UNIVERSITI TEKNOLOGI MARA

Public Interest Centre of Excellence

# International Teaching Aid Competition 2023

Reconnoitering Innovative Ideas in Postnormal Times

# iTAC 2023

## iTAC 2023
## INTERNATIONAL TEACHING AID COMPETITION
# E-PROCEEDINGS

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Cover Design : *Asrol Hasan*
Layout : *Nurina Anis Mohd Zamri*
eISBN : 978-967-2948-51-3

Published by : Universiti Teknologi MARA Cawangan Kedah,
08400 Merbok,
Kedah,
Malaysia.

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**PREFACE**

iTAC or International Teaching Aid Competition 2023 was a venue for academicians, researchers, industries, junior and young inventors to showcase their innovative ideas not only in the teaching and learning sphere but also in other numerous disciplines of study. This competition was organised by the Special Interest Group, Public Interest Centre of Excellence (SIG PICE) UiTM Kedah Branch, Malaysia. Its main aim was to promote the production of innovative ideas among academicians, students and also the public at large.

In accordance with the theme "Reconnoitering Innovative Ideas in Post-normal Times", the development of novel ideas from the perspectives of interdisciplinary innovations is more compelling today, especially in the post-covid 19 times. Post-pandemic initiatives are the most relevant in the current world to adapt to new ways of doing things and all these surely require networking and collaboration. Rising to the occasion, iTAC 2023 has managed to attract more than 267 participations for all categories. The staggering number of submissions has proven the relevance of this competition to the academic world and beyond in urging the culture of innovating ideas.

iTAC 2023 committee would like to thank all creative participants for showcasing their innovative ideas with us. As expected in any competition, there will be those who win and those who lose. Congratulations to all the award recipients (Diamond, Gold, Silver and Bronze) for their winning entries. Those who did not make the cut this year can always improve and join us again later.

It is hoped that iTAC 2023 has been a worthy platform for all participating innovators who have shown ingenious efforts in their products and ideas. This compilation of extended abstracts published as iTAC 2023 E-Proceedings contains insights into what current researchers, both experienced and novice, find important and relevant in the post-normal times.

Best regards,

**iTAC 2023 Committee**
**Special Interest Group, Public Interest Centre of Excellence (SIG PICE)**
**UiTM Kedah Branch**
**Malaysia**

# UniBillMate

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**ABSTRACT**

This abstract presents an innovative mobile application that aims to alleviate these difficulties by offering a comprehensive set of features to the University Technology Mara (UiTM) students. UniBillMate provides students with timely reminders for UiTM semester fees, club fees, and donations (waqf, community service program, etc.) while also offering an integrated academic calendar and class timetable functionality. University students may miss important dates such as due dates for fees and course validation due to a lack of organization, feeling overwhelmed by information, procrastination, personal issues, or communication breakdowns. One of the primary features of the app is its ability to send automated reminders to students regarding upcoming payment deadlines. By centralizing fee-related information and sending timely notifications, the app helps students stay on top of their financial responsibilities. This not only reduces the risk of late payment penalties but also ensures that students can focus on their studies without worrying about missed deadlines. UniBillMate is a unique app because it introduces a fresh and innovative concept that has not been seen before and offers distinctive features and functionality that address a specific problem or cater to a specific audience in a novel way. These unique features enhance the user experience and provide value that is not readily available in other apps. In the initial phase, this app is created mainly for UiTM students but as days goes by the development of the app will become more advance. Then, the app will be commercialized to the other public university in Malaysia so that it will not only be limited to only UiTM student. Students from other universities will share the same features and functions of the apps in only one place which is

UniBillMate app.

**Keywords:** financial, students, fees, UiTM, app

## BACKGROUND

Students at University Technology Mara (UiTM) and other public universities in Malaysia frequently struggle to balance their academic obligations with their financial obligations. Many times, students struggle to stay organized, keep track of deadlines, and manage their workload while also feeling overburdened by a variety of responsibilities, such as club dues, semester fees, and donations. These difficulties result from a variety of circumstances, including a lack of organizational abilities, feeling overloaded with information, procrastination, personal problems, or communication breakdowns. According to the study, students' poor behavior or lack of discipline are the primary sources of stress.

Control strategies are the most widely used coping mechanisms for stress, followed by escape plans and symptom management (Pocinho & Capelo, 2009). Without proper supervision, students may encounter late payment fines, missed deadlines, and elevated stress levels, which may have a severe influence on their academic performance and overall university experience. Apart from that, increasing the financial resources available to students is likely to be associated with reduced stress and improved academic performance (Britt et al., 2016)

## PROBLEM STATEMENT

Students' existing systems and tools for managing their financial commitments and academic timetables are frequently fragmented and inefficient. Students must sift through many sources of information, such as university portals, email notifications, and physical reminders, to learn about payment deadlines, course registrations, and crucial academic dates. The lack of a centralized platform causes confusion, missed deadlines, and financial challenges inside the university. Current market applications do not successfully address the specific demands of Malaysian university students, resulting in a disconnected and overwhelming experience.

## OBJECTIVES

The main goal of UniBillMate is to make it easier for students to balance their financial obligations and academic commitments. The objective of the mobile app is to offer a full range of features and functionalities that simplify the procedure, lessen stress, and improve the overall educational experience. By providing a centralized platform, UniBillMate strives to streamline and combine fee-related data with academic calendars into one mobile-friendly application. By giving them frequent reminders, customized notifications, and simple tools to help them stay on top of their financial duties and academic commitments, the application aims to empower students. Tsinghua University in China found that reminder apps improved students' time management and reduced procrastination. These apps helped students manage their time and avoid last-minute cramming, improving academic performance (Shi, Yang, & Wang, 2018).

## NOVELTY

Due to its cutting-edge and distinctive features, UniBillMate stands out from other available programmed on the market. A distinguishing aspect of UniBillMate is the sophisticated automatic reminder system, which makes certain that students receive individualized information about approaching payment deadlines. This function takes into account the unique needs of each student, taking into account things like current course enrollment, club affiliations, and charitable donations. UniBillMate frees students from the hassle of keeping track of numerous payment dates and assists them in avoiding late payment fees by intelligently personalizing reminders. Students who received regular digital reminders were more motivated and committed to completing their tasks, which improved academic performance (Kizilcec, 2016).

UniBillMate also features an integrated academic calendar and class timetable, making it a complete solution for managing students' academic timetables. The tool syncs with the university's course management system, automatically populating the calendar with crucial academic dates like course enrollment windows, add or drop deadlines, exam schedules, and assignment due dates. To make sure they never miss a critical academic occasion, students can customize their calendar by choosing their preferred notification settings.

Students may easily use UniBillMate and find the information they require thanks to the user-friendly, intuitive design of the interface. Students can order the display of information in the application's user-customizable dashboard in accordance with their preferences. Students can keep track of their financial activities and records thanks to real-time notifications on payment statuses, which ensures transparency. In addition, the incorporation of a safe online payment gateway makes it possible for customers to make purchases without any fuss from their mobile devices, eliminating the need for paperwork and manual cash transactions.

## COMMERCIALIZATION POTENTIALS

Both within UiTM and among Malaysia's other public colleges, UniBillMate has a substantial business potential. The long-term goal is to extend its reach to other institutions, even though it was primarily created for UiTM students and teachers. UniBillMate seeks to establish a centralized platform for controlling financial commitments and class schedules throughout the Malaysian university system by working with numerous institutions of higher learning. Not only would the user base grow as a result of this expansion, but it would also draw new partners and sponsors, creating chances for money generating. UniBillMate is highly suited for commercial use due to its scalability and adaptability.

## BENEFIT TO COMMUNITY

The university community would gain several advantages from the use of UniBillMate. Students would feel less stress and better money management, resulting in on-time payments and the avoidance of penalties. By giving students from many institutions access to one central platform, the application promotes a sense of community. It promotes cooperation, knowledge sharing, and experience sharing among Malaysian university students. It encourages the growth of a collaborative atmosphere among the Malaysian university community and enhances the entire university experience. Chikezie, (2017) found that financial apps help students learn financial management and improve their finances.

## FEEDBACK FROM COMMUNITY

We have received overwhelmingly positive feedback from the students of UiTM Campus Bandaraya Melaka (UiTM KBM) regarding our application. To gather feedback about our application, we conducted surveys using Google Forms, ensuring a comprehensive understanding of their needs and preferences. The survey primarily focused on assessing the students' desire for an organizing app that could significantly improve their lives.

Upon analyzing the survey results, we obtained insightful findings. Figure 1 illustrates that an alarming 29.7% of students at UiTM KBM face a common challenge of missing University fee payments due to unawareness of deadlines. Furthermore, figure 2 reveals that many students find it difficult to remember payment dates, especially when it comes to university bills. However, an impressive 45.9% of students express their agreement with the idea of an application offering a convenient payment service (as demonstrated in figure 3), which would greatly simplify the fee payment process.

The unanimous consensus among respondents is that the development of such an application, referred to as UniBillMate, would substantially assist students in becoming more organized. Moreover, it would effectively eliminate the risk of overlooking any University fees. By leveraging UniBillMate, students can stay on top of their financial obligations, ensuring timely payments without any stress or oversight.

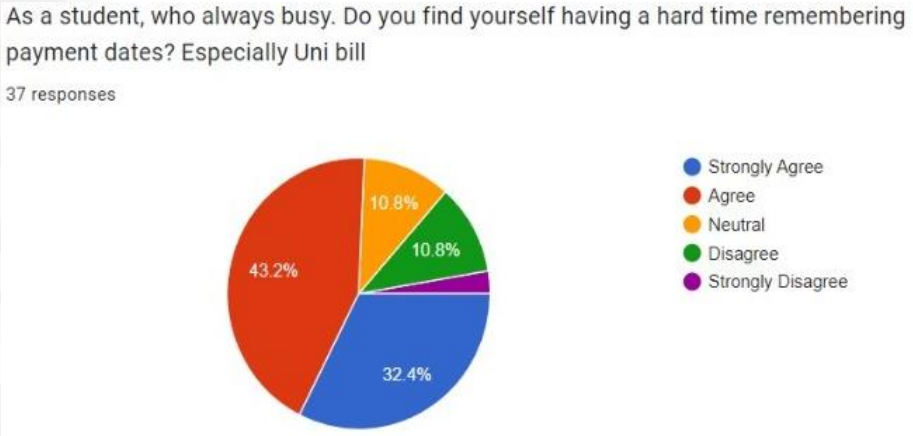

**Figure 1**

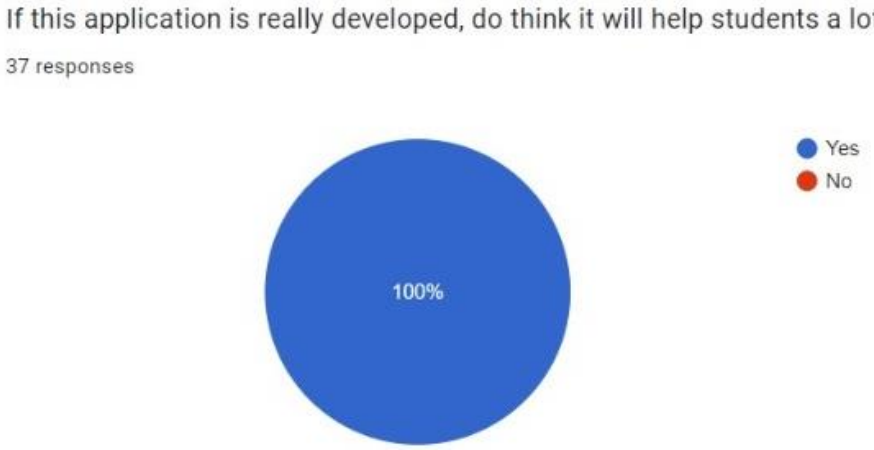


**Figure 2**

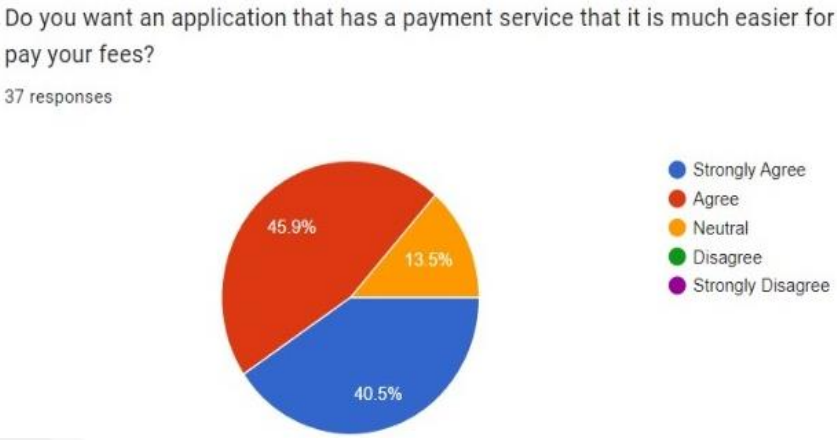


**Figure 3**

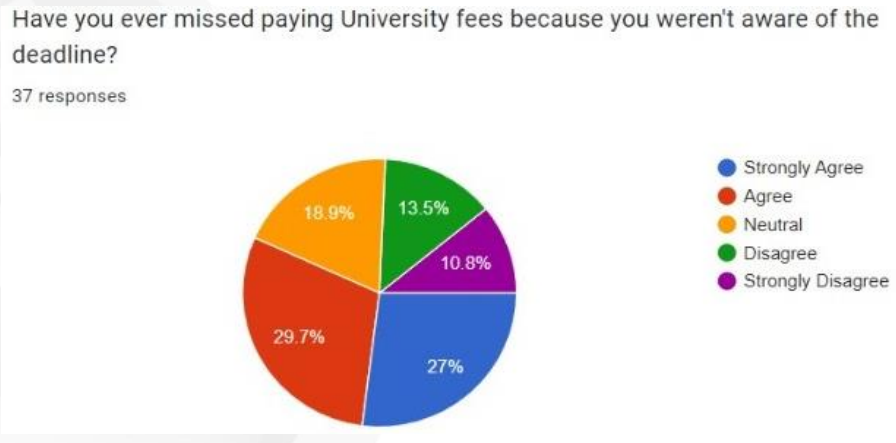

**Figure 4**

## CONCLUSION AND REFLECTION

The numerous issues university students experience in managing their financial obligations and academic commitments are addressed by UniBillMate, an innovative smartphone application. Its cutting-edge features, like automated reminders, centralized information, and an intuitive design, offer a helpful answer to these problems. The introduction of the application to additional Malaysian public universities is an appealing proposition given its scalability and potential for wider adoption. The extensive functions of UniBillMate and its emphasis on enriching the university experience help the Malaysian university community build a collaborative atmosphere and enhance students' general well-being.

## ACKNOWLEDGEMENTS

First and foremost, we express our gratitude to the Almighty God for granting us with the fortitude and, by virtue of His favor, we have ultimately attained triumph in the iTAC 2023, International Aid Competition. If it were not for His divine blessings, we would not have been able to achieve such significant progress. This task cannot be accomplished without the diligent efforts and collaborative energy of our group members, namely Muhammad Anas bin Mohamad Khusairi, Nur Qurratuain binti Nor Azmi, and Noor Syafiqah binti Noor Rashid. We would like to express our gratitude to our esteemed advisor, Madam Nor Maslia binti Rasli Samudin, for her invaluable guidance and support since day one.

Furthermore, we express our utmost gratitude to Professor Madya Dr. Maheran binti Katan for her essential guidance and mentorship in ensuring the success of our innovative project on a weekly basis. Our assignment cannot be completed properly without her guidance. The instructor consistently provides us with support and guidance on how to approach our assignments with the intention of achieving a favorable outcome. Her inspiration was a great motivator for us to engage in this project. We would also like to express our gratitude to her for imparting her knowledge and expertise throughout the duration of this course.

Lastly, we would like to express our gratitude to UiTM Kedah for coming up with this iTAC for this year. We also would like to extend our sincere appreciation to UiTM Bandaraya Melaka for granting us the privilege to carry out this innovative project. Lastly, we would like to give an honorable mention to our friends and respondents for their support and willingness to volunteer their time to complete our questionnaires. As diligent university students, we consistently strive to generate high-quality assignments with unwavering dedication and accountability.

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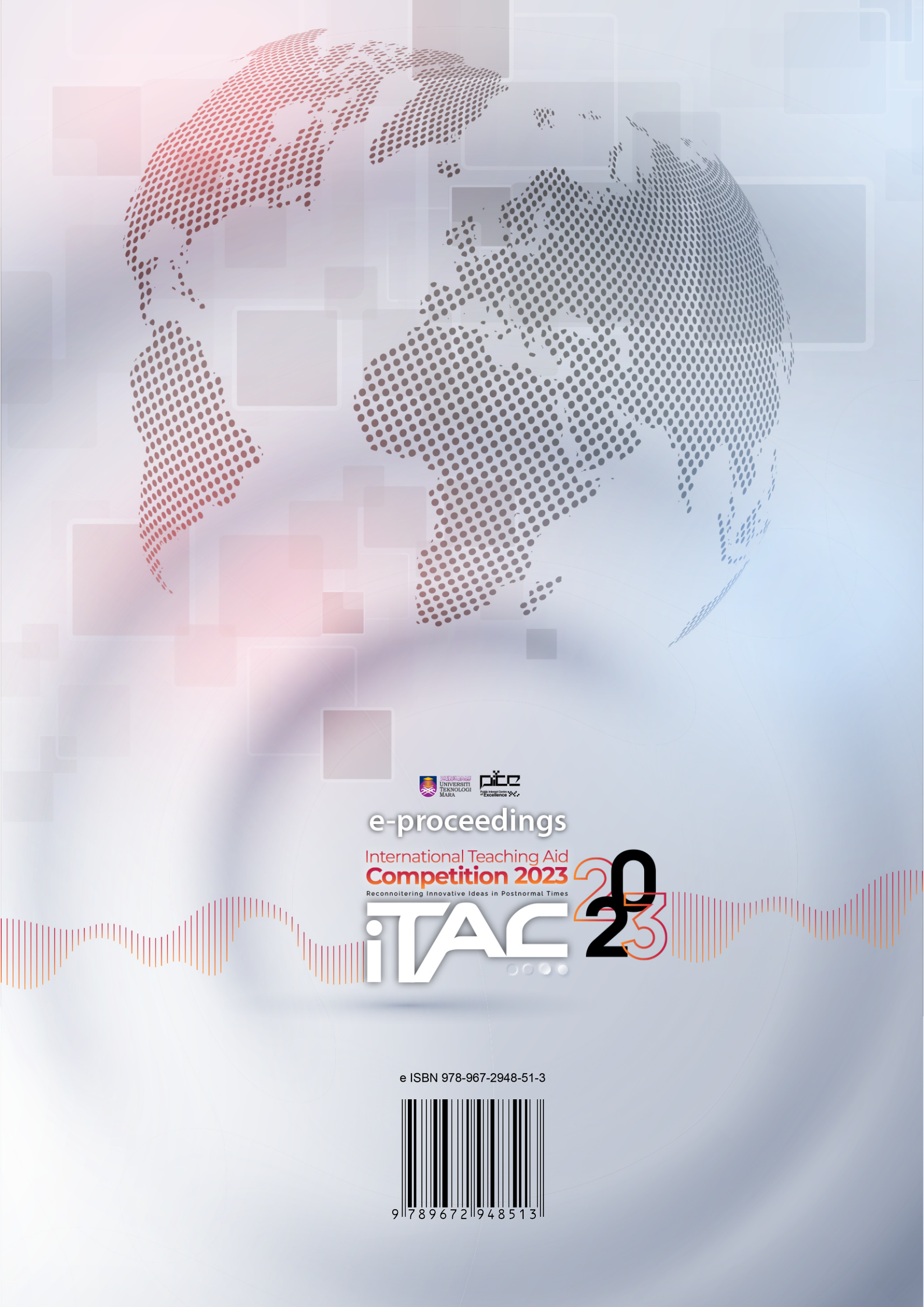

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e ISBN 978-967-2948-51-3