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RESEARCH EXHIBITION IN MATHEMATICS & COMPUTER SCIENCES

# REMACS 5.0

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CS240 - BACHELOR OF INFORMATION TECHNOLOGY [HONS.]  
CS248 - BACHELOR OF SCIENCES [HONS.]  
MANAGEMENT IN MATHEMATICS  
CS251 - BACHELOR OF COMPUTER SCIENCE [HONS]  
NETCENTRIC COMPUTING  
CS255 - BACHELOR OF COMPUTER SCIENCE [HONS]  
DATA COMMUNICATION & NETWORKING

**2<sup>nd</sup> February 2023**  
**Stor Complex, UiTM Perlis**

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Organized by:  
College of Computing, Informatics and Media  
Universiti Teknologi MARA Perlis Branch

**Research Exhibition in Mathematics and Computer Sciences  
(REMACS 5.0)**

Research Exhibition in Mathematics and Computer Sciences (REMACS 5.0)

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# Preface

It is with great pleasure that we present this extended abstract book, titled "The 5<sup>th</sup> Research Exhibition in Mathematics and Computer Sciences (REMACS 5.0)". This book is a collection of research work in the fields of Computer Science and Mathematics, contributed by the final year students from Universiti Teknologi MARA, Perlis Branch. The aim of this book is to showcase the diversity and depth of research in these two interrelated fields.

Mathematics and Computer Science are two fields that have seen tremendous growth and advancement in recent years. With the rise of new technologies and the increasing demand for data-driven solutions, researchers in these fields have been working hard to develop new theories, algorithms, and models that can help solve some of the most pressing problems of our time. This book is a testament to their hard work and dedication.

The abstracts in this book cover a wide range of topics, including algebra, analysis, logic, computer architecture, algorithms, artificial intelligence, machine learning, computer network, netcentric computing and many more. The work presented here is both theoretical and practical, and has the potential to impact many areas of society, from finance and healthcare to education and security.

We hope that this book will serve as a valuable resource for future students in the fields of Mathematics and Computer Science. We also hope that it will inspire more students to pursue innovative and groundbreaking research in these two fields. Finally, we would like to express our gratitude to all the contributors for their hard work and dedication, without which this book would not have been possible.



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# EVENT SCHEDULE

8:00 – 8:30 am

- Registration

8:00 am – 12:00 pm

- FYP Project Presentation

12:00 - 2:00pm

- Lunch Break

2:15 – 2:35 pm

- National & Wawasan Setia Anthems
- Doa Recitation

2:35 – 2:45 pm

- Welcoming Address by Director of REMACS 5.0

2:45 – 2:55 pm

- Officiating & Closing Remarks from Rector of UiTM Perlis

2:55 – 3:00 pm

- REMACS 5.0 Montage

3:00 – 4:00 pm

- Awarding of Winners:
  - Best Poster
  - Best Project Award
- Photo Session
- End of Ceremony

*Dress Code: Formal / Corporate*

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# EXTENDED ABSTRACTS

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RESEARCH EXHIBITION IN MATHEMATICS & COMPUTER SCIENCES  
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# FINAL YEAR PROJECT SUPERVISOR ACCEPTANCE SYSTEM (FYPSA)

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## **Abstract**

A majority of the final year students in Universiti Teknologi Mara Cawangan Perlis faced with unpleasant issue due to finding the suitable supervisor to finish their final year project. The Final Year Project Supervisor Acceptance System (FYPSA) which is an application that can bring together the student and supervisor by helping them on searching for supervisor, submitting, reviewing, and accepting the final year project request. The goal of this project is making FYPSA based on mobile application for android user to improve the communication between students and supervisor to completing the first phase of final year project which is proposing the project title that usually do manually. The development of FYPSA application used the System Development Life Cycle (SDLC) by implementing the agile model as the methodology. A user acceptance testing was conducted with 30 respondents who are the students in Universiti Teknologi Mara Cawangan Perlis to determine the usability and functionality of the FYPSA by evaluating the questionnaires that were divided into two categories respectively. Results of the system evaluation showed that most of the participant were satisfied with all categories provided. Therefore, FYPSA can assist the student and the supervisor to complete the first phase of final year project run smoothly without taking a lot of time to find and approve the project proposal.

*Keywords: Final Year Project, Mobile Application, Agile Model.*

## **1. Introduction**

The struggle that student run into when they want to start the first phase of final year project is to find supervisor to propose their final project title. In order to overcome the situation is to create a system as a medium to communicate based on mobile application. The aim is to help the student and supervisor to have a system that meets the usability and functional in accepting the project request. The project will prioritize for UITM Perlis because there are a lot of students that being request for supervisor. When there are a lot of students it also will need more lecture, so it will be one of the benefits to organize all the people that involve in increasing the efficiency. Also, the limit of system will be focused on degree course that need final year project in the end of the years.

## **2. Methodology**

By referring to and evaluating existing concepts, such as how the student tries to contact the supervisor in the past, data were gathered via participant observations, interviews, and textual analysis. Findings from the study assess the issue that arises when students simply depend on the list of supervisors provided in lectures and are required to physically locate and propose. The idea to develop the Final Year Project Supervisor Acceptance System, which would aid it, came from there. The system's design will be based on an Android mobile application. To create the project, It was necessary to learn Java in order to construct the application using Android Studio.

## **3. Results and Discussion**

When the student and supervisor have a system that can organize the work for them, the first phase of the final year project which is finding supervisor and propose project title. With the system that build specific for android user, the task can be done remotely. From now, the student does not need to take a lot of time and it will be more efficient to find supervisor and propose the project title with a system. This article will finally reveal what it needs on the system to be able fix the current issue that student need to face when they want to start the final year project.

#### **4. Novelty of Research / Product**

The novelty of the research for the Final Year Project Supervisor Acceptance System (FYPSA) mobile app lies in its ability to streamline the process of supervisor selection and project request management for final year students. Unlike traditional methods which rely on manual paperwork and face-to-face meetings. Manual processes are time-consuming and error-prone (Kauffman, 2019) . FYPSA allows students to easily submit project requests, view the status of their requests, and communicate with their potential supervisors all in one convenient mobile application. Changes in the world are now entering the era of industrial revolution 4.0 where technology becomes a necessity in human life, everything has become limitless with unlimited use of computational power and data (Sarwandi, S., Giatman, M., Sukardi, S., & Irfan, D. 2019). Additionally, FYPSA also integrates with various forms of communication such as WhatsApp, SMS, and email to ensure that students and supervisors are promptly notified of any updates. According from research WhatsApp with its popularity as mobile instant messaging application is also proving crucial in creation and dissemination of news (Batra, B. 2016).

#### **5. Conclusion**

In conclusion, the Final Year Project Supervisor Acceptance System (FYPSA) mobile app is an innovative way to simplify the procedure for final-year students choosing supervisors and managing project requests. Overall, the FYPSA mobile app is a useful tool for project management process improvement for both students and supervisors.

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