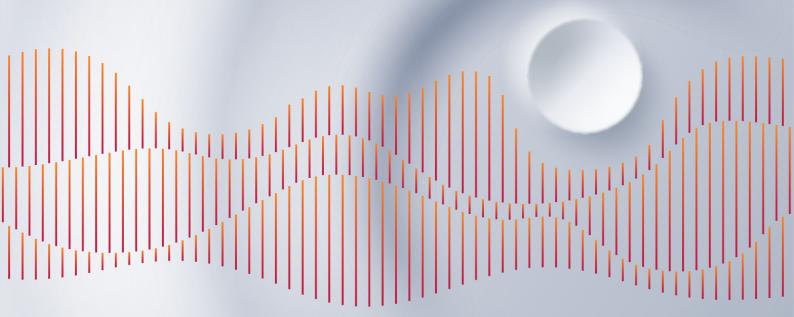


# **E-PROCEEDINGS**



Copyright © 2023 is held by the owner/authors(s). These papers are published in their original version without editing the content.

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

Copy Editors: Syazliyati Ibrahim, Azni Syafena Andin Salamat, Berlian Nur Morat (Dr.), Najah Mokhtar, Noor 'Izzati Ahmad Shafiai, Muhamad Khairul Anuar Bin Zulkepli (Dr.)

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.



Geetha Muthusamy, Nursyafiqah binti Mohd Jaffri, Nur Hanis Farhana binti Mohd Hasni, Nur Nabilah Huda binti A D Osmara

99.	STUDENT'S FINANCIAL ASISSTANT Norkarisya Idayu Binti Abu Kassim, Amirah Zafirah Binti Musa, Kenneth Walker Anak Philip, Mohamad Danial Akmal bin Hanim, Nor Maslia Binti Rasli Samudin	649
100.	FICAG: PERSONAL FINANCIAL PLANNING INTERACTIVE CARD GAMES Nurhannan Ainal binti Hairol Faizi, Nurul Syahirah binti Idris, Nurhannani Zulaikha binti Shahromizam, Muhammad Haziq bin Baharim, Munirah binti Mohamed	656
101.	IMPROVING EDUCATION: DEVELOPMENT OF INSURANCE MODULE Nur' Nadhirah Binti Roslan, Nurul Aliah Syamimi Binti Norazman, Nor Athirah Binti Ibrahim, Nurul Ain Natasha Binti Marzuki, Amirah Hazimah Binti Borhanordin	662
102.	STUDENT FINANCIAL PLANNING APPLICATION (SABE) Nurul Izzah Binti Zainal, Nurul Iman Binti Nikrul Tarmizi, Nur Anis Najwa Binti Jamaluddin, Nadzirah Wafaa Binti Zaini, Nurazree Bin Mahmud	668
103.	DO YOU CONSIDER FURTHERING YOUR STUDY? SCHOLARSHIPMY.COM Zarina Begum Binti Ebrahim, Nur Hazira Binti Jaidi, Nur Qistinah Athirah Binti Mazlan, Nurul Aina Binti Abdul Razak, Nuralyaa Aiman Binti Mohd Ridzuan	673
104.	A GRAPHICAL USER INTERFACE TO APPROXIMATE AREA (AMOEBA) USING TRAPEZOIDAL METHOD FOR TEACHING AND LEARNING PROCESSES  Nurul Ain Johar, Nurul Hazirah Norhisham, Mohd Agos Salim Nasir, Siti Khuzaimah Soid, Herniza Md Tahir	680
105.	LANGUAGE BOARD GAME: THE ADVENTURE OF HANG NADIM Nur Aisha Hanina Binti Khairul Nazmi, Sumayyah Shaidin	685
106.	NEWBIE INVESTMENT SIMULATION APPLICATION Aina Sufia Binti Musa, Hani Sofia Binti Mazlan, Fatin Hanani Binti Ahmad	693

#### **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



# FICAG: PERSONAL FINANCIAL PLANNING INTERACTIVE CARD GAMES

Nurhannan Ainal binti Hairol Faizi Faculty of Business and Management, UiTM Kampus Bandaraya Melaka 2021885678@student.uitm.edu.my

Nurul Syahirah binti Idris Faculty of Business and Management, UiTM Kampus Bandaraya Melaka 2021898848@student.uitm.edu.my

Nurhannani Zulaikha binti Shahromizam Faculty of Business and Management, UiTM Kampus Bandaraya Melaka 2021478186@student.uitm.edu.my

Muhammad Haziq bin Baharim Faculty of Business and Management, UiTM Kampus Bandaraya Melaka 2021477218@student.uitm.edu.my

\*Munirah binti Mohamed
Faculty of Business and Management, UiTM Kampus Bandaraya Melaka
\*Corresponding author: munirah257@uitm.edu.my

#### **ABSTRACT**

Personal financial planning plays a crucial role in our lives, yet many individuals struggle to develop the necessary skills to manage their finances effectively. FICAG is an interactive and innovative approach to learning personal financial planning with card games. The problem with learning personal finance through traditional methods is that they can often be dull and fail to engage students. Without an understanding of personal financial planning, students are more likely to engage in impulsive spending, accumulate debt, or fail to save for future goals. This can lead to financial instability and difficulties in managing their finances effectively throughout their lives. The primary objective of learning personal financial planning through card games is to give early exposure to financial literacy among secondary school students. By engaging in card games that incorporate financial concepts, players can gain a deeper understanding of fundamental principles such as saving, spending, budgeting, and risk assessment. The games provide an interactive and practical learning experience that promotes financial knowledge. The novelty of this card game allows players to experience and practice personal finance concepts in a hands-on and experiential manner, and it is designed for secondary school students. FICAG offers numerous benefits to society by improving financial literacy, fostering practical



financial skills, promoting long-term financial well-being, and reducing financial stress. Due to a growing recognition of the importance of financial literacy among secondary school students, these card games can be commercialized by introducing them to educational institutions. It can serve as a valuable educational tool in classrooms, offering an engaging and interactive way to learn financial concepts. Companies can also position themselves as leaders in the financial education space while providing valuable resources.

**Keywords:** card, games, personal, financial, planning

# **BACKGROUND**

Families and schools need early financial education. Financial literacy should begin in elementary school. Schools should teach personal finance, it's worth, how to save, invest, spend, and avoid squandering it. Many young Malaysians fall into the debt trap and eventually declare bankruptcy because of their lack of financial education (The Star Online, 2019). Bank Negara Malaysia (2022) reported that Malaysians need greater financial understanding to manage their money and weather economic storms.

Everyone needs help with budgeting, saving, investing, and debt. This information gap must enhance financial planning, decision-making, and security (Ying, 2020). Personal finance games make financial skills practice fun. Modern finance is complicated. People may invest in financial goods. College debts, mortgages, retirement, and investments are theirs. Digital banking and fintech complicate issues. Personal financial games help you understand, feel, and negotiate this complexity. Financial concepts must be explained through lectures, seminars, and textbooks. These methods need financial knowledge and relationships. Interactive financial games teach. Games enhance financial education.

## PROBLEM STATEMENT

Secondary students' financial issues have grown in recent years. Secondary students need help with several economic problems. Many secondary schools require thorough financial education. Thus, many students need financial education to make educated choices about money management, budgeting, saving, investing, and debt management. Students without financial education must be prepared for adult financial responsibility (Lusardi, 2019). Advertising influences secondary kids to value material goods and instant fulfillment. Advertising, peer pressure, and social media may lead to impulsive spending and short-term financial goals. This may lead to student debt, overspending, and financial irresponsibility. They made digital financial judgments. Online shopping, smartphone apps, and digital payments provide new obstacles for secondary students (Yin et al., 2022). Online transactions enable overspending, debt, and fraud. Students must learn to protect personal data, recognize



online fraud, and safely handle digital transactions.

#### **OBJECTIVES**

Personal financial games are interactive and teach financial knowledge and money management. These games teach players how to make smart financial choices, develop good habits, and reach their financial goals. Personal economic games teach financial concepts. These games teach budgeting, investing, debt management, and financial planning. Interactive games help students learn complex financial topics better than standard instructional tools. Personal economic games may also show the real-world effects of prudent and reckless financial decisions. These games teach financial skills. Participants may practice budgeting, interest computation, investment appraisal, and risk analysis in simulated situations and decision-making difficulties. In a game, people may get practical experience without losing money. This improves real-world financial decision-making by building confidence and expertise in personal finance management.

# **NOVELTY**

Each player is given a set of cards representing various income, assets, and liabilities. The game incorporates a dynamic market system that simulates adult-life economic conditions, including fluctuating prices, and financial decisions. Players must analyze the risks and make strategic decisions to grow their wealth. What sets FICAG apart is its educational component. The game includes explanations of financial concepts indirectly and terminology on each card, providing players with a practical understanding of risk management, and financial decision-making. It encourages players to think critically about their decisions, evaluate different strategies, and learn from their successes and failures. FICAG also incorporates a multiplayer mode that allows players to compete against each other. This fosters social interaction and encourages players to discuss and debate financial strategies, further enhancing the learning experience. Overall, FICAG combines entertainment with financial education, offering a novel approach to card games. By merging gameplay with real-world financial concepts, it provides players with an engaging and immersive way to develop their financial literacy and decision-making skills.

### **COMMERCIALIZATION POTENTIALS**

The FICAG Card Games have a lot of marketing potential because they teach high school students and young people about money. Focusing on this group, the game taps into a niche market with a growing need for tools to help people learn about money. The online mode adds a new level of interest by letting players know, connect, talk about, and argue about financial tactics. This makes learning more fun and interesting. Because of this unique selling point, the FICAG Card Games are a great tool for schools, parents, and people who want to improve their



financial knowledge and skills. Licensing deals with schools, relationships with financial institutions, online sales platforms, and the possibility of expanding into other related goods or services, such as classes, lessons, or digital apps, are all ways to make money from the idea. The FICAG Card Games have a lot of promise for business success and wide acceptance because they focus on making the economy more stable and are fun to play.

#### **BENEFIT TO COMMUNITY**

Personal financial games boost economic stability for individuals and society. Financial literacy and sound financial practices help community members make educated financial choices. Financial difficulty, excessive debt, and poor financial management are reduced. People can help the community's economy when they take responsibility for their money. In many places, the economic disparity must be minimized. Personal finance games teach all socioeconomic groups how to succeed financially. These games enable people to overcome challenges and make smart financial choices by offering accessible and comprehensive financial education. Wealth inequality may be reduced through this. Long-term financial planning is encouraged via personal economic games. Retirement planning, financial methods, and goal setting may be explored via games and interactive situations. Players may learn to think strategically about their finances by playing these games. Improved financial decision-making, savings, and planning for long-term financial goals, including housing, education, and retirement. Community members learn how to manage their finances via personal financial games. These exercises educate people to handle their money independently.

# FEEDBACK FROM COMMUNITY

The community applauds the poll for providing a clear and detailed summary of the learning card game project, which was one of its focuses. The objective of the game, as well as its potential to be used as a tool to improve educational results, is communicated quite well in the abstract. The way in which the project places a focus on interactive gameplay is something that is particularly appreciated, as it presents a novel and interesting perspective to the process of learning.

**Table 1.** Table of Frequency

Item	Number of students	% of Strongly Agree
Do you have your own personal financial goals?	30/39	76.9%
Do you love financial-related subjects?	21/39	53.8%



Would you recommend	29/39	74.4%
our FICAG Card Game		
to your friends?		

The community has shown an interest in gaining further knowledge on the development process as well as the problems that were encountered throughout the deployment of the learning card game. It would give depth to the abstract as well as giving readers with some useful insights if you included some insights into the technology that was utilized, the input from playtesting, and any adjustments that were made to better the game.

#### **CONCLUSION AND REFLECTION**

The abstract emphasizes personal financial planning and how difficult it is to manage money. Traditional private finance classes only sometimes engage students, which may lead to economic instability and lifelong money problems. FICAG is a new card game that teaches high schoolers about personal finance: fun and practical learning. Students may learn about saving, purchasing, planning, and risk-taking via financial games. This enhances their financial expertise. Companies may market card games to schools to help pupils learn about money and establish themselves as financial education leaders. This strategy allows individuals to understand money and make sensible financial decisions.

## **ACKNOWLEDGEMENTS**

First and foremost, we express our best wishes for tranquility and harmony. To start, we thank Allah SWT for making it possible for us to finish this innovative initiative. Muhammad Haziq Bin Baharim, Nurul Syahirah Binti Idris, Nurhannan Ainal Binti Hairol Faizi, and Nurhannani Zulaikha binti Shahromizam worked tirelessly to see this creative idea through to fruition. We spent a lot of time getting ready for and conducting this assessment, but we were able to do it because we took our time and worked more efficiently. In addition, we would like to show our deep appreciation to Miss Munirah Binti Mohamed, our advisor, for all of the help, direction, and professional advice she has given us during this project. In addition, we would like to thank everyone who has assisted us in any way or form during this project's development. Finally, we would like to express our gratitude to our families, our friends, and most of all, our partners, who have always put in the time and effort required to ensure that our joint effort has yielded the highest quality results. The insightful criticism and suggestions offered pushed us to start working on ways to enhance the whole project.

# REFERENCES

Bank Negara Malaysia. (2022). Malaysia Financial Sector Blueprint 2022-2026. Central



Bank of Malaysia. https://www.bnm.gov.my/financial-sector-development1

- Lusardi, A. (2019). Financial literacy and the need for financial education: evidence and implications. *Swiss Journal of Economics and Statistics*, *155*(1). https://doi.org/10.1186/s41937-019-0027-5
- Ying, T. L. (2020). Financial Literacy Among Gen Y In Malaysia. *European Proceedings of Social and Behavioural Sciences*. https://doi.org/10.15405/epsbs.2020.12.05.5
- Yin, K. Y., Yusof, R., & Yi, W. C. (2022). Factors that influence Malaysian-based financial literacy model among teenagers. *International Journal of Evaluation and Research in Education (IJERE)*, 11(3), 1218–1225. https://ijere.iaescore.com/index.php/IJERE/article/view/22622/13384
- The Star Online. (2019, March 5). *Lim: Young Malaysians have low financial literacy*. Retrieved from https://www.thestar.com.my/news/nation/2019/03/05/lim-young-malaysians-have-low-financial-literacy/



e ISBN 978-967-2948-51-3

