

RESEARCH EXHIBITION IN MATHEMATICS & COMPUTER SCIENCES

REMACS 5.0

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MANAGEMENT IN MATHEMATICS

CS251 - BACHELOR OF COMPUTER SCIENCE [HONS]

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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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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

SKIN CARE E-COMMERCE MOBILE PLATFORM WITH PRODUCT RECOMMENDATION BASED ON SKIN TYPE

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Abstract

This study for a project final year with the title Skincare E-Commerce Mobile Platform with Product Recommendation Based on Skin Type. This research aims to design and develop a mobile application for skincare e-commerce platform with product recommendations based on skin type. This mobile application has the ability to identify user skin type by using several methods. There are 3 methods that have been used is skin test question method, bare face method and blotting sheet method. Besides, this system also can recommend user with the suitable skincare products based on their skin type. The methodology for this study used the Software Development Life Cycle (SDLC) with the Waterfall Model. This methodology consists of five phases which is analysis, design, implementation, testing, and documentation. The system have been designed with the persuasive technology principle as a guideline. To evaluate the study, functionality testing and user experience test have been conducted. Functionality testing have been used to test every function in this mobile application. This testing have been successful and proceed to the second testing which is User Experience Test. This testing aims to satisfy users and concentrates primarily on attractiveness, perspicuity, efficiency, dependability, stimulation and novelty. In conclusion, this research and development have been achieve the objectives of designing, developing, and evaluating a mobile application for a skincare e-commerce platform with product recommendations based on skin type.

Keywords: E-Commerce Mobile Platform, Skin Care, Waterfall Model, User Experience Test

1. Introduction

Nowadays, when comes to choosing skin care product for their skin, people tend to choose the wrong skin care product that will make their skin worst. In order to help solve the problem there is need to develop a mobile platform e-commence. To achieve the e-commence mobile platform there are 3 goals that need to be achieved first. The first objective or goals is to design a mobile application e-commerce platform for skin care products with recommendations based on the skin type, Next, to develop a mobile application e-commerce platform for skin care products with recommendations based on the skin type to ease and help the user to choose their products to buy. The final objective is To evaluate the user experience of the mobile application e-commerce platform for skincare products with recommendations based on the skin type by using User Experience Test.

2. Methodology

Methodology that use in this project is Waterfall Model of Software Development Life Cycle (SDLC). Design phase is earlier phase which include the design the data flow of the system, design the database and design the user interface. By using the design that have been develop, implementation will be conducted to complete this project. Implementation phase include the development of user interface, develop system and creation of database. Testing have been conducted by using method functionality testing and user experience test to evaluate the satisfaction user during use this mobile applications.

3. Results and Discussion

In the recent depiction of user that have been use this mobile application, there are various reactions and recommendation about this application. Testing that have been used is User Experience Test which contains 26 questions and received more that 30 respondents. As a result from this survey, user is agree that the mobile application is attractiveness, perspicuity, efficiency, dependability, stimulation and novelty. From the survey, the mean has been calculated and have been compared to the benchmark. In overall, the mean scale for each part in this survey is above 2.00 which shows a positive evaluation from the user. Compared to the benchmark, this result is excellent. However, there is suspicious data from the user. During the data analysis, there are 2 questions that user submit the suspicious data. The questions is about the ability to learn and use this application and the quality of this application either valuable or inferior.

4. Novelty of Research / Product

Convenience, straightforward customer interaction, and online usage are all advantages of mobile applications (Parker, 2022). This mobile application is a skin care e-commerce mobile platform. In application include new features which is skin type identification. Instead of user buy the product in this application, user can identify their skin type to choose the suitable product to their skin. Knowing your skin type is essential for determining which products would be most beneficial and whether using the wrong products could make your skin worse rather than better (skinadmin & skinadmin, 2016). Skin type identification in this application include 3 methods which is Skin Test Questions method, Bare-Face method and Blotting Sheet method. In addition, product recommendation based on skin type also included in this mobile application. By include this feature, it is easier for users to choose the suitable product according to their skin type.

5. Conclusion

This research was carried out with the purpose developing a skin care e-commerce mobile platform with product recommendation based on skin type. This mobile applications able to identify user skin type by using skin test questions. In addition, this mobile application also can recommend product based on skin type.

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