

THE 13TH INTERNATIONAL INNOVATION, INVENTION & DESIGN COMPETITION 2024

EXTENDED ABSTRACTS

e-BOOK



EXTENDED ABSTRACTS e-BOOK

THE 13th INTERNATIONAL INNOVATION, INVENTION & DESIGN COMPETITION 2024



Organized by: Office Of Research, Industry, Community & Alumni Network UiTM Perak Branch

© Unit Penerbitan UiTM Perak, 2024

All rights reserved. No part of this publication may be reproduced, copied, stored in any retrieval system or transmitted in any form or by any means; electronic, mechanical, photocopying, recording or otherwise; without permission on writing from the director of Unit Penerbitan UiTM Perak, Universiti Teknologi MARA, Perak Branch, 32610 Seri Iskandar Perak, Malaysia.

Perpustakaan Negara Malaysia

Cataloguing in Publication Data

No e- ISBN: 978-967-2776-31-4

Cover Design: Dr. Mohd Khairulnizam Ramlie Typesetting : Zarinatun Ilyani Abdul Rahman

EDITORIAL BOARD

Editor-in-Chief

ZARINATUN ILYANI ABDUL RAHMAN

Managing Editors NUR FATIMA WAHIDA MOHD NASIR SYAZA KAMARUDIN

Copy Editors ZARLINA MOHD ZAMARI DR NURAMIRA ANUAR NORLINDA ALANG DHAYAPARI PERUMAL WAN FARIDATUL AKMA WAN MOHD RASHIDI HALIMATUSSAADIAH IKSAN NURDIYANA MOHAMAD YUSOF ONG ELLY NURSHAHIRAH AZMAN MUHD SYAHIR ABDUL RANI DR PAUL GNANASELVAM A/L PAKIRNATHAN AMIRUL FARHAN AHMAD TARMIZI SYAREIN NAZRIQ MARIZAM SHAHRULNIZAM NAZIRUL MUBIN MOHD NOOR NOR NAJIHAH NORAFAND INTAN NOORAZLINA ABDUL RAHIM AZIE AZLINA AZMI NOORAILEEN IBRAHIM IZA FARADIBA MOHD PATEL

APPLICATION OF OVERNIGHT PLACES NEAR UITM

Muhamad Nurman Aqif Bin Muhamad Mazli¹, Nur Alissa Natasya Binti Azman², Nurul Afiesya Binti Abdul Razak³, Nur Laila Khadijah Binti Zulkifli⁴, Muhammad Haiqal Bin Mohammad Jaafar⁵,

1,2,3,4,5 Department of Built Environment Studies and Technology, College of Built Environment, Universiti Teknologi

MARA Cawangan Perak

2023168103@student.uitm.edu.my, 2023103715@student.uitm.edu.my, 202337461@student.uitm.edu.my, 2022856708@student.uitm.edu.my, 2023167933@student.uitm.edu.my

ABSTRACT

The "UiTM 360" app is specifically designed to assist UiTM tourists and families seeking accommodation near UiTM campuses. With a focus on convenience and accessibility, the app categorizes hotels based on their proximity to UiTM, ranging from 10 km to 50 km in distances. Targeting UiTM visitors and families, the app aims to provide a seamless experience by not only recommending nearby hotels but also highlighting essential facilities such as mosques, restaurants, laundromats, and convenience stores in the vicinity. By offering insights into the surrounding area, the app provides users with well-informed details about their hotel's location and nearby amenities, enhancing their overall stay and experience. The objective of this project is to ensure that users visiting from other places have an idea of where they would like to stay overnight. By achieving the full potential use of this application, it is stipulated to help other users as well.

Keyword: UiTM Hotel Finder, Accommodation Search, UiTM Tourists, Families, Nearby

1. INTRODUCTION

This application will provide hotel recommendations for hotels that are close to UiTM Perak State Branch by district. In addition, this application also informs the value given by visitors to each hotel. At the same time, this application informs the user about the estimated price required for each hotel.

The main feature provided in this application is the location of the selected hotel. In addition, this application also provides some places that are close to the selected hotel. For example, the distance between the hotel and the nearest mosque. This product will make it easier for all visitors, especially visitors who want to come to UiTM. This application will use special programming built into it to facilitate the work of the application system. At the end of using this application, users will definitely get an answer for the right hotel choice for them.

Furthermore, each user will be given a choice based on the desired UiTM area as the screen will also display the hotel view, which is covered by the star rating, price and location of the hotel.

2. OBJECTIVE

- I. To build an app that helps users visiting from other places to have an idea of where they would like to stay overnight.
- II. To give an idea of facilities that are located around the areas they choose.

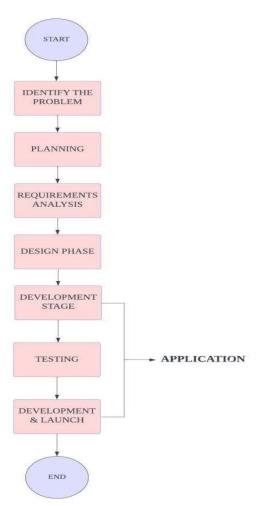
3. METHODOLOGY

The development of the "UiTM 360" app follows a structured approach to ensure efficiency and effectiveness in meeting its objectives. Here is an overview of the methodology employed:

- I. Requirement Analysis:
 - a. Conduct a thorough analysis of user requirements, focusing on the needs and preferences of UiTM tourists and families.
 - b. Identify key features and functionalities essential for the app's success, including hotel categorization, proximity-based recommendations, and information about nearby facilities.
- II. Design Phase:
 - a. Develop a user-centric design, prioritizing simplicity, intuitiveness, and aesthetics to enhance user experience.
 - b. Create wireframes and prototypes to visualize the app's layout, navigation flow, and screen interactions.
 - c. Design the database schema to efficiently store and retrieve hotel information, user preferences, and feedback data.
- III. Development Stage:
 - a. Select appropriate technologies and frameworks for app development, considering factors such as platform compatibility, scalability, and performance.
 - b. Implement frontend and backend components, adhering to industry best practices and coding standards.
 - c. Integrate third-party APIs and services for functionalities like geolocation, mapping, and user reviews.
 - d. We choose Android Studio to build the application.
- IV. Testing and Quality Assurance:
 - a. Conduct rigorous testing to identify and rectify any bugs, errors, or inconsistencies in the app's functionality.
 - b. Perform usability testing to assess user interaction and navigation within the app.
 - c. Validate the accuracy of hotel recommendations, proximity calculations, and facility information.
- V. Deployment and Launch:
 - a. Prepare the app for deployment on major app stores, ensuring compliance with platform-specific guidelines and requirements.
 - b. Plan a strategic marketing and promotion strategy to increase app visibility and attract target users.
 - c. Monitor app performance post-launch, gathering feedback from users to identify areas for improvement and optimization.

By following this methodology, the "UiTM 360" app aims to deliver a seamless and invaluable experience to users, empowering them to make informed decisions about their accommodation options near UiTM campuses.

4. FLOWCHART



FLOWCHART

Figure 1 Flowchart of the methodology

5. EXPECTED OUTCOMES



OPTION TO CHOOSE UITM BRANCH

Users are given the option to choose the location of any selected UiTM campus that they want

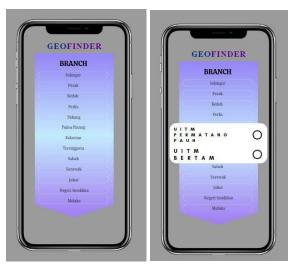


Figure 2 Expected outcomes

6. RADIUS OPTION TO CHOOSE

Users are given the option to choose the radius that they want from any selected UiTM campus

GEOFINDE	R
10 KM	
20 K M	
30 K M	

Figure 3 Radius option to choose

7. HOTEL SELECTION

нот	EL SEARC	н
â		
	вте ноте.	
<u>A</u>	HINHOTEL	
	2 A 2 H O T E L	C 1 1 C 8

Users are given the option to choose the hotel of their choice

Figure 4 Hotel selection

After the hotel selection is complete, the picture of the hotel will appear on the screen. It will start with important information about the hotel such as range, price and ratings of the hotel. Besides that, it will also state the distance between user selection hotels from the facilities that are nearest to the hotel. For example, mosques, restaurants, laundromats, and convenience stores.

8. CONCLUSION

In conclusion, the "UiTM 360" app emerges as a valuable gadget for UiTM visitors and families, by streamlining the process of finding suitable accommodation near UiTM campuses. Through its user-friendly interface and comprehensive features, the app caters to the specific needs of travelers, offering not only hotel recommendations but also essential information about nearby facilities and amenities. By focusing on convenience and accessibility, the app aims to enhance the overall visitor experience, empowering users to make informed decisions about their stay. As technology continues to play a pivotal role in travel planning, the "UiTM 360" app stands out as a testament to innovation in catering to the needs of modern travelers. Moving forward, the continued refinement and enhancement of this application will ensure its effectiveness in meeting the evolving needs of UiTM visitors and beyond.

REFERENCES

Universiti Teknologi MARA Official Website (2020). Retrieved from: https://www.UiTM.edu.my Build an Apps Android Studio Flamingo (2023). *Creating first application in android studio in 2023 – for beginners*. Retrieved from: https://youtu.be/gNO8PwI2arI?si=7SGnJVsks-Hr_dTt Pejabat Perpustakaan Librarian Office

Universiti Teknologi MARA Cawangan Perak Kampus Seri Iskandar 32610 Bandar Baru Seri Iskandar, Perak Darul Ridzuan, MALAYSIA Tel: (+605) 374 2093/2453 Faks: (+605) 374 2299





Prof. Madya Dr. Nur Hisham Ibrahim Rektor Universiti Teknologi MARA Cawangan Perak

Tuan,

PERMOHONAN KELULUSAN MEMUAT NAIK PENERBITAN UITM CAWANGAN PERAK MELALUI REPOSITORI INSTITUSI UITM (IR)

Perkara di atas adalah dirujuk.

2. Adalah dimaklumkan bahawa pihak kami ingin memohon kelulusan tuan untuk mengimbas (*digitize*) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.

3. Tujuan permohonan ini adalah bagi membolehkan akses yang lebih meluas oleh pengguna perpustakaan terhadap semua maklumat yang terkandung di dalam penerbitan melalui laman Web PTAR UiTM Cawangan Perak.

Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

"BERKHIDMAT UNTUK NEGARA"

Saya yang menjalankan amanah,

Setuju.

PROF. MADYA DR. NUR HISHAM IBRAHIM REKTOR UNIVERSITI TEKNOLOGI MARA CAWANGAN PERAK KAMPUS SERI ISKANDAR

SITI BASRIYAH SHAIK BAHARUDIN Timbalah Ketua Pustakawan

nar