

## THE 13<sup>TH</sup> 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

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#### **APPLICATION OF OVERNIGHT PLACES NEAR UITM**

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#### 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.

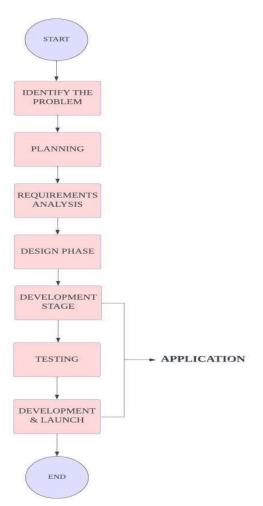
#### 3. METHODOLOGY

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

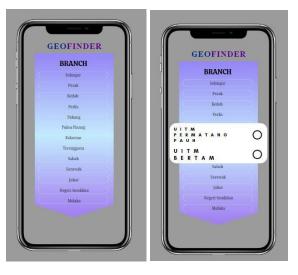


Figure 2 Expected outcomes

#### 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

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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.

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