noise baffle prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the baffle element of window fan insert with a night noise baffle remaining accessible for inspection.
US.5.	
INVENTORS	Anika Singh
INVENTION	Mechanical Medication Drawer Reminder for Shared Homes
INSTITUTION	Mechanical Homes Applied Workshop
ABSTRACT	A recurring maintenance problem in small workshops led to the design of Mechanical Medication Drawer Reminder for Shared Homes, forming the specific starting point for mechanical medication drawer reminder for shared homes. A flexible collar changes position as conditions vary, while a colored window gives the user an immediate, non-electronic reading in the mechanical medication drawer reminder for shared homes configuration. Early evaluation focused on wet and dry cycling, ease of resetting, and performance after repeated opening and closing for the mechanical medication drawer reminder for shared homes prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the homes element of mechanical medication drawer reminder for shared homes remaining accessible for inspection.
US.6.	
INVENTORS	Noah Williams, Samuel Boateng, Elena Garcia, Ravi Patel, Zoe Chen
INVENTION	Bike Rack Marker That Records Minor Vehicle Contact
INSTITUTION	Marker Contact Applied Workshop
ABSTRACT	The starting point for Bike Rack Marker That Records Minor Vehicle Contact was the need to make routine handling easier to see, adjust, and maintain in public waiting areas, forming the specific starting point for bike rack marker that records minor vehicle contact. Instead of sensors, the design relies on a floating marker, a calibrated stop, and a colored window that remains readable after use in the bike rack marker that records minor vehicle contact configuration. A full-size mock-up was evaluated

	through routine transport; a second round examined dust exposure and cleaning and replacement of worn pieces for the bike rack marker that records minor vehicle contact prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the contact element of bike rack marker that records minor vehicle contact remaining accessible for inspection.
US.7.	
INVENTORS	Mariam Saleh, Lucas Martin
INVENTION	Low-Water Dishwasher Basket for Small Kitchen Loads
INSTITUTION	Water Loads Applied Workshop
ABSTRACT	Low-Water Dishwasher Basket for Small Kitchen Loads was developed for homes and shared apartments, where a compact response to water handling is more useful than a complex connected system, forming the specific starting point for low-water dishwasher basket for small kitchen loads. The main frame protects a sliding guide; an adjacent moving band shows when cleaning, adjustment, or resetting is needed in the low-water dishwasher basket for small kitchen loads configuration. Trials included different container sizes and warm-to-cool transitions, with attention to stability, false indications, and access for cleaning for the low-water dishwasher basket for small kitchen loads prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the loads element of low-water dishwasher basket for small kitchen loads remaining accessible for inspection.
US.8.	
INVENTORS	Ivy Nguyen
INVENTION	Tactile Measuring Cup Sleeve with Temperature Warning
INSTITUTION	Tactile Warning Applied Workshop
ABSTRACT	During ordinary use in temporary service points, small changes related to temperature management can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for tactile measuring cup sleeve with temperature warning. Interchangeable contact pieces sit around a porous insert, and a tactile scale records the most important change during operation in the tactile measuring cup sleeve with temperature warning configuration. The team observed the device during one-handed operation, then altered the geometry before repeating the evaluation under routine transport for the tactile measuring cup sleeve with temperature warning prototype. The final arrangement favors understandable operation and local repair rather than disposable electronics, with the warning element of tactile measuring cup sleeve with temperature warning remaining accessible for inspection.
US.9.	
INVENTORS	Adrian Kowalski, Sara Ahmed, Benjamin Clark

INVENTION	Portable Library Return Box with a Moisture-Safe Floor
INSTITUTION	Portable Floor Applied Workshop
ABSTRACT	The starting point for Portable Library Return Box with a Moisture-Safe Floor was the need to make moisture control easier to see, adjust, and maintain in local markets, forming the specific starting point for portable library return box with a moisture-safe floor. Interchangeable contact pieces sit around a sliding guide, and a position ring records the most important change during operation in the portable library return box with a moisture-safe floor configuration. The team observed the device during different container sizes, then altered the geometry before repeating the evaluation under changes in load and angle for the portable library return box with a moisture-safe floor prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the floor element of portable library return box with a moisture-safe floor remaining accessible for inspection.
US.10.	
INVENTORS	Lina Moradi, Diego Flores
INVENTION	Community Garden Hose Splitter with Visible Flow Balance
INSTITUTION	Community Balance Applied Workshop
ABSTRACT	A recurring maintenance problem in temporary service points led to the design of Community Garden Hose Splitter with Visible Flow Balance, forming the specific starting point for community garden hose splitter with visible flow balance. The main frame protects a floating marker; an adjacent inspection slot shows when cleaning, adjustment, or resetting is needed in the community garden hose splitter with visible flow balance configuration. Prototype checks covered different container sizes as well as warm-to-cool transitions, revealing where dirt or unintended movement could interfere for the community garden hose splitter with visible flow balance prototype. The design remains deliberately simple so users can inspect its condition before every use, with the balance element of community garden hose splitter with visible flow balance remaining accessible for inspection.
US.11.	
INVENTORS	Amara Lewis, Tariq Bashir, Mei Sullivan, Jonas Reed
INVENTION	Foldable Evacuation Pet Carrier with a Calm-Light Window
INSTITUTION	Foldable Window Applied Workshop
ABSTRACT	This project looks at building comfort from the perspective of people working in garden plots with limited space and basic tools, forming the specific starting point for foldable evacuation pet carrier with a calm-light window. The prototype combines a spring-loaded tab with a position ring; both parts can be reached without dismantling the main body in the foldable evacuation pet carrier with a calm-light window configuration. Early evaluation focused on uneven surfaces, ease of resetting, and

	performance after different container sizes for the foldable evacuation pet carrier with a calm-light window prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the window element of foldable evacuation pet carrier with a calm-light window remaining accessible for inspection.
US.12.	
INVENTORS	Amina Alvarez, Mateo Raman, Priya Brooks, Daniel Petrov, Sofia Tran, Minh Haddad
INVENTION	Reusable Laboratory Sample Rack with an Impact Flag
INSTITUTION	Reusable Impact Applied Workshop
ABSTRACT	Reusable Laboratory Sample Rack with an Impact Flag was developed for neighborhood facilities, where a compact response to routine handling is more useful than a complex connected system, forming the specific starting point for reusable laboratory sample rack with an impact flag. The main frame protects a folding brace; an adjacent position ring shows when cleaning, adjustment, or resetting is needed in the reusable laboratory sample rack with an impact flag configuration. Prototype checks covered uneven surfaces as well as short outdoor trials, revealing where dirt or unintended movement could interfere for the reusable laboratory sample rack with an impact flag prototype. The design remains deliberately simple so users can inspect its condition before every use, with the impact element of reusable laboratory sample rack with an impact flag remaining accessible for inspection.
US.13.	
INVENTORS	Leila Lee, Jordan Noor, Fatima Miller
INVENTION	Roof Gutter Leaf Guide That Opens for Tool-Free Cleaning
INSTITUTION	
ABSTRACT	The starting point for Roof Gutter Leaf Guide That Opens for Tool-Free Cleaning was the need to make workshop organization easier to see, adjust, and maintain in neighborhood facilities, forming the specific starting point for roof gutter leaf guide that opens for tool-free cleaning. Interchangeable contact pieces sit around a tensioned strap, and a position ring records the most important change during operation in the roof gutter leaf guide that opens for tool-free cleaning configuration. Trials included short outdoor trials and storage and reassembly, with attention to stability, false indications, and access for cleaning for the roof gutter leaf guide that opens for tool-free cleaning prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the cleaning element of roof gutter leaf guide that opens for tool-free cleaning remaining accessible for inspection.
US.14.	
INVENTORS	Ethan Rocha, Camila Grant, Owen Okafor, Nia Sato, Kenji Cohen, Maya Herrera

INVENTION	Apartment Door Draft Panel with Adjustable Corner Pads
INSTITUTION	Apartment Corner Applied Workshop
ABSTRACT	Apartment Door Draft Panel with Adjustable Corner Pads was developed for local markets, where a compact response to routine handling is more useful than a complex connected system, forming the specific starting point for apartment door draft panel with adjustable corner pads. The main frame protects a sliding guide; an adjacent visible gauge shows when cleaning, adjustment, or resetting is needed in the apartment door draft panel with adjustable corner pads configuration. Early evaluation focused on repeated opening and closing, ease of resetting, and performance after routine transport for the apartment door draft panel with adjustable corner pads prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the corner element of apartment door draft panel with adjustable corner pads remaining accessible for inspection.
US.15.	
INVENTORS	Luis Singh, Anika Williams, Noah Kim, Hana Boateng
INVENTION	Playground Shade Tie That Releases Before Fabric Tearing
INSTITUTION	
ABSTRACT	Playground Shade Tie That Releases Before Fabric Tearing was developed for local markets, where a compact response to routine handling is more useful than a complex connected system, forming the specific starting point for playground shade tie that releases before fabric tearing. Interchangeable contact pieces sit around a folding brace, and a inspection slot records the most important change during operation in the playground shade tie that releases before fabric tearing configuration. A full-size mock-up was evaluated through one-handed operation; a second round examined dust exposure and cleaning and replacement of worn pieces for the playground shade tie that releases before fabric tearing prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the tearing element of playground shade tie that releases before fabric tearing remaining accessible for inspection.
US.16.	
INVENTORS	Samuel Garcia, Elena Patel, Ravi Chen, Zoe Saleh, Mariam Martin, Lucas Nguyen
INVENTION	Shared Refrigerator Bin with a Date-Rotation Track
INSTITUTION	Shared Track Applied Workshop
ABSTRACT	This project looks at routine handling from the perspective of people working in homes and shared apartments with limited space and basic tools, forming the specific starting point for shared refrigerator bin with a date-rotation track. Instead of sensors, the design relies on a sliding guide, a calibrated stop, and a mechanical flag that remains readable after use in the shared refrigerator bin with a date-rotation track configuration. Prototype checks covered short outdoor trials as well as dust exposure and

	cleaning, revealing where dirt or unintended movement could interfere for the shared refrigerator bin with a date-rotation track prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the track element of shared refrigerator bin with a date-rotation track remaining accessible for inspection.
US.17.	
INVENTORS	Ivy Kowalski, Adrian Ahmed, Sara Clark, Benjamin Moradi
INVENTION	Curbside Package Stand with a Rain-Level Indicator
INSTITUTION	Curbside Indicator Applied Workshop
ABSTRACT	This project looks at weather protection from the perspective of people working in public waiting areas with limited space and basic tools, forming the specific starting point for curbside package stand with a rain-level indicator. The prototype combines a floating marker with a visible gauge; both parts can be reached without dismantling the main body in the curbside package stand with a rain-level indicator configuration. Testing compared several material thicknesses during changes in load and angle and checked whether the reading remained clear after one-handed operation for the curbside package stand with a rain-level indicator prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the indicator element of curbside package stand with a rain-level indicator remaining accessible for inspection.
US.18.	
INVENTORS	Lina Flores, Diego Lewis, Amara Bashir, Tariq Sullivan, Mei Reed, Jonas Diallo
INVENTION	Quiet Shopping Cart Wheel Insert for Indoor Markets
INSTITUTION	Quiet Markets Applied Workshop
ABSTRACT	A recurring maintenance problem in neighborhood facilities led to the design of Quiet Shopping Cart Wheel Insert for Indoor Markets, forming the specific starting point for quiet shopping cart wheel insert for indoor markets. The main frame protects a spring-loaded tab; an adjacent moving band shows when cleaning, adjustment, or resetting is needed in the quiet shopping cart wheel insert for indoor markets configuration. A full-size mock-up was evaluated through repeated opening and closing; a second round examined short outdoor trials and replacement of worn pieces for the quiet shopping cart wheel insert for indoor markets prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the markets element of quiet shopping cart wheel insert for indoor markets remaining accessible for inspection.
US.19.	
INVENTORS	Amina Raman, Mateo Brooks, Priya Petrov

INVENTION	Portable Art-Drying Rack with Dust-Safe Spacers
INSTITUTION	
ABSTRACT	This project looks at routine handling from the perspective of people working in garden plots with limited space and basic tools, forming the specific starting point for portable art-drying rack with dust-safe spacers. A hinged channel changes position as conditions vary, while a position ring gives the user an immediate, non-electronic reading in the portable art-drying rack with dust-safe spacers configuration. Early evaluation focused on repeated opening and closing, ease of resetting, and performance after short outdoor trials for the portable art-drying rack with dust-safe spacers prototype. The final arrangement favors understandable operation and local repair rather than disposable electronics, with the spacers element of portable art-drying rack with dust-safe spacers remaining accessible for inspection.
US.20.	
INVENTORS	Daniel Tran, Sofia Haddad, Minh Lee, Leila Noor
INVENTION	Mechanical Classroom Airing Timer with a Color Band
INSTITUTION	
ABSTRACT	Mechanical Classroom Airing Timer with a Color Band was developed for local markets, where a compact response to shared learning spaces is more useful than a complex connected system, forming the specific starting point for mechanical classroom airing timer with a color band. The main frame protects a weighted flap; an adjacent inspection slot shows when cleaning, adjustment, or resetting is needed in the mechanical classroom airing timer with a color band configuration. Testing compared several material thicknesses during one-handed operation and checked whether the reading remained clear after routine transport for the mechanical classroom airing timer with a color band prototype. The design remains deliberately simple so users can inspect its condition before every use, with the color element of mechanical classroom airing timer with a color band remaining accessible for inspection.
US.21.	
INVENTORS	Jordan Miller, Fatima Rocha, Ethan Grant
INVENTION	Reusable Shipping Corner Made from Textile Offcuts
INSTITUTION	Reusable Offcuts Applied Workshop
ABSTRACT	During ordinary use in small delivery operations, small changes related to routine handling can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for reusable shipping corner made from textile offcuts. Instead of sensors, the design relies on a porous insert, a calibrated stop, and a contrast marker that remains readable after use in the reusable shipping corner made from textile offcuts configuration. A full-size mock-up was evaluated through dust exposure and cleaning; a second round examined different container sizes and

	replacement of worn pieces for the reusable shipping corner made from textile offcuts prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the offcuts element of reusable shipping corner made from textile offcuts remaining accessible for inspection.
US.22.	
INVENTORS	Camila Okafor, Owen Sato, Nia Cohen, Kenji Herrera, Maya Singh
INVENTION	Handrail Grip Sleeve with a Wear-Depth Indicator
INSTITUTION	Handrail Indicator Applied Workshop
ABSTRACT	The starting point for Handrail Grip Sleeve with a Wear-Depth Indicator was the need to make routine handling easier to see, adjust, and maintain in repair spaces, forming the specific starting point for handrail grip sleeve with a wear-depth indicator. The prototype combines a hinged channel with a visible gauge; both parts can be reached without dismantling the main body in the handrail grip sleeve with a wear-depth indicator configuration. A full-size mock-up was evaluated through changes in load and angle; a second round examined one-handed operation and replacement of worn pieces for the handrail grip sleeve with a wear-depth indicator prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the indicator element of handrail grip sleeve with a wear-depth indicator remaining accessible for inspection.
US.23.	
INVENTORS	Luis Williams, Anika Kim, Noah Boateng, Hana Garcia, Samuel Patel
INVENTION	Dormitory Bedside Shelf with a Spill-Direction Channel
INSTITUTION	Dormitory Channel Applied Workshop
ABSTRACT	During ordinary use in homes and shared apartments, small changes related to routine handling can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for dormitory bedside shelf with a spill-direction channel. The prototype combines a spring-loaded tab with a mechanical flag; both parts can be reached without dismantling the main body in the dormitory bedside shelf with a spill-direction channel configuration. The team observed the device during different container sizes, then altered the geometry before repeating the evaluation under light impact and vibration for the dormitory bedside shelf with a spill-direction channel prototype. Further field use would determine the best materials for long-term durability, with the channel element of dormitory bedside shelf with a spill-direction channel remaining accessible for inspection.
US.24.	
INVENTORS	Elena Chen
INVENTION	Tool Belt Clip That Locks Only Under Load

INSTITUTION	Locks Under Applied Workshop
ABSTRACT	Tool Belt Clip That Locks Only Under Load was developed for schools and community rooms, where a compact response to workshop organization is more useful than a complex connected system, forming the specific starting point for tool belt clip that locks only under load. Its working section uses a sliding guide to redirect force or flow toward a colored window, keeping the response visible and reversible in the tool belt clip that locks only under load configuration. Trials included one-handed operation and wet and dry cycling, with attention to stability, false indications, and access for cleaning for the tool belt clip that locks only under load prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the under element of tool belt clip that locks only under load remaining accessible for inspection.
US.25.	
INVENTORS	Ravi Saleh
INVENTION	Bus Stop Seat Cover with a Passive Heat Warning
INSTITUTION	Cover Warning Applied Workshop
ABSTRACT	This project looks at thermal protection from the perspective of people working in repair spaces with limited space and basic tools, forming the specific starting point for bus stop seat cover with a passive heat warning. Interchangeable contact pieces sit around a floating marker, and a mechanical flag records the most important change during operation in the bus stop seat cover with a passive heat warning configuration. A full-size mock-up was evaluated through warm-to-cool transitions; a second round examined dust exposure and cleaning and replacement of worn pieces for the bus stop seat cover with a passive heat warning prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the warning element of bus stop seat cover with a passive heat warning remaining accessible for inspection.
US.26.	
INVENTORS	Mariam Nguyen, Lucas Kowalski
INVENTION	Garden Seed Packet Case with Humidity-Balancing Tabs
INSTITUTION	Garden Balancing Applied Workshop
ABSTRACT	The starting point for Garden Seed Packet Case with Humidity-Balancing Tabs was the need to make small-scale growing easier to see, adjust, and maintain in homes and shared apartments, forming the specific starting point for garden seed packet case with humidity-balancing tabs. Instead of sensors, the design relies on a segmented seal, a calibrated stop, and a patterned tab that remains readable after use in the garden seed packet case with humidity-balancing tabs configuration. Testing compared several material thicknesses during changes in load and angle and checked whether the reading remained clear after repeated opening and closing for the garden seed packet case with humidity-balancing tabs prototype. The

	final arrangement favors understandable operation and local repair rather than disposable electronics, with the balancing element of garden seed packet case with humidity-balancing tabs remaining accessible for inspection.
US.27.	
INVENTORS	Ivy Ahmed, Adrian Clark
INVENTION	Kitchen Compost Lid with a Mechanical Fill Gauge
INSTITUTION	Kitchen Gauge Applied Workshop
ABSTRACT	The starting point for Kitchen Compost Lid with a Mechanical Fill Gauge was the need to make routine handling easier to see, adjust, and maintain in schools and community rooms, forming the specific starting point for kitchen compost lid with a mechanical fill gauge. Instead of sensors, the design relies on a tensioned strap, a calibrated stop, and a raised pointer that remains readable after use in the kitchen compost lid with a mechanical fill gauge configuration. A full-size mock-up was evaluated through repeated opening and closing; a second round examined wet and dry cycling and replacement of worn pieces for the kitchen compost lid with a mechanical fill gauge prototype. Further field use would determine the best materials for long-term durability, with the gauge element of kitchen compost lid with a mechanical fill gauge remaining accessible for inspection.
US.28.	
INVENTORS	Sara Moradi, Benjamin Flores
INVENTION	Laundry Basket Divider That Protects Delicate Fabrics
INSTITUTION	
ABSTRACT	This project looks at routine handling from the perspective of people working in small workshops with limited space and basic tools, forming the specific starting point for laundry basket divider that protects delicate fabrics. Instead of sensors, the design relies on a tensioned strap, a calibrated stop, and a visible gauge that remains readable after use in the laundry basket divider that protects delicate fabrics configuration. Testing compared several material thicknesses during repeated opening and closing and checked whether the reading remained clear after storage and reassembly for the laundry basket divider that protects delicate fabrics prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the fabrics element of laundry basket divider that protects delicate fabrics remaining accessible for inspection.
US.29.	
INVENTORS	Lina Lewis, Diego Bashir
INVENTION	Foldable Solar Cooker Stand with a Shadow Alignment Guide
INSTITUTION	Foldable Guide Applied Workshop

ABSTRACT	The idea grew from a practical difficulty observed in homes and shared apartments: passive energy use often depends on equipment that is awkward to inspect or repair, forming the specific starting point for foldable solar cooker stand with a shadow alignment guide. The main frame protects a floating marker; an adjacent visible gauge shows when cleaning, adjustment, or resetting is needed in the foldable solar cooker stand with a shadow alignment guide configuration. Prototype checks covered repeated opening and closing as well as dust exposure and cleaning, revealing where dirt or unintended movement could interfere for the foldable solar cooker stand with a shadow alignment guide prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the guide element of foldable solar cooker stand with a shadow alignment guide remaining accessible for inspection.
US.30.	
INVENTORS	Amara Sullivan, Tariq Reed, Mei Diallo
INVENTION	Apartment Plant Tray with a Slow-Leak Alert
INSTITUTION	
ABSTRACT	This project looks at routine handling from the perspective of people working in schools and community rooms with limited space and basic tools, forming the specific starting point for apartment plant tray with a slow-leak alert. The main frame protects a hinged channel; an adjacent contrast marker shows when cleaning, adjustment, or resetting is needed in the apartment plant tray with a slow-leak alert configuration. Early evaluation focused on wet and dry cycling, ease of resetting, and performance after one-handed operation for the apartment plant tray with a slow-leak alert prototype. Further field use would determine the best materials for long-term durability, with the alert element of apartment plant tray with a slow-leak alert remaining accessible for inspection.
US.31.	
INVENTORS	Jonas Alvarez, Amina Brooks, Mateo Petrov, Priya Tran, Daniel Haddad
INVENTION	Wheelchair Bag Frame with Quick-Release Balance Straps
INSTITUTION	
ABSTRACT	The starting point for Wheelchair Bag Frame with Quick-Release Balance Straps was the need to make airflow management easier to see, adjust, and maintain in neighborhood facilities, forming the specific starting point for wheelchair bag frame with quick-release balance straps. The main frame protects a folding brace; an adjacent inspection slot shows when cleaning, adjustment, or resetting is needed in the wheelchair bag frame with quick-release balance straps configuration. Prototype checks covered routine transport as well as changes in load and angle, revealing where dirt or unintended movement could interfere for the wheelchair bag frame with quick-release balance straps prototype. Further field use would determine the best materials for long-term durability, with the straps element of wheelchair bag frame with quick-release balance straps remaining

	accessible for inspection.
US.32.	
INVENTORS	Sofia Lee, Minh Noor, Leila Miller, Jordan Rocha
INVENTION	Reusable Moving Box with a Compression History Window
INSTITUTION	Reusable Window Applied Workshop
ABSTRACT	The starting point for Reusable Moving Box with a Compression History Window was the need to make building comfort easier to see, adjust, and maintain in neighborhood facilities, forming the specific starting point for reusable moving box with a compression history window. Instead of sensors, the design relies on a folding brace, a calibrated stop, and a patterned tab that remains readable after use in the reusable moving box with a compression history window configuration. Testing compared several material thicknesses during different container sizes and checked whether the reading remained clear after routine transport for the reusable moving box with a compression history window prototype. The design remains deliberately simple so users can inspect its condition before every use, with the window element of reusable moving box with a compression history window remaining accessible for inspection.
US.33.	
INVENTORS	Fatima Grant, Ethan Okafor, Camila Sato, Owen Cohen, Nia Herrera, Kenji Singh
INVENTION	Storm-Drain Marker That Rises During Rapid Snowmelt
INSTITUTION	Storm Snowmelt Applied Workshop
ABSTRACT	During ordinary use in homes and shared apartments, small changes related to weather protection can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for storm-drain marker that rises during rapid snowmelt. The main frame protects a folding brace; an adjacent raised pointer shows when cleaning, adjustment, or resetting is needed in the storm-drain marker that rises during rapid snowmelt configuration. The team observed the device during storage and reassembly, then altered the geometry before repeating the evaluation under changes in load and angle for the storm-drain marker that rises during rapid snowmelt prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the snowmelt element of storm-drain marker that rises during rapid snowmelt remaining accessible for inspection.
US.34.	
INVENTORS	Maya Williams, Luis Kim, Anika Boateng
INVENTION	Shared Workshop Charger Shelf with Cable Return Flags
INSTITUTION	Shared Flags Applied Workshop
ABSTRACT	A recurring maintenance problem in schools and community rooms led to

	the design of Shared Workshop Charger Shelf with Cable Return Flags, forming the specific starting point for shared workshop charger shelf with cable return flags. A segmented seal changes position as conditions vary, while a inspection slot gives the user an immediate, non-electronic reading in the shared workshop charger shelf with cable return flags configuration. Prototype checks covered short outdoor trials as well as storage and reassembly, revealing where dirt or unintended movement could interfere for the shared workshop charger shelf with cable return flags prototype. The design remains deliberately simple so users can inspect its condition before every use, with the flags element of shared workshop charger shelf with cable return flags remaining accessible for inspection.
US.35.	
INVENTORS	Noah Garcia, Hana Patel
INVENTION	Bicycle Pannier Insert for Separating Hot and Cold Items
INSTITUTION	
ABSTRACT	Bicycle Pannier Insert for Separating Hot and Cold Items was developed for small workshops, where a compact response to everyday mobility is more useful than a complex connected system, forming the specific starting point for bicycle pannier insert for separating hot and cold items. The main frame protects a sliding guide; an adjacent mechanical flag shows when cleaning, adjustment, or resetting is needed in the bicycle pannier insert for separating hot and cold items configuration. Testing compared several material thicknesses during uneven surfaces and checked whether the reading remained clear after light impact and vibration for the bicycle pannier insert for separating hot and cold items prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the items element of bicycle pannier insert for separating hot and cold items remaining accessible for inspection.
US.36.	
INVENTORS	Samuel Chen, Elena Saleh, Ravi Martin
INVENTION	Classroom Whiteboard Eraser with a Dust Collection Channel
INSTITUTION	Classroom Channel Applied Workshop
ABSTRACT	During ordinary use in schools and community rooms, small changes related to shared learning spaces can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for classroom whiteboard eraser with a dust collection channel. Interchangeable contact pieces sit around a rotating sleeve, and a patterned tab records the most important change during operation in the classroom whiteboard eraser with a dust collection channel configuration. The team observed the device during repeated opening and closing, then altered the geometry before repeating the evaluation under different container sizes for the classroom whiteboard eraser with a dust collection channel prototype. The design remains deliberately simple so users can inspect its condition before every

	use, with the channel element of classroom whiteboard eraser with a dust collection channel remaining accessible for inspection.
US.37.	
INVENTORS	Zoe Nguyen, Mariam Kowalski, Lucas Ahmed, Ivy Clark, Adrian Moradi, Sara Flores
INVENTION	Pet Water Bowl Base That Indicates Floor Tilt
INSTITUTION	
ABSTRACT	This project looks at water handling from the perspective of people working in temporary service points with limited space and basic tools, forming the specific starting point for pet water bowl base that indicates floor tilt. Interchangeable contact pieces sit around a weighted flap, and a mechanical flag records the most important change during operation in the pet water bowl base that indicates floor tilt configuration. Trials included routine transport and short outdoor trials, with attention to stability, false indications, and access for cleaning for the pet water bowl base that indicates floor tilt prototype. The design remains deliberately simple so users can inspect its condition before every use, with the floor element of pet water bowl base that indicates floor tilt remaining accessible for inspection.
US.38.	
INVENTORS	Benjamin Lewis, Lina Bashir, Diego Sullivan, Amara Reed, Tariq Diallo, Mei Alvarez
INVENTION	Portable Produce Scale with a Mechanical Overload Memory
INSTITUTION	
ABSTRACT	The starting point for Portable Produce Scale with a Mechanical Overload Memory was the need to make routine handling easier to see, adjust, and maintain in small delivery operations, forming the specific starting point for portable produce scale with a mechanical overload memory. Its working section uses a tensioned strap to redirect force or flow toward a position ring, keeping the response visible and reversible in the portable produce scale with a mechanical overload memory configuration. Early evaluation focused on storage and reassembly, ease of resetting, and performance after wet and dry cycling for the portable produce scale with a mechanical overload memory prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the memory element of portable produce scale with a mechanical overload memory remaining accessible for inspection.
US.39.	
INVENTORS	Jonas Raman, Amina Petrov, Mateo Tran, Priya Haddad
INVENTION	Window Herb Planter with a Wind-Release Bracket
INSTITUTION	Window Bracket Applied Workshop

ABSTRACT	A recurring maintenance problem in local markets led to the design of Window Herb Planter with a Wind-Release Bracket, forming the specific starting point for window herb planter with a wind-release bracket. Its working section uses a spring-loaded tab to redirect force or flow toward a position ring, keeping the response visible and reversible in the window herb planter with a wind-release bracket configuration. Testing compared several material thicknesses during storage and reassembly and checked whether the reading remained clear after one-handed operation for the window herb planter with a wind-release bracket prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the bracket element of window herb planter with a wind-release bracket remaining accessible for inspection.
US.40.	
INVENTORS	Daniel Lee, Sofia Noor, Minh Miller, Leila Rocha, Jordan Grant
INVENTION	Travel Medicine Case with a Time-Above-Temperature Strip
INSTITUTION	
ABSTRACT	The idea grew from a practical difficulty observed in small delivery operations: temperature management often depends on equipment that is awkward to inspect or repair, forming the specific starting point for travel medicine case with a time-above-temperature strip. Its working section uses a weighted flap to redirect force or flow toward a mechanical flag, keeping the response visible and reversible in the travel medicine case with a time-above-temperature strip configuration. The team observed the device during warm-to-cool transitions, then altered the geometry before repeating the evaluation under storage and reassembly for the travel medicine case with a time-above-temperature strip prototype. It is intended as a practical aid, not as a certified measuring or safety instrument, with the strip element of travel medicine case with a time-above-temperature strip remaining accessible for inspection.
US.41.	
INVENTORS	Fatima Okafor, Ethan Sato, Camila Cohen, Owen Herrera
INVENTION	Reconfigurable Study Divider Made from Recovered Felt
INSTITUTION	Reconfigurable Recovered Applied Workshop
ABSTRACT	During ordinary use in small delivery operations, small changes related to routine handling can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for reconfigurable study divider made from recovered felt. A floating marker changes position as conditions vary, while a visible gauge gives the user an immediate, non-electronic reading in the reconfigurable study divider made from recovered felt configuration. Testing compared several material thicknesses during uneven surfaces and checked whether the reading remained clear after one-handed operation for the reconfigurable study divider made from recovered felt prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with

	the recovered element of reconfigurable study divider made from recovered felt remaining accessible for inspection.
US.42.	
INVENTORS	Nia Singh
INVENTION	Home Repair Mat That Captures and Sorts Dropped Screws
INSTITUTION	Repair Screws Applied Workshop
ABSTRACT	A recurring maintenance problem in public waiting areas led to the design of Home Repair Mat That Captures and Sorts Dropped Screws, forming the specific starting point for home repair mat that captures and sorts dropped screws. Instead of sensors, the design relies on a weighted flap, a calibrated stop, and a position ring that remains readable after use in the home repair mat that captures and sorts dropped screws configuration. A full-size mock-up was evaluated through light impact and vibration; a second round examined warm-to-cool transitions and replacement of worn pieces for the home repair mat that captures and sorts dropped screws prototype. Further field use would determine the best materials for long-term durability, with the screws element of home repair mat that captures and sorts dropped screws remaining accessible for inspection.
US.43.	
INVENTORS	Kenji Williams, Maya Kim, Luis Boateng
INVENTION	Backpack Frame Insert with a Load-Balance Indicator
INSTITUTION	Backpack Indicator Applied Workshop
ABSTRACT	The idea grew from a practical difficulty observed in local markets: routine handling often depends on equipment that is awkward to inspect or repair, forming the specific starting point for backpack frame insert with a load-balance indicator. The main frame protects a weighted flap; an adjacent patterned tab shows when cleaning, adjustment, or resetting is needed in the backpack frame insert with a load-balance indicator configuration. A full-size mock-up was evaluated through storage and reassembly; a second round examined light impact and vibration and replacement of worn pieces for the backpack frame insert with a load-balance indicator prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the indicator element of backpack frame insert with a load-balance indicator remaining accessible for inspection.
US.44.	
INVENTORS	Anika Garcia
INVENTION	Reusable Coffee Cup Carrier with Spill-Isolation Cells
INSTITUTION	Reusable Cells Applied Workshop
ABSTRACT	During ordinary use in small workshops, small changes related to routine handling can remain unnoticed until they cause waste or inconvenience, forming the specific starting point for reusable coffee cup carrier with

	spill-isolation cells. Interchangeable contact pieces sit around a spring-loaded tab, and a position ring records the most important change during operation in the reusable coffee cup carrier with spill-isolation cells configuration. A full-size mock-up was evaluated through dust exposure and cleaning; a second round examined changes in load and angle and replacement of worn pieces for the reusable coffee cup carrier with spill-isolation cells prototype. Further field use would determine the best materials for long-term durability, with the cells element of reusable coffee cup carrier with spill-isolation cells remaining accessible for inspection.
US.45.	
INVENTORS	Noah Patel, Hana Chen, Samuel Saleh, Elena Martin, Ravi Nguyen, Zoe Kowalski
INVENTION	Community Notice Board with Fog-Release Corner Vents
INSTITUTION	Community Vents Applied Workshop
ABSTRACT	This project looks at routine handling from the perspective of people working in public waiting areas with limited space and basic tools, forming the specific starting point for community notice board with fog-release corner vents. The main frame protects a replaceable pad; an adjacent position ring shows when cleaning, adjustment, or resetting is needed in the community notice board with fog-release corner vents configuration. Testing compared several material thicknesses during wet and dry cycling and checked whether the reading remained clear after one-handed operation for the community notice board with fog-release corner vents prototype. The design remains deliberately simple so users can inspect its condition before every use, with the vents element of community notice board with fog-release corner vents remaining accessible for inspection.
US.46.	
INVENTORS	Mariam Ahmed, Lucas Clark, Ivy Moradi, Adrian Flores
INVENTION	Compact Snow Shovel Handle with a Strain Warning Ring
INSTITUTION	Compact Warning Applied Workshop
ABSTRACT	A recurring maintenance problem in neighborhood facilities led to the design of Compact Snow Shovel Handle with a Strain Warning Ring, forming the specific starting point for compact snow shovel handle with a strain warning ring. Interchangeable contact pieces sit around a floating marker, and a contrast marker records the most important change during operation in the compact snow shovel handle with a strain warning ring configuration. Early evaluation focused on different container sizes, ease of resetting, and performance after one-handed operation for the compact snow shovel handle with a strain warning ring prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the warning element of compact snow shovel handle with a strain warning ring remaining accessible for inspection.
US.47.	

INVENTORS	Sara Lewis, Benjamin Bashir, Lina Sullivan, Diego Reed, Amara Diallo
INVENTION	Kitchen Drawer Insert with Tactile Expiry Markers
INSTITUTION	Kitchen Markers Applied Workshop
ABSTRACT	A recurring maintenance problem in small delivery operations led to the design of Kitchen Drawer Insert with Tactile Expiry Markers, forming the specific starting point for kitchen drawer insert with tactile expiry markers. Interchangeable contact pieces sit around a hinged channel, and a visible gauge records the most important change during operation in the kitchen drawer insert with tactile expiry markers configuration. The team observed the device during routine transport, then altered the geometry before repeating the evaluation under changes in load and angle for the kitchen drawer insert with tactile expiry markers prototype. The final arrangement favors understandable operation and local repair rather than disposable electronics, with the markers element of kitchen drawer insert with tactile expiry markers remaining accessible for inspection.
US.48.	
INVENTORS	Tariq Alvarez, Mei Raman
INVENTION	Low-Cost Doorway Water Barrier with a Self-Leveling Seal
INSTITUTION	Doorway Leveling Applied Workshop
ABSTRACT	This project looks at water handling from the perspective of people working in small delivery operations with limited space and basic tools, forming the specific starting point for low-cost doorway water barrier with a self-leveling seal. The prototype combines a segmented seal with a inspection slot; both parts can be reached without dismantling the main body in the low-cost doorway water barrier with a self-leveling seal configuration. Trials included routine transport and one-handed operation, with attention to stability, false indications, and access for cleaning for the low-cost doorway water barrier with a self-leveling seal prototype. Further field use would determine the best materials for long-term durability, with the leveling element of low-cost doorway water barrier with a self-leveling seal remaining accessible for inspection.
US.49.	
INVENTORS	Jonas Brooks, Amina Tran, Mateo Haddad, Priya Lee, Daniel Noor, Sofia Miller
INVENTION	Delivery Cart Shelf That Records Sudden Tilting
INSTITUTION	Delivery Tilting Applied Workshop
ABSTRACT	Delivery Cart Shelf That Records Sudden Tilting was developed for garden plots, where a compact response to local transport is more useful than a complex connected system, forming the specific starting point for delivery cart shelf that records sudden tilting. Its working section uses a replaceable pad to redirect force or flow toward a raised pointer, keeping the response visible and reversible in the delivery cart shelf that records

sudden tilting configuration. Prototype checks covered uneven surfaces as well as warm-to-cool transitions, revealing where dirt or unintended movement could interfere for the delivery cart shelf that records sudden tilting prototype. The concept can be adapted to nearby use cases without changing its basic mechanical principle, with the tilting element of delivery cart shelf that records sudden tilting remaining accessible for inspection.

VIETNAM	
VN.1.	
INVENTORS	Vuong Ha Chi, Le Hai Binh An, Tran Ngoc Bich
INVENTION	Evaluating the antimicrobial properties of Starch-based edible film from <i>Canna edulis</i>
INSTITUTION	VNU University of Science
ABSTRACT	The Canna plant (<i>Canna edulis</i>) is abundantly available in tropical regions. It contains 88.1% starch, with a high amylose content of 35.0%. Its large starch granules facilitate rapid gelatinization with low energy consumption, making the starch suitable for packaging applications. This study demonstrates the properties of biofilms produced from Canna starch, specifically highlighting their strong antimicrobial activity. Consequently, Canna from biofilms offer a promising alternative to currently available biofilms.
VN.2.	
INVENTORS	Phan Minh Duc, Do Quynh Chi, Dang Nam Binh, Nguyen Minh Quan, Nguyen Ngoc Minh Khue, Bui Khanh Chi
INVENTION	Efficacy of ethanolic extract from <i>Ageratum conyzoides</i> in the management of type 2 diabetes in mice
INSTITUTION	VNU University of Science
ABSTRACT	Type 2 diabetes mellitus (T2DM) is a chronic metabolic disorder characterized by persistent hyperglycemia, primarily resulting from insulin resistance and impaired insulin secretion by pancreatic beta cells. <i>Ageratum conyzoides</i> , a plant, exhibits anti-inflammatory, antioxidant, and antimicrobial properties, and helps regulate certain metabolic disorders. Recent studies indicate that <i>Ageratum conyzoides</i> exerts anti-inflammatory effects by inhibiting signaling pathways associated with oxidative stress and inflammatory responses, also showing potential in regulating nitric oxide and related metabolic processes. This study demonstrated ethanolic extract's anti-inflammatory capabilities and its potential role in the management of type 2 diabetes.
VN.3.	
INVENTORS	Tran Diep Anh, Tran The Thanh, Vu Khanh Linh, Nguyen Ha An, Nguyen Ngoc Ha, Nguyen Hoang Minh

INVENTION	Therapeutic efficacy of ethanolic extract from <i>Ageratum conyzoides</i> on gout in mice
INSTITUTION	VNU University of Science
ABSTRACT	Gout is a form of arthritis, a term referring to a group of related disorders characterized by episodes of abnormal joint inflammation. Individuals with gout often exhibit elevated blood urate levels (hyperuricemia). <i>Ageratum conyzoides</i> has attracted significant interest due to its content of alkaloids that are pharmacologically and phytochemically valuable. In this study, an ethanolic extract of <i>Ageratum conyzoides</i> have demonstrated anti-inflammatory activity and the ability to inhibit monosodium urate-induced acute gout in mice, suggesting its potential for use in the future treatment of gout.
VN.4.	
INVENTORS	Nguyen Tuan Gia Linh, Bui Tuan Phat, Tran Ngoc Thanh Van, Vu The Dan
INVENTION	Nanoformulated <i>Cordyceps militaris</i> Extract with Enhanced Water Dispersibility and In Vitro Cytotoxic Activity Against Selected Human Cancer Cell Lines
INSTITUTION	VINA-STEAM Technology Education Company
ABSTRACT	Development of a nanoformulated <i>Ganoderma lucidum</i> extract with enhanced water dispersibility and evaluation of its in vitro cytotoxic activity against selected human cancer cell lines.
VN.5.	
INVENTORS	Trinh Bui Quang Minh, Trieu Le Quan, Le Duc Quang, Do Ha Duy Phong, Le Nguyen My Linh
INVENTION	VocaBus AI: A Touch-Free Voice Assistant for Bus Route Guidance for Older Adults
INSTITUTION	VINA-STEAM Technology Education Company
ABSTRACT	An AI-powered touch-free voice assistant that helps older adults identify bus routes and receive navigation guidance through natural voice interaction.
YEMEN	
YE.1.	
INVENTORS	Amal Al-Hakimi, Tareq Noman, Huda Saleh, Nabil Qasim
INVENTION	Gravity-Fed Handwashing Stand with a Foot Valve
INSTITUTION	Gravity Valve Applied Workshop
ABSTRACT	A recurring maintenance problem in homes and shared apartments led to the design of Gravity-Fed Handwashing Stand with a Foot Valve, forming the specific starting point for gravity-fed handwashing stand with a foot

valve. Instead of sensors, the design relies on a porous insert, a calibrated stop, and a tactile scale that remains readable after use in the gravity-fed handwashing stand with a foot valve configuration. Prototype checks covered wet and dry cycling as well as routine transport, revealing where dirt or unintended movement could interfere for the gravity-fed handwashing stand with a foot valve prototype. Individual wear parts can be replaced, extending the useful life of the complete product, with the valve element of gravity-fed handwashing stand with a foot valve remaining accessible for inspection.

YE.2.

INVENTORS

Rania Saeed, Amal Noman

INVENTION

Clay Water Jar Base with a Cooling Air Channel

INSTITUTION

Water Channel Applied Workshop

ABSTRACT

This project looks at water handling from the perspective of people working in local markets with limited space and basic tools, forming the specific starting point for clay water jar base with a cooling air channel. Its working section uses a rotating sleeve to redirect force or flow toward a colored window, keeping the response visible and reversible in the clay water jar base with a cooling air channel configuration. Prototype checks covered changes in load and angle as well as storage and reassembly, revealing where dirt or unintended movement could interfere for the clay water jar base with a cooling air channel prototype.

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Every idea is a beginning.
Every invention can shape tomorrow.

IDEA & INVENTION SECTION

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