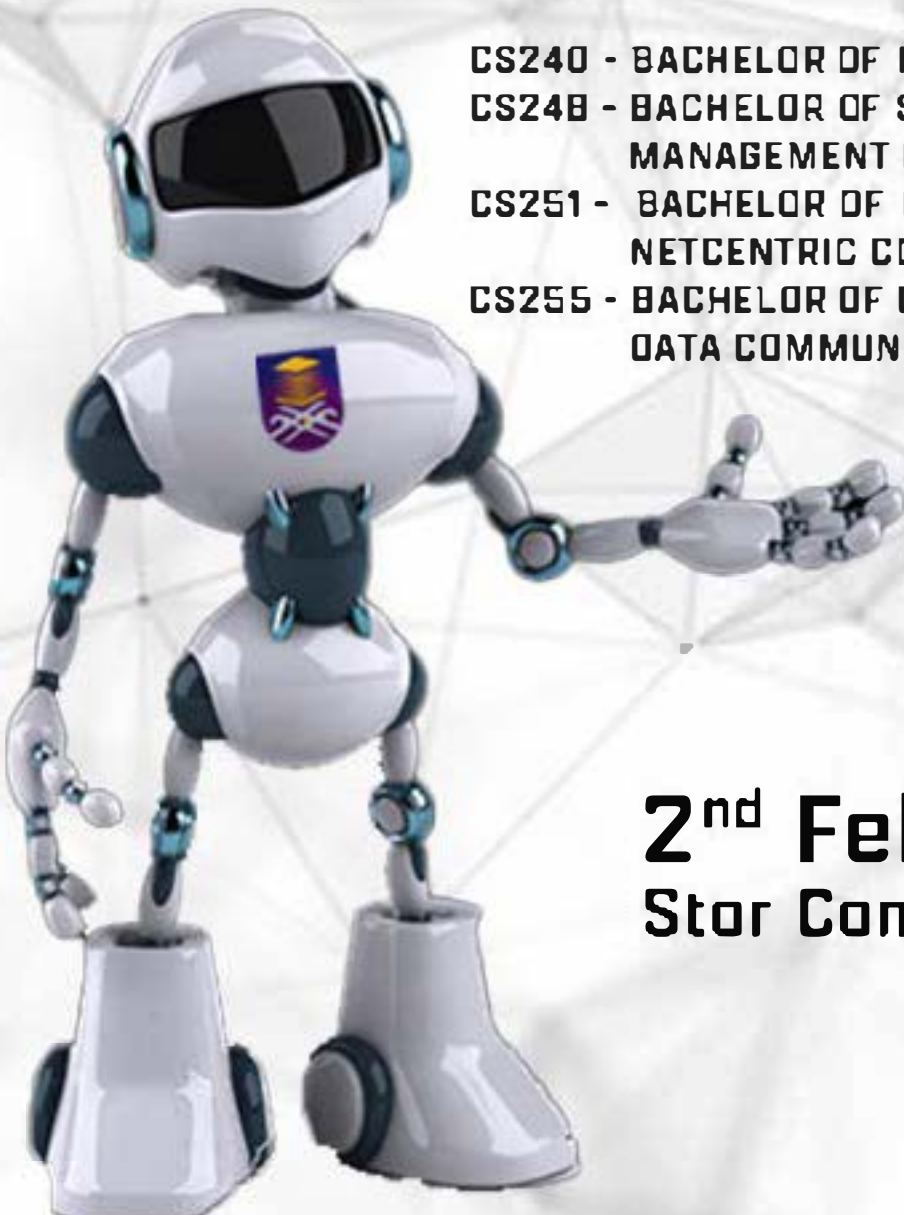

RESEARCH EXHIBITION IN MATHEMATICS & COMPUTER SCIENCES

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

SPORT FACILITIES AND EQUIPMENT BOOKING SYSTEM FOR UITM PERLIS

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Abstract

Sports facilities and equipment booking system was proposed to help UiTM students and staffs to ease the process of borrowing the sports facilities. This system does not only assist the facilities unit to achieve higher quality, but it also helps to make the system efficient and to make the booking process smooth and easy for the management. The main issue that arises in the main existing system is that the current system is due to not efficient. The objectives of this project are to develop a web-based for Sport Facilities and Equipment Booking System in UITM Perlis sport centre and to evaluate the functionality and usability of the proposed web-based system. The methodology consists of three phases. This project will benefit the society especially the staff and students who are users. Once the system has been established, staff and students will have many bookings that are flexible. In order to use the sport centre facilities, staff and students do not need to book manually using paper or form. Instead, they just need to book through the system which makes everything easier and more paperless. It will significantly increase the efficiency of the sports centre facilities as compared to the booking process using paper or forms as it is faster and saves users time. Eventually, by fully implementing the system, the system may be able to provide excellent service to both employees and students.

Keywords: facilities and equipment, booking

1. Introduction

Sports facilities and equipment booking system was proposed to help UiTM students and staffs to ease the process of borrowing the sports facilities. The purpose of this project are to develop a web-based for Sport Facilities and Equipment Booking System in UITM Perlis and to evaluate the functionality and usability of the proposed web-based system. Both the students and the staff can make a booking at the booking system of sports facilities and equipment based on the listed. Admin can manage the users. Admin can view the details, edit facilities and equipment availability and cancel booking of the sports facilities and equipment.

2. Methodology

Data were collected from a survey that was made for participant based on their observations & interviews after testing the system. The methodology consists of 3 phases. The proposed system can simplify the process for application to saving time and more user friendly. The technique used in this study is capable to avoid the overlapping booking system.

3. Results and Discussion

This system will make it easy for students to book equipment and facilities. Students do not need to manually inquire about staff availability. To obtain the information, they simply need to access the website. As an illustration, the status of the equipment's or facilities' booking will be updated right away after student made a booking. Other students who were slow to book the equipment will therefore being cancelled by the admin right away, allowing them to move on to other facilities and equipment at a later

time or on different days. Thus, this improves the functionality and efficiency of sport management at UiTM Perlis, particularly for students.

4. Novelty of Research / Product

There is still no sport booking system in any of UiTM branches. Sport booking system is a software solution and reservation system that makes it simple for student and staff to book sport facilities and equipment online. In the current Campus Arau Sports Centre, there are unsystematic systems that provide difficulties to keep the details of the users. The details that are kept in papers and books might take a longer time to search the previous or old details. The capability of this web-based benefit the society especially the staff and students who are users. Once the system has been established, staff and students will have many bookings that are flexible. It will significantly increase the efficiency of the sports centre facilities as compared to the booking process using paper or forms as it is faster and saves users time.

5. Conclusion

The objectives of this research were successfully achieved. Sport Facilities and Equipment Booking System is a web-based system with the priority concept. Overall, most of the respondents have given positives feedback. However, this system still needs to be improved in the future where it can be developed with more features and advanced technology.

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