

Optimizing Innovation in Knowledge, Education and Design

EXTENDED ABSTRACT





e ISBN 978-967-2948-56-8





EXTENDED ABSTRACT

Copyright © 2023 by the Universiti Teknologi MARA (UiTM) Cawangan Kedah.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission, in writing, from the publisher.

© iSpike 2023 Extended Abstract is jointly published by the Universiti Teknologi MARA (UiTM) Cawangan Kedah and Penerbit UiTM (UiTM Press), Universiti Teknologi MARA (UiTM), Shah Alam, Selangor.

The views, opinions and technical recommendations expressed by the contributors and authors are entirely their own and do not necessarily reflect the views of the editors, the Faculty, or the University.

Editors : Dr. Siti Norfazlina Yusoff Azni Syafena Andin Salamat Nurfaznim Shuib

Cover design : Syahrini Shawalludin

Layout : Syahrini Shawalludin

eISBN 978-967-2948-56-8

Published by:
Universiti Teknologi MARA (UiTM) Cawangan Kedah,
Sungai Petani Campus,
08400 Merbok,
Kedah,
Malaysia.

5	CNN-Based Model on Potential Dyslexia Detection Based on Automated Handwriting Features Extraction Siti Azura Ramlan, Iza Sazanita Isa, Ahmad Puad Ismail, Muhammad Khusairi Osman & Zainal Hisham Che Soh	584-588
6.	EDUxic for Dyslexic: A Framework for Teaching Aids Norarifah Ali, Azhari Md Hashim, Roslinda Alias & Muhammad Nidzam Yaakob	589-595
CATEGORY: BST YOUNG INVENTOR		
1.	Flood, Earthquake, Air Pollution (FEAR) Alert and Monitoring System with WiFi Module Mohd Sufian Ramli, Siti Sufiah Abd Wahid, Khairul Kamarudin Hasan & Danial Zarif Mohammad Zaharuddin	596-600
2.	C++ Rush: Interactive Game for Novices in Learning Basic Computer Language Muhammad Salman Hakim Shaiful Nizam & Arifah Fasha Rosmani	601-606
3.	GoBox Aqib Syahir Bin Ahmad Tarmizee, Ariff Hakimi Bin Ahmad Khusairi, Muhammad Zulhilmi Bin Mohamad Fauzi, Nur Afiqah Binti Zakaria, Nur Nadiah Binti Zuber, Nur Farahah Binti Mohd Fauzi & Amilia Binti Saidin	607-611
4.	Smart Vision the Smart Projector Muhammad Hazim Bin Roslan, Harith Danial Bin A.S Azmi, Muhamad Hakim Bin Anuar, Muhammad Faris Syazwi Bin Shukri, Muhammad Zahiruddin Bin Omar, Afidah Binti Sapari & Dr Vani A/P Tanggamani	612-618
5.	UniEase Muhammad Haziq Syukran Bin Abdul Manaf, Muhammad Sallehudin Bin Samudin, Muhammad Syukran Bin Mohamed Desa, Aisya Nurdania Binti Mohd Noor Azian, Alia Hasanah Binti Abdul Rahim, Nurin Syakira Binti Ahmad Zainuddin & Nor 'Asyiqin Abu	619-622
6.	Exploring the Potential of Aloe Vera and Coconut Oil in Natural Toothpaste Tablets Muhammad Nazrul Afiq Zulkifli, Muhammad Irfan Mustakim, Nurul Ain Jaaizah Muhamad Zaki, Nur Syabila Husna Mohd Bakti, Nurul Aimi Zakaria, Zubainun Mohamed Zabidi & Ahmad Nazib Alias	623-627
7.	Building Resilient Start-Up: A Comprehensive Strategic Framework for Start-Up Survival Irme Rafhan Ibrahim, Ammar Yasir Mustafa, Aqilah Hanif, Batrisyia Tihani Hamdan, Maisarah Ruslan, Wan Hafiz Aizuddin Wan Yusoff & Suriana Ramli	628-638



Assalamualaikum warahmatullahi wabarakatuh,

First and foremost, I would like to express my gratitude to the organizing committee of i-Spike 2023 for their tremendous efforts in bringing this online competition a reality . I must extend my congratulations to the committee for successfully delivering on their promise to make i-Spike 2023 a meaningful event for academics worldwide.

The theme for this event, 'Optimizing Innovation in Knowledge, Education, and Design,' is both timely and highly relevant in today's world, especially at the tertiary level. Innovation plays a central role in our daily lives, offering new solutions for products, processes, and services By adopting a strategic approach to 'Optimizing Innovation in Knowledge, Education, and Design,' we have the potential to enhance support for learners and educators, while also expanding opportunities for learner engagement, interactivity, and access to education.

I am awed by the magnitude and multitude of participants in this competition. I am also confident that all the innovations presented have provided valuable insights into the significance of innovative and advanced teaching materials in promoting sustainable development for the betterment of teaching and learning. Hopefully, this will mark the beginning of a long series of i-Spike events in the future.

It is also my hope that you find i-Spike 2023 to be an excellent platform for learning, sharing, and collaboration. Once again, I want to thank all the committee members of i-Spike 2023 for their hard work in making this event a reality I would also like to extend my congratulations to all the winners, and I hope that each of you will successfully achieve your intended goals through your participation in this competition.

Professor Dr. Roshima Haji Said

RECTOR

UITM KEDAH BRANCH



WELCOME MESSAGE (i-SPIKE 2023 CHAIR)

We are looking forward to welcoming you to the 3rd International Exhibition & Symposium on Productivity, Innovation, Knowledge, and Education 2023 (i-SPiKE 2023). Your presence here is a clear, crystal-clear testimony to the importance you place on the research and innovation arena. The theme of this year's Innovation is "Optimizing Innovation in Knowledge, Education, & Design". We believe that the presentations by the distinguished innovators will contribute immensely to a deeper understanding of the current issues in relation to the theme.

i-SPiKE 2023 offers a platform for nurturing the next generation of innovators and fostering cutting-edge innovations at the crossroads of collaboration, creativity, and enthusiasm. We enthusiastically welcome junior and young inventors from schools and universities, as well as local and foreign academicians and industry professionals, to showcase their innovative products and engage in knowledge sharing. All submissions have been rigorously evaluated by expert juries comprising professionals from both industry and academia.

On behalf of the conference organisers, I would like to extend our sincere thanks for your participation, and we hope you enjoy the event. A special note of appreciation goes out to all the committee members of i-SPiKE 2023; your dedication and hard work are greatly appreciated.

Dr. Junaida Ismail

Chair

3rdInternational Exhibition & Symposium Productivity, Innovation, Knowledge, and Education 2023 (i-SPiKE 2023)







UniEase

Muhammad Haziq Syukran Bin Abdul Manaf
Muhammad Sallehudin Bin Samudin
Muhammad Syukran Bin Mohamed Desa
Aisya Nurdania Binti Mohd Noor Azian
Alia Hasanah Binti Abdul Rahim
Nurin Syakira Binti Ahmad Zainuddin
Nor 'Asyiqin Abu
Faculty of Accountancy, UiTM Cawangan Melaka
norasyiqin@uitm.edu.my

ABSTRACT

"UniEase" Is the Ultimate Campus Companion! UniEase is a revolutionary platform created specifically for UiTM Melaka students, offering a seamless and hassle-free method to improve campus life. This application software is designed to provide students with easy access to a wide variety of goods and services that are tailored to satisfy their particular requirements. Students can order delectable meals from local restaurants, have supplies delivered directly to their door, or opt for self-pickup with UniFood. UniCar is the solution to all of the students' transportation problems. It helps those who need a ride to explore the city or return home during breaks when the drivers are fellow UiTM students, ensuring that trips are affordable and supporting the student community. UniCar aimed to make journeys outside UiTM economical and convenient. UniShuttle provides students with a convenient and dependable means of moving around campus. Using UniRent, finding suitable off-campus housing is easy. Recognizing that many non-resident students may be unfamiliar with housing options near UiTM, UniRent provides information and guidance to make the housing search a seamless and stress-free process. UniEducation facilitates a more manageable academic experience. UniClass informs students of their class schedule and locations, ensuring that they never miss a class. UniNews, on the other hand, is a reliable source of official information from each UiTM organization, keeping students abreast of all campus events and announcements. UniMart is a onestop shop for all campus necessities. From textbooks to stationery, from devices to personal care products, UniMart offers a vast selection of products, all of which can be delivered directly to students. UniWallet embraces the future of payments! This secure e-wallet system enables cashless transactions on UiTM property, making purchases fast and simple. UniEase is more than an app platform; it is a lifeline for UiTM Melaka students, allowing them to focus on what genuinely matters: education and personal development. Join the UniEase community today and open up a world of opportunities.

Keywords: application software, user-friendly, guidance, all-in one

INTRODUCTION

The majority of university students, particularly freshmen, are unaware of the most recent UITM information. Typically, the class representative provides the most recent information via a WhatsApp or Telegram group; however, it may be difficult to locate the information when there are numerous conversations. As a result, the provided information is comprehensive, but future reference to the material may prove challenging. The provided information is not organized. There is also an UiTM website where students can obtain the latest information, but sometimes the websites are disorganized, leaving students unsure of





how to use this platform as their guide and where to find the application's most recent updates. As a result, the provided material is comprehensive; however, they may encounter difficulties in the future when they need to refer back to the information. Despite students having the opportunity to access the UiTM website for the latest information, they occasionally encounter a frustrating obstacle - the website's disjointed nature. While the intention to provide updated content is commendable, the lack of coherence in the website's layout and navigation hampers students' ability to locate the most recent application updates efficiently. UniEase is here to pave the way for a more streamlined and fruitful educational experience at UiTM.

OBJECTIVE

UniEase is an integrated application catering to the needs of UiTM students, particularly those in Alor Gajah, Melaka. The application serves two primary objectives. Firstly, it aims to simplify information access for students by consolidating all organization-related data within UiTM. Presently, students face the inconvenience of navigating various websites for different information, such as class details on Ufuture and tuition fees on Istudent. These individual sites may also be prone to crashes, adding to the students' difficulties. UniEase seeks to streamline this process by providing a centralized platform for accessing all essential information.

The second objective of UniEase is to offer students opportunities for additional income. It achieves this by incorporating features similar to popular services like GrabCar and Food Panda, but exclusively employing UiTM students as drivers and food delivery personnel. This setup fosters trust and security between students, eradicating concerns related to unknown drivers or delivery agents. Moreover, UniEase maintains a record of all students' data, ensuring their safety and allowing them to report any issues that may arise during transactions.

In essence, UniEase serves as a comprehensive solution, offering convenient information retrieval and promoting a safe and reliable environment for students seeking additional income opportunities within the UiTM community.

NOVELTY

UniEase, a comprehensive application designed to encompass all the essential needs of UiTM students within one convenient platform. Compared to other existing websites and apps provided by UiTM, UniEase offers a user-friendly and efficient experience. UniEase introduces exciting new concepts. Among these are UniFood, UniCar, UniShuttle, UniRent, UniEducation, UniClass, UniNews, UniMart and UniWallet.

UniEase aims to provide a seamless and accessible approach for users to access data and services effortlessly. This includes convenient options for students to access essential services like food delivery and transportation. With just a few taps on their smartphones, students can easily order food or request a ride without leaving the comfort of their dorm or classroom. Safety and security take precedence in UniCar, ensuring peace of mind, especially for students traveling alone or during late hours.





To access the benefits of UniEase, users can simply download and install the application on their smartphones or tablets, offering quick and easy access to all its features. With UniEase, UiTM students can enjoy a more integrated and efficient experience, catering to their various needs within a single platform.

PRACTICALITY & USEFULNESS

UniEase proves to be an exceptionally practical and convenient platform, offering a myriad of multi-functional services tailored to suit UiTM students' diverse needs. With just a single touch, students can easily access a range of essential services through this comprehensive application. The array of services available on UniEase includes UniFood, UniCar, UniShuttle, UniRent, UniEducation, UniClass, UniNews, UniMart and UniWallet, each catering to distinct requirements. By encompassing this wide array of services, UniEase emerges as a versatile and indispensable tool for UiTM students, making their daily lives more efficient and enjoyable. Whether it's satisfying hunger pangs, getting around campus, finding a place to stay, accessing educational resources, shopping for necessities, or managing finances, UniEase has it all covered. Its user-friendly interface and comprehensive range of functions make it a go-to platform for students seeking convenience and practicality at their fingertips.

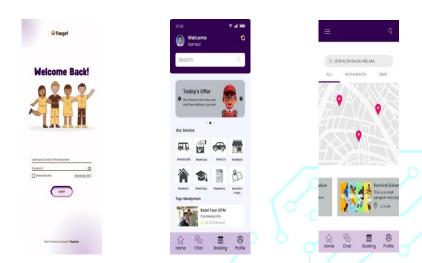


Figure 1. UniEase User Interface

COMMERCIALIZATION POTENTIAL

We firmly believe that UniEase holds tremendous potential for commercialization, particularly among UiTM students. The app's projected growth reflects its wide appeal and convenience, making it an attractive choice for a diverse student population. As the demand for more convenient services continues to rise, UniEase is expected to draw in students not only from UiTM but also from various other universities. The preference for easy-to-access and user-friendly apps among students and youngsters further strengthens the case for UniEase success. Tailored specifically for UiTM students in Melaka, the app aims to streamline access to a range of essential services. Our vision extends beyond Melaka, as we aspire to expand UniEase to serve all UiTM students across Malaysia and eventually encompass other universities as well.





The key differentiator of UniEase lies in its all-in-one approach. While other apps provided by UiTM may address specific needs, UniEase consolidates everything into a single, convenient touchpoint. This comprehensive offering positions UniEase as a sought-after solution, meeting the diverse requirements of students with ease. With a focus on enhancing convenience and accessibility, UniEase is poised to carve a significant niche in the market, capturing the hearts of students and catering to their evolving needs. The continued expansion of UniEase, combined with its user-centric design and broad range of services, sets the stage for a promising and prosperous future in the world of mobile applications.

CONCLUSION

In conclusion, UniEase will serve as an indispensable platform, guiding students through their academic journey and making their lives at UiTM more manageable. By providing a seamless and convenient experience, it will alleviate the burden on students and facilitate easy access to essential information within the university. With its modern and multifunctional system, we are confident that our product will effectively cater to students' diverse needs, offering a comprehensive solution for all aspects of their student life.

ACKNOWLEDGEMENTS

The participation fees to the International Exhibition & Symposium on Productivity, Innovation, Knowledge, Education & Design (i-Spike 2023) were funded by UiTM Cawangan Melaka.

REFERENCES

Grab. (n.d.). *The everyday everything app*. https://www.grab.com/sg/

- Education Horizons (2023, May 9). The next generation student information platform. https://educationhorizons.com/solutions/zunia/?utm_source=google&utm_medium=cpc&utm_campaign=Zunia&utm_campaign=SEQTA_Australia&utm_source=google &utm_medium=cpc&utm_term=attendance%20tracker%20system&gclid=CjwKCAjwp6CkBhB_EiwAlQVyxQd0DBGK8zAWmOPT-adEpLPXYb
- Dribbble. (n.d.). Foodpanda designs, themes, templates and downloadable graphic elements on Dribbble. https://dribbble.com/tags/foodpanda
- Grab. (2022, June 8). *Grab to be fully powered by its own mapping technology by Q3* 2022.https://www.grab.com/sg/press/tech-product/grab-to-be-fully-powered-by-its-own-mapping-technology-by-q3-2022/
- BlueCart. (n.d.). *The 23 best high demand products to sell in 2023*. https://www.bluecart.com/blog/high-demand-products



e ISBN 978-967-2948-56-8



