



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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## **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**



## SPENDING TRACKER VIA ONLINE BANKING (SAVE4U)

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### ABSTRACT

The Save4u is an innovation of spending tracker feature that provides a solution to track expenses, check user's overall financial status whether the user is in a good shape or not and give them alerts related to their spending habits. Extravagant spending has become the new norm these days especially among students since social media encourages people to purchase items that follow the trend. By using the Save4u feature, it will customize an analysis of the user's savings by using data that is linked directly to the bank account. Save4u will send notification to the user's phone to let them know whether they are overspending or if they have extra money. Save4u also allows the users to set their own goals that they want to achieve. The target user is for those who have an online banking app. For example, a student wants to save RM500 this month, so Save4u will do the calculation on how much the users can use this month based on their expenses and income. It is different from the existing product in online banking apps, where the users can only set goals and the amount will be separated at the end of every month from savings account to goal account. Save4u will benefit the society by providing detailed data about their expenses transaction. The pie chart analysis will pop up to reveal the users about what needs to be improved, and what they can control. This feature can be expanded by collaboration with banking institutions in Malaysia to focus the feature development for students as a starter.

**Keywords:** spending tracker, analysis, notifications, overspending, goals

## **INTRODUCTION**

In the past few years, extravagant spending has become the new norm, particularly among young generations as influence from various aspects mainly by social media encourages them to buy products that follow the trend. This happens because the items trending on social media are deemed as a necessity in life and must to have. Malaysians may suffer financially as they are unable to track their expenses and do not have enough savings for the long term run or in case of an emergency. Save4u is an innovation of spending tracker feature via online banking where it helps users to track their expenses and give short advice to the user on how they should manage their finances.

## **AN ANALYSIS ON FEATURES OF ONLINE BANKING APPLICATIONS**

An analysis based on the existing online banking app features was done via App Store (Apple) and Play Store (Android) on 20th May 2023. There are various online banking apps that can be found such as MAE by Maybank2u, CIMB and others. There are two applications relating to the topic that have been identified and discussed discreetly in this research. The two applications are MAE by Maybank2u and CIMB. These two applications have an enormous database of users and are able to provide many features in one app that assist their users to complete transactions within a few minutes. Based on the analysis, we decided to make an innovation of spending tracker via online banking where it provides not only expenses details, goal savings and brief analysis. It also provides a short summary that will let you know what you need to control based on data from the past three months and send a pop-up notification to let the user know when they overspend their money.

## **OBJECTIVES**

Save4u strives to increase financial awareness in the community. With Save4u, users are more aware of their spending because Save4u has pop-up notification features where users will be notified if they overspend. Not only that, Save4u wants to make it easier for everyone to manage their finances. Their spending patterns can be illustrated by listing all the expenses they have incurred over a certain period of time, such as a week or month. This will allow them to better understand their shopping habits. Additionally, it puts them in charge, allowing them to change spending based on which expenses need additional funding and which should be cut, and make the necessary adjustments. Moreover, Save4u wants to promote saving. With Save4u, users create their own financial goals.

## NOVELTY

Novelty means something new or unique in the product. As for Save4u, the novelty is the pop-up notification. For the Save4u concept, we refer to the Maybank2u apps. The modification we made is a pop-up alert. These functionalities are available in Save4u but not in Maybank2u apps. These features' purpose is to notify consumers of their spending patterns. The user will be alerted, for instance, if they spend too much money. The unique feature of Save4u is also a quick analysis, which gives customers complete information about their finances, including a brief overview of what has to be improved and what they should control. Users can therefore improve their financial situation.

## COMMERCIALIZATION POTENTIAL

The prospective market is the percentage of the total population that has indicated interest in acquiring a particular good or service. Individuals, businesses, and organizations are all affected by this. Potential market is also known as the total addressable market (TAM). We want to calculate the possible market size for Save4u. This is accomplished by segmenting the entire population into groups according to how much interest they have shown in the product, and then combining all of the segments. Therefore, a potential customer for financial tracking is the banking industry, which offers financial services to the general public.

## FEEDBACK FROM COMMUNITY

This survey has received a total of 35 respondents and it consists of 82.9% women and 17.1% men. There were 77.1% who answered that they were students, and 20% were employed and others. In addition, 68.6% of the respondents to this survey are aged 18 to 22 years old and the rest are 31.4% aged 23-27 years old.

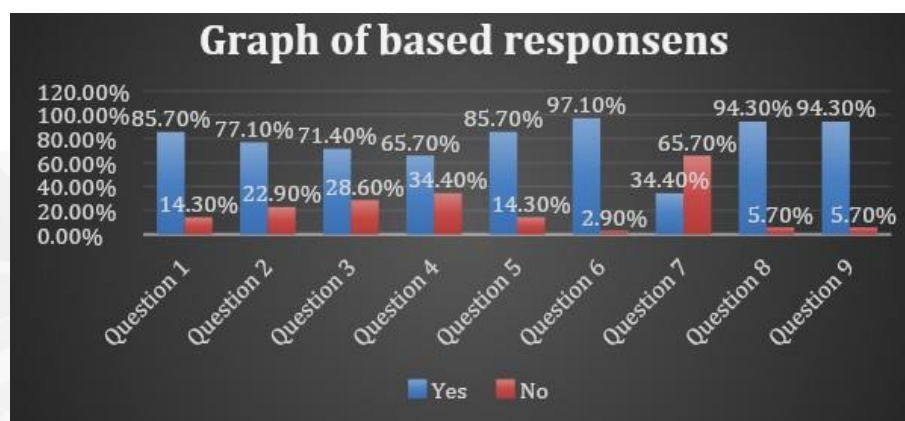


Figure 1. Graph based on survey of Save4u

**This a question based on the graph above**

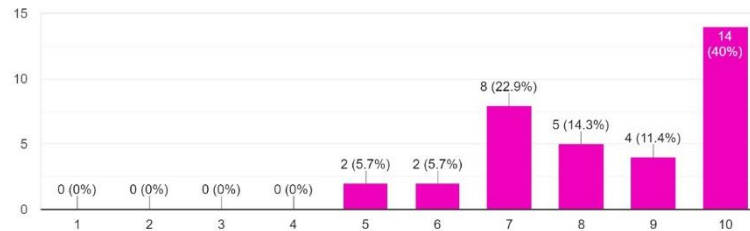
**Table 1.** Table of question in survey

Numbers	Questions
1	Have you heard about basic finance?
2	Have you set any financial goals?
3	Have you ever monitored your cash in and out flow?
4	Have you ever experiences any shortfalls in funding?
5	Have you taken any professional advice on managing finances?
6	Do you think it is important to have emergency funds?
7	Have you used any spending tracker apps before?
8	Do you think it will help you if there are features that can help you track your spending?
9	Do you think by using a spending a tracker app will contribute to a better outcome for your financial situation?

According to the questions above from questions 1 to 9, respondents choose yes or no according to their knowledge and preferences. For question 1, most respondents 85.7% have heard about basic finance and the rest have never. For the second question, only 77.1% of respondents have set their financial goals, and for question 3 only 71.4% have monitored their cash flow. For the 4th question, there were many respondents who experienced a lack of funding which showed that 65.7% answered yes. But for question 5, as many as 85.7% of respondents answered no compared to question 6 which received a yes vote of 97.1%. Almost all respondents felt that an emergency fund is very important. For question 7, based on this survey, only 34.3% have ever used an expense tracker app and 65.7% of them never. Next, questions 8 and 9 have the same value for yes, meaning that 94.3% of them feel that the expense tracker application can help them overcome their financial problems.

For the last question, which is question 10, there are many opinions given by respondents regarding the usefulness of having an expense tracker through online banking. The picture below shows the rate from 1 to 10 given by each respondent. Each provided rate is very different, but they all believe that having an expense tracker through online banking that may aid them in their daily lives is highly vital.

10. Rate from 1 to 10, do you think it is useful to have a spending tracker via online banking?  
 35 responses



**Figure 2.** Graph of rate respondent

## BENEFIT TO COMMUNITY

Save4u is an app which brings awareness to the community in terms of financial. Save4 u is the automated expenses app which is easier for the community to use than traditional expenses management. Nowadays, the efficient technology allows the community to use the smartphone or any device to do automated expenses management which gives better benefits in terms of time and accuracy. The goal of the product's creation was to provide the community with better offers and opportunities for wise budgeting. Save4u provides a detailed overview of the flow of where the money is being spent. Tracking the spending will help the user determine whether they are spending the money wisely or not. At the same time, it will help the user comprehend why they are overspending or underspending and how to take control of their finances. Following this, the user can also cut the unnecessary expenses and make improvements on payment terms.

## CONCLUSION AND REFLECTION

Nowadays, our community is unaware about how important a stable financial situation especially in current economy. In our option, we create Save4u app to offer better opportunities for financial situations. Save4u gives an extensive overview of how and where the money is spent. The features will lead and help the community to be more aware and organize their financial effectively. The app is the solution for people who want to start managing their finances on a regular basis because it will help them automatically gather the data which is much easier than the traditional method.

## ACKNOWLEDGEMENTS

We are grateful to UiTM for providing us with the opportunity to take part in such a significant and memorable project. It gives us pleasure to be able to develop and produce innovative products for community use. It was one of the most challenging yet the good experiences for



us as we have to brainstorm many ideas in order to fit in with the community. We also want to thank our lecturer, Dr. Nor Shahrina Mohd Rafein for all of her help with our project including all of the guidance and encouragement when things got hectic and challenging.

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