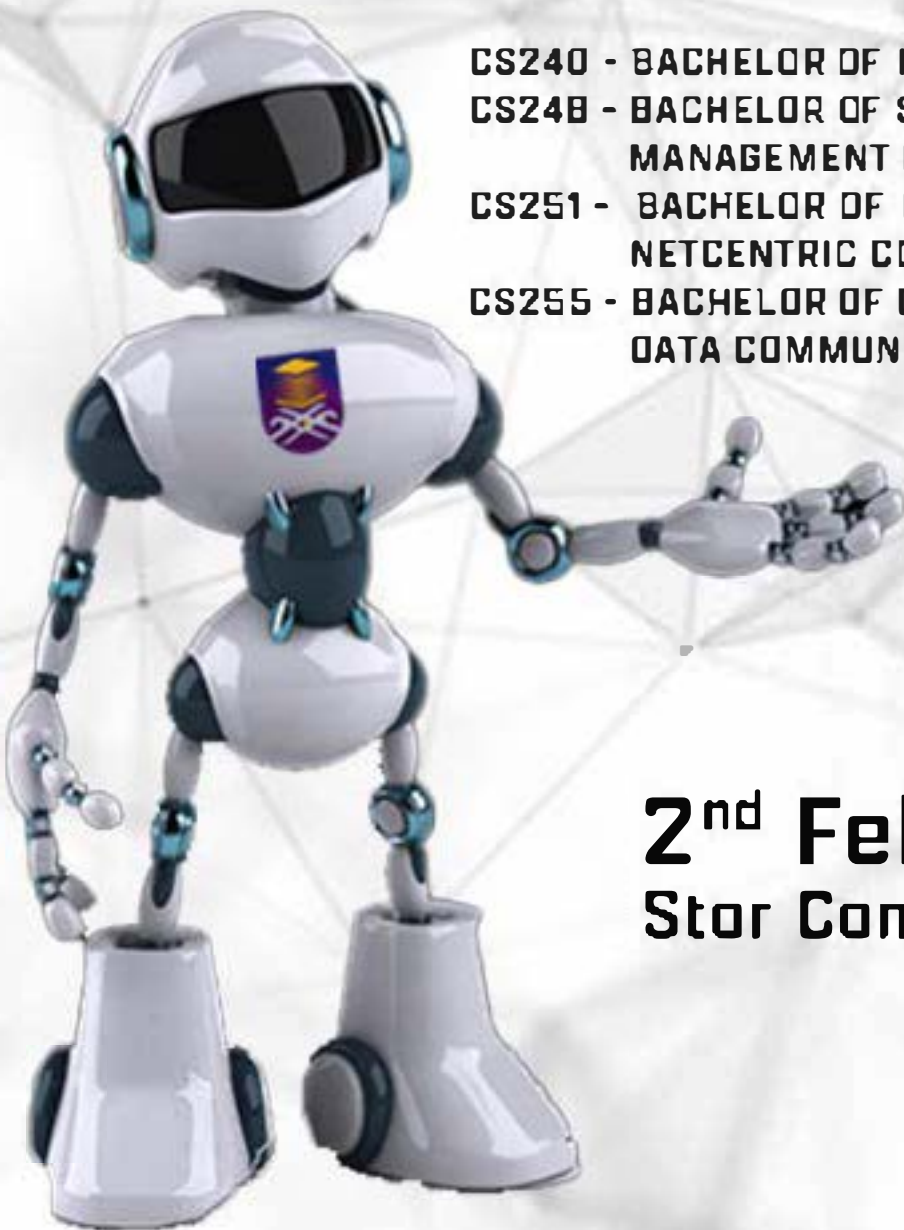

RESEARCH EXHIBITION IN MATHEMATICS & COMPUTER SCIENCES

REMACS 5.0



CS240 - BACHELOR OF INFORMATION TECHNOLOGY [HONS.]
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2nd February 2023
Stor Complex, UiTM Perlis

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 5th 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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REMACS 5.0

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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

RESEARCH EXHIBITION IN MATHEMATICS & COMPUTER SCIENCES
REMACS 5.0

MOBILE APPLICATION FOR COLLEGE LAUNDRY BOOKING SYSTEM IN UITM PERLIS

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Abstract

According to the observation of student life at UiTM Arau in Perlis, students have limited time to do side activities, especially to do their own laundry. Students have to wait their turn to use the washing machines or dryer and sometimes their queue is being cut off by others. This will take the student a longer time to wait. After studying the related issues, a system called Mobile Application for College Laundry Booking System in UiTM Perlis is proposed. The solution will offer time savings for students in queue for their laundry. Students do not have to wait for too long and can do other activities while waiting without having to worry about their turn being cut off. This project is developed with Android Studio connected with a database using Firebase Database. The application proposed will make the students much easier in using the laundry service in college with a proper booking system. All the objectives had been achieved from the analysis and testing results on the system.

Keywords: laundry, college, washing machine, dryer

1. Introduction

The objectives of this project are to develop a mobile application that focuses on booking the laundry and to evaluate the proposed model using a user acceptance test. Students living in the college UiTM Arau are the targeted users for this system. The system will design and develop a mobile application to help students have an easy way to book laundry. With this mobile application, students can see the availability of the laundry and the remaining time of the used washing machine and dryer. The application will reduce the time taken and can save time from long queues at the doobby. This mobile application will provide information about the laundry at college and help students to book the washing machine and dryer without having to queue manually or move from their current place.

2. Methodology

Data were collected from a survey which is using Functionality Testing. Each system component was checked to make sure it was functioning efficiently during this testing. A significant amount of data was used to assess each function and the output was reviewed. Other than that, User Acceptance Testing is a technique for determining how user-friendly a system is by testing it. The respondents will try to use the laundry mobile application and respondents will be provided with a tablet to use the application. The respondents will try to use the application for almost 30 minutes. After completing all the testing of a mobile application, users will be given a questionnaire regarding the acceptance test of the system using a Google Form.

3. Results and Discussion

A total of 30 people participated in the User Acceptance Test. In the first phase of the survey, personal information about the respondents such as gender, age and college were collected. Then, the question provided four sections such as perceived ease of use, perceived usefulness, attitude and intention to use. The intention to use criteria got the highest mean score which is 4.6 while the perceived ease of use and

attitude get the same score of 4.4 each. The intention to use criteria had proved to use this mobile application for their daily routine to use laundry. In conclusion, users have intended to use this mobile application as almost all criteria have high mean scores.

4. Novelty of Research / Product

The benefits of this mobile application has helped students in college use the laundry. This can improve the management process of using the laundry to wash clothes. Students don't need to queue long at the laundry. This also reduces the time taken to queue at the college laundry. Students just need to log in this mobile application and can book the laundry with their smartphone. They also can see the availability date and time for washing machines and dryers to make a booking. In addition, this project can provide an organized and orderly system in the laundry and can reduce students gathering in large numbers in the laundry.

5. Conclusion

Overall, all of the objectives were achieved, and the Mobile Application for College Laundry Booking System in UiTM Perlis was successfully developed in accordance with the plan. This mobile application also has been successfully developed according to the users need which is an easy application to book the laundry. The user will use this mobile application because this application can save time for students without waiting in line at laundry.

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