



EXTENDED ABSTRACT



InViCCAD 2025
1ST INTERNATIONAL VIRTUAL COMPETITION OF CREATIVE
ARTS & INNOVATIVE DESIGN IN TEACHING & LEARNING



Design Innovation Academic Show 2025



Organized by



Fakulti
Seni Lukis & Seni Reka
Cawangan Kedah



اوسها تقوى موليا

Collaboration with



#perubahanluarbiasa
#ADpilihanpertama



**EXTENDED
ABSTRACT**

**Design
Innovation
Academic
Show 2025**





DIAS 2025 (Design Innovation Academic Show) is all about "Transcending the Boundaries of Creativity: Innovation in Art & Design for 21st Century Education." This vibrant program shines a spotlight on how creativity and innovation are reshaping modern education.

It consists of three key components. First up is the Mindareka Design Show, an exhibition that showcases students' final year projects and creative designs, giving them a chance to connect with industry professionals and the wider community. Next, we have the Northern Innovation Academic Tour (NIAT), which takes participants on an academic adventure to select institutions and innovation centers in the northern region, aimed at promoting knowledge sharing and building strong academic and professional networks.

Finally, there's the 1st International Virtual Competition of Creative Arts & Innovative Design in Teaching & Learning (InViCCAID), a global competition that recognizes outstanding practices in teaching and learning by blending art, technology, and innovative design. But DIAS 2025 is more than just a talent showcase; it's a powerful platform for empowering both students and educators, while also strengthening collaborations between universities, creative industries, and global communities. With its inclusive and interdisciplinary approach, this initiative strives to spark relevant, competitive, and impactful ideas and innovations that truly benefit society and push the future of education forward.



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Design
Innovation
Academic
Show 2025



Prof. Dr. Roshima Haji Said
Acting Rector
UiTM Kedah Branch

Rector's Message

I am delighted to extend my heartfelt congratulations to the College of Creative Arts, UiTM Kedah Branch, for bringing MINDAREKA 2024 - Unleashing Your Visual Creativity to fruition. The triumphs of past MINDAREKA editions undoubtedly fueled the organization of this year's event, making MINDAREKA 2024 a reality.

MINDAREKA 2024 - Unleashing Your Visual Creativity stands as a testament to the dedication of students at the College of Creative Arts, UiTM Kedah Branch, providing them with a platform to showcase their final art projects. Beyond serving as a space for the exploration of fresh, innovative, and entrepreneurial concepts, this exhibition is poised to connect aspiring talents with potential clients and employers.

I extend my sincere gratitude to all participants whose enthusiasm and support have contributed to the success of MINDAREKA 2024 - Unleashing Your Visual Creativity. Their unwavering belief and commitment have truly brought this event to life, marking it as a resounding triumph!





Head of Faculty Message

It is an honour to introduce DIAS 2025 – Design Innovation Academic Show, held under the theme “Transcending the Boundaries of Creativity: Innovation in Art & Design for 21st-Century Education.” This significant event reflects the faculty’s ongoing commitment to fostering a culture of innovation, critical thinking, and creative exploration among our students and academic community. As we navigate the complexities of the 21st century, it becomes increasingly clear that education must go beyond traditional boundaries to embrace multidisciplinary approaches that are both relevant and future-forward.

The three core components of DIAS 2025, Mindareka Design Show, Northern Innovation Academic Tour (NIAT), and the 1st International Virtual Competition of Creative Arts & Innovative Design in Teaching & Learning (InViCCAID) which is serve as vital platforms to highlight the convergence of design, technology, and pedagogy. These initiatives not only empower our students to showcase their talents and ideas, but also create opportunities for engagement with industry leaders, academic peers, and global collaborators. The Mindareka Design Show celebrates student creativity and innovation through compelling final year projects. NIAT fosters knowledge sharing and institutional partnerships through academic visits and exchanges, while InViCCAID offers international recognition for excellence in integrating art and design into teaching and learning.

I would like to express my deepest appreciation to the organising committee, faculty members, students, and strategic partners who have worked tirelessly to bring this programme to life. Your dedication and collaborative spirit have made DIAS 2025 a reality and a reflection of our shared vision for transformative education. It is my hope that this platform will continue to inspire meaningful dialogue, cultivate groundbreaking ideas, and spark a new wave of innovation that enriches both education and society.



Mohamat Najib Mat Noor
Head of Faculty
Faculty of Arts & Design
UiTM Kedah Branch





***Industrial
Design
(Diploma)***





TO STUDY ON ENHANCING RESTROOM ENVIRONMENT AT MADAD (GOLDEN HOLD)

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ABSTRACT

This project aims to develop a practical, ergonomic, and user-focused assistive device specifically designed for elderly users in the restroom spaces of the Murtadha Dakwah Centre (MADAD), Sungai Petani, Kedah. The product, titled Golden Hold, addresses key issues faced by elderly individuals such as physical instability, fear of slipping, and lack of accessible support, particularly in wet and potentially hazardous bathroom environments. Observations at MADAD highlighted the absence of dedicated support structures for older adults, prompting a need for intervention. Guided by the Human-Centred Design (HCD) approach, the design process centred around elderly users' mobility, safety, and dignity. The final product is a stainless-steel armrest with a curved structure for better support, integrated with a waterproof and anti-slip grip to provide comfort and prevent slipping. Its bold yet respectful message, "HOLD ME CAREFULLY," emphasises mindful usage and consideration for ageing users. Real-user feedback confirmed the product's effectiveness in increasing user confidence, reducing fall risk, and improving accessibility in public restrooms. In conclusion, Golden Hold provides a respectful and practical enhancement to elderly-friendly infrastructure, ensuring safety and improving the quality of restroom experiences for seniors in shared public environments.

Keywords : Elderly support, restroom safety, human-centered design, anti-slip handrail

INTRODUCTION



1.1 Observation of MADAD restroom area

People often overlook the needs of elderly individuals when designing inclusive and safe public spaces, particularly in high-traffic facilities like MADAD. The elderly, especially those with mobility limitations, face heightened risks in restrooms due to wet floors, poor balance, and the absence of support structures. Through direct observations at MADAD, it was evident that older users lacked stable grip points, making their bathroom experience both difficult and dangerous. Golden Hold was developed to address these challenges directly. It is an assistive armrest unit designed with both functional and emotional considerations. This device encourages safety and autonomy, providing users with a non-intrusive, strong, and reliable support tool. The slogan “Hold Me Carefully” reinforces the product’s purpose while establishing a gentle, empathetic user interaction. Its sleek, modern aesthetic and green accent color make it visible and inviting, without being intrusive or clinical. Developed with a human-centered design methodology, this solution puts users’ safety, comfort, and dignity at its core.



1.3 Stainless Steel



1.4 EPDM Knurled Rubber Grip

The development process began with on-site observations at MADAD's restroom areas to identify pain points and user behaviour patterns. A survey was conducted among elderly users and carers to assess concerns related to restroom use, particularly issues of balance, confidence, and accessibility. Follow-up interviews provided deeper insights into users' emotional and physical needs. Based on findings, the Golden Hold was designed and prototyped using stainless steel for its frame, chosen for its durability, corrosion resistance, and ease of maintenance in wet environments. A waterproof and anti-slip rubber grip was integrated into the handhold area to ensure safety even with wet hands. The product stands firmly on rubber-tipped legs to avoid slipping, while the ergonomic curve ensures that users can grip it naturally without strain. The design also allows installation without obstructing the space, making it ideal for compact or crowded restrooms.



1.6 User Testing with Golden Hold Prototype

Feedback from elderly users and MADAD management was overwhelmingly positive. Users noted a significant improvement in perceived safety and ease of movement when using Golden Hold. The anti-slip grip provided reassurance, especially for those with weakened hand strength. Caregivers reported that users felt more confident and independent in using the restroom, reducing the need for constant physical assistance.

The thoughtful design and material choices also supported hygiene and ease of maintenance. The bright green accent helped users easily identify the grip area, especially in lower lighting. Additionally, the product maintained its structural stability under various load conditions, thanks to its stainless-steel frame and stable anti-slip feet. Its simple yet bold message panel serves as a reminder of careful use and



underscores the dignity of aging.

CONCLUSION AND RECOMMENDATION

Golden Hold demonstrates how empathetic design, informed by real-world observation and user engagement, can significantly improve elderly care in public environments. By integrating durable stainless steel, anti-slip waterproof grips, and a stable ergonomic form, the product enhances restroom safety, accessibility, and comfort for older adults at MADAD. Its aesthetic and functional aspects show how design can empower users while maintaining respect and dignity.

Moving forward, future enhancements could include adjustable height versions, foldable models for compact storage, or integration with sensor-based lighting for better visibility. Ultimately, Golden Hold sets a benchmark for inclusive and meaningful product design in shared spaces.

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