



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)***





STUDY ON ENCHANCING COMFORTABILITY AT WAITING AREA FOR VISITORS

(ChargeP)

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ABSTRACT

This project aims to develop SafeCharge, a secure and user-friendly public charging port designed for the Murtadha Dakwah Centre (MADAD) in Sungai Petani, Kedah. The purpose of the study is to address the lack of safe mobile charging options for visitors attending religious and educational activities. The background study points out issues such as fear of theft and data security when using public chargers. Using the human-centered design (HCD) approach and reverse engineering methods, existing products were analysed to identify useful features and user needs. The final design includes lockable compartments, fast universal charging ports, and data-blocking features to ensure user safety and convenience. Results show that SafeCharge effectively enhances the public charging experience while maintaining security. In conclusion, this solution supports digital accessibility in respectful and community-based environments.

KEYWORDS: SafeCharge, public charging port, Human-Centered Design, reverse engineering, mobile security, data protection, user-friendly design, MADAD, digital accessibility.

INTRODUCTION



Figure 1.1 The picture of student entering MADAD for observation purpose



Figure 1.2 The picture of final design of the product (ChargeP)

Keeping a community hub like MADAD connected isn't just about offering power—it's about ensuring safety, respect, and ease of use. With many visitors attending prayers, classes, and events daily, the need for secure mobile charging is high. However, public charging often raises concerns about theft, data security, and accessibility. That's where ChargeP comes in. It's designed as a secure, user-friendly charging port with lockable compartments, universal fast-charging, and data-blocking features. Developed with real user feedback and a human-centered design approach, SafeCharge ensures a safe, convenient, and respectful digital experience for all visitors.

MATERIALS AND METHODS

The research phase began with naturalistic observations across key areas in MADAD, such as prayer halls and waiting areas. These observations were conducted without interfering with daily activities, allowing genuine user behaviour and environmental challenges to emerge. Simultaneously, we distributed questionnaires with scale ratings to gather feedback from visitors regarding their mobile charging habits and concerns, particularly around safety and accessibility. Semi-structured interviews were also conducted to explore deeper insights into users' experiences, such as their hesitation to leave phones unattended and expectations for a secure public charging solution. The insights gained from this research directly shaped the design and development of the final product, ChargeP. The unit was produced using a combination of ABS (Acrylonitrile Butadiene Styrene) for the outer casing and PET (Polyethylene Terephthalate) for transparent internal panels and secure compartments. ABS was selected for its high durability, impact resistance, and smooth finish—ideal for public environments and frequent handling. PET components offer clarity, strength, and resistance to wear, making it easy for users to monitor their devices while ensuring safety. ChargeP integrates key features such as lockable compartments, universal fast-charging ports, and built-in data-blocking capabilities. Its compact, ergonomic design was refined through multiple iterations to ensure user convenience and compatibility within MADAD's multi-use, culturally respectful space.

RESULTS AND DISCUSSION/FINDINGS



Figure 1.5 The picture of the visitor using the product

Providing mobile charging access in a community space like MADAD goes beyond offering convenience, and it's about respecting cultural norms and ensuring user safety. With daily crowds attending prayers, classes, and events, visitors often hesitate to charge their phones due to theft risks, data privacy concerns, and a lack of secure facilities. That's where ChargeP comes in. Designed to offer safe, accessible, and user-friendly charging, it combines essential security features into a compact, easy-to-use system. Operable with just one hand, ChargeP includes lockable compartments, universal fast-charging ports, and data-blocking protection. Real user feedback shapes its design, aiming to create a secure, respectful, and seamless charging experience for everyone at MADAD.

CONCLUSION & RECOMMENDATION



Figure 1.6 The picture of Environment (ChargeP)

Charge demonstrates how human-centred design can solve practical challenges in culturally sensitive and sacred spaces, like MADAD. By integrating secure charging features into a compact, 3D-printed design, it enhances user safety, improves accessibility, and respects the quiet, respectful environment of the mosque.



The thoughtful mix of current technologies with secure compartments, universal fast-charging, and data-blocking in a specially designed case creates a solution that works well and is respectful of cultural values.

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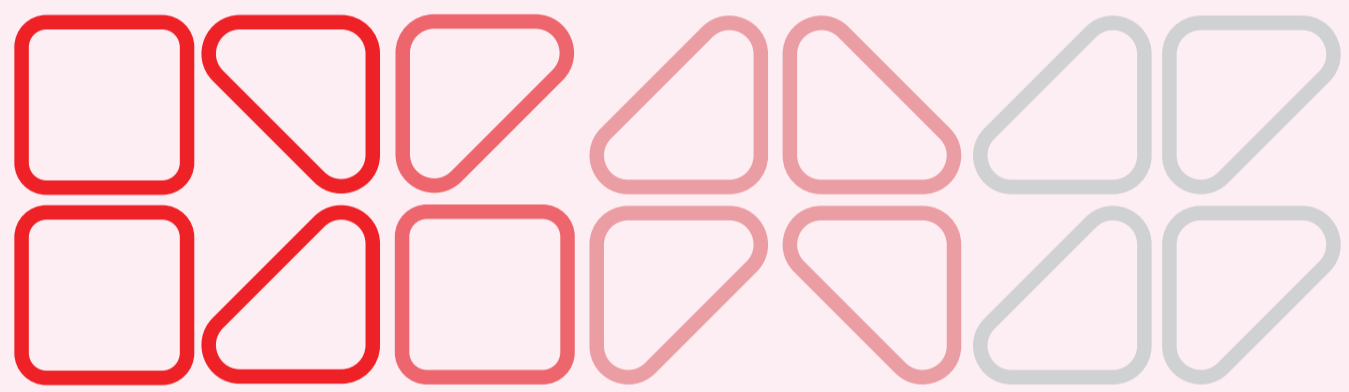
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