

Research Article

# Snap-It Lokal

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**Abstract:** This paper presents the development of Snap-it Lokal, a travel application designed to provide comprehensive assistance to travellers, promote tourism attractions in Sabah, Malaysia, and drive technological advancements in the local tourism industry. Snap-it Lokal integrates GPS functionality, curated recommendations for dining and attractions, and seamless access to local tour operators within a single platform. The primary objective of this project is to enhance convenience and streamline travellers' experiences, while simultaneously showcasing the diverse and captivating tourism offerings in Sabah. By leveraging cutting-edge technology, Snap-it Lokal aims to contribute to the growth and development of the tourism industry by fostering a seamless and immersive travel experience for visitors to Sabah, Malaysia.

**Keywords:** travel application; GPS; artificial intelligence.



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## 1. INTRODUCTION

A traveller is a person who participates in the act of moving between different geographic locations for various purposes, such as education, leisure, and business. These actions collectively fall under the term travel, encompassing the complete range of their journeys from one place to another. (Dilek & Dilek, 2018). One factor that can influence travellers' decisions to travel is convenience (Singleton, 2013). Convenience can be achieved through various means, and one of them is the availability of travel applications. These applications can simplify travellers' experiences by storing necessary data, providing relevant information, and suggesting suitable destinations (Wu et al., 2022). Some of the most famous travel applications are for example, Tripadvisor and Traveloka. For TripAdvisor, it provides information such as best ratings for accommodations, trips and restaurants. Meanwhile, Traveloka is a Southeast Asian travel application, that able users to book accommodations. Each of these applications provides their own benefits to users.

Nevertheless, there is currently a scarcity of mobile apps that encompass all the essential features within a single application. These features include GPS functionality, restaurant and accommodation recommendations, as well as comprehensive contact details for local tour operators. To address this issue, a solution called Snap-it Lokal is being developed. Snap-it Lokal is an innovative travel application aimed at aiding travellers by offering precise GPS coordinates, suggesting nearby

points of interest, dining establishments, and facilitating easy access to tour operators in the vicinity. Users only need to allow location and camera access in their smartphones, to get the accurate coordinates. Other than nearby restaurants and attractions, by using Snap-it Lokal, users would be able to know what do's and don'ts or any general information regarding on the attraction. To be more specific, the following are the objectives of why this project is developed.

- i. To assist travellers in way-finding during their travel journeys
- ii. To promote and showcase the tourism attractions in Sabah, Malaysia
- iii. To enhance the use of technology in the tourism industry of Sabah, Malaysia

## **2. METHOD & MATERIAL**

### *2.1 Materials*

Snap-it Lokal's materials are divided into three which are design, programming language and the hardware that will be used to create the application. Each of these materials plays a major role in making the application a success.

#### *2.1.1 Design*

The application's interface will be designed using Canva, a user-friendly design platform known for its simplicity and versatility. Canva provides a vast collection of design ideas and templates, enabling the creation of visually appealing and captivating designs. By utilizing Canva's capabilities, we will enhance the application's interface, ensuring a polished and attractive appearance that resonates with users.

#### *2.1.2 Programming language*

Snap-it Lokal will be using Python as its' programming language. According to The Productive Advantage of the Python Programming Language, published by Sphere Software (2019), Python is one of the most used programming language. This is due to its' specialized features, along with its easy setup and natural, succinct syntax, empower speedy delivery and maintenance for your company's continued convenience.

By using Python, Snap-it Lokal will be programmed to gather various information from specific websites such Sabah Tourism Board, Malaysia Tourism Board or any Destination Management Organization (DMO) by using an AI technique called web scraping. This technique will be used to scrape the destination management organization's website or other relevant sources for information on attractions, ratings, reviews, and other details. According to Khder (2021), the benefits of using the web scraping technique includes increased efficiency, consistency, and ease compared to manual performance of similar tasks. The technique requires minimal maintenance and has low running costs, making it a cost-effective solution. Furthermore, web scraping enables businesses to enhance their online reputation and effectively target their advertising efforts, providing a valuable opportunity to reach their customers with personalized and relevant advertising content.

#### *2.1.3 Hardware*

An Asus-model laptop will be used to develop Snap-it Lokal. The laptop is equipped with Intel Core i7 and Memory 128 8GB of internal RAM. The operating system is Windows 10 (64 bits).

## 2.2 Method

The process of developing this mobile application will be divided into which first is the concept development and secondly, the interaction and visual design.

### 2.2.1 Concept Development

During the concept development phase, various ideas and examples of similar applications that share characteristics with Snap-it Lokal will be presented. Two reference examples include GPS Map Camera and TripAdvisor. GPS Map Camera combines GPS and camera features, allowing users to capture photos with location information. This serves as an example of how Snap-it Lokal can integrate GPS functionality. TripAdvisor, a well-known travel application, provides recommendations for accommodations, restaurants, and attractions. It inspires Snap-it Lokal's recommendation feature, offering personalized suggestions and detailed information. By studying these examples, valuable insights into successful feature implementation can be gained.

Python and web scraping were selected for the development process based on their benefits and suitability. Python is a versatile and user-friendly programming language with a robust ecosystem for web application development. Web scraping enables the extraction of relevant data from websites, ensuring accurate and up-to-date information for Snap-it Lokal. These choices were made to enhance the project's efficiency, practicality, and functionality.

### 2.2.2 Interaction and Visual design

During the second stage, significant attention was given to developing an interactive and visually appealing design for Snap-it Lokal. This involved creating a user-friendly interface that is both engaging and easy to navigate.

In terms of interactive design, the focus was on ensuring users can effortlessly move through the application and perform desired actions. Clear buttons, menus, and gestures were incorporated to facilitate seamless exploration of different features. The aim was to provide a smooth flow within the application, enabling users to accomplish tasks without confusion or difficulty. Visual design played a crucial role as well. Careful consideration was given to selecting appealing colors, fonts, and images that align with the application's style and aesthetics. The layout of information was carefully organized to promote clarity and highlight essential elements. The use of visually engaging elements like icons and images aimed to enhance the overall visual appeal and user experience. Examples for this application can be referred in Figure 2.1.

By emphasizing both interactive and visual design, the objective was to create a user-friendly interface that is visually captivating. This, in turn, enhances the overall user experience of Snap-it Lokal, making it enjoyable and easy for users to navigate and engage with the application.



Figure 2.1 Snap-it Lokal application

### 3. FINDINGS

The research findings directly support the objectives of Snap-it Lokal. The study reveals a clear demand for assisting travellers throughout their journeys, aligning with Snap-it Lokal's goal of providing users with recommendations, and essential information. Additionally, choosing Snap-it Lokal as a travel application can effectively aid travellers in navigating their holiday, alleviating travel anxiety and enhancing convenience.

The study emphasizes the importance of effectively promoting and showcasing the diverse tourism attractions in Sabah, Malaysia, thereby providing strong validation for Snap-it Lokal's objective of enhancing awareness, visibility, and facilitating seamless way-finding to these attractions. Furthermore, the study highlights the significance of utilizing technology in Sabah's tourism industry, further strengthening Snap-it Lokal's objective of enhancing the travel experience through technological advancements.

### 4. CONCLUSION

In conclusion, the study highlights the need for helping travellers, promoting tourism attractions, and leveraging technology in the tourism industry. By addressing these areas, Snap-it Lokal can effectively assist travellers, raise awareness of Sabah's attractions, and enhance the overall travel experience through innovative technology. With its comprehensive approach, Snap-it Lokal is poised to make a significant impact in the travel landscape by facilitating seamless and memorable journeys for users.

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