UNIVERSITI TEKNOLOGI MARA

INTERACTIVE MAP MOBILE APPLICATION OF SHAH ALAM NATIONAL BOTANICAL PARK (SHAH ALAM NATIONAL BOTANICAL PARK IMAP)

SYED AHMAD AFIQ BIN SYED SOFI

BACHELOR OF INFORMATION TECHNOLOGY (Hons.)

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ABSTRACT

Interactive map is a digital map that apply interactive elements which includes navigating and zooming to assist people in their daily lives like Google Maps and Waze. Moreover, the use of the interactive map also implemented in tourism industry such as botanical gardens; a place where variety of plants gathered for research and educational purpose, by providing source of information and the picture of attraction. One of the well-known botanical gardens in Malaysia is Shah Alam National Botanical Park. However, the use of interactive map is new in Malaysia especially in Shah Alam National Botanical Park. Due to that, visitors lack necessary information, lacking tools and platform to share their experience and tend to wonder around or possibly get lost since the park area is too big. Therefore, the aim of this project is to create an android mobile application to provide general information, allow user to share their experience and navigation to the attraction for Shah Alam National Botanical Park. The objective of this project is to design and develop Shah Alam National Botanical Park iMap mobile application. The Mobile Application Development Lifecycle (MADLC) approach was used in this project to complete the task. The features of this application include the map of the botanical park, information related to the park, and journal function to allow the user to record their experience. The limitation for this application is also mentioned in the final chapter in this report. In a nutshell, Shah Alam National Botanical Park iMap can help the public users and the visitors of Shah Alam National Botanical Park by providing the information of available attractions, general information and attraction's navigation. The future recommendation of this application is mentioned in the final chapter which can be apply for future development of this application.

Keywords: Interactive Map, Botanical Garden, Navigation, Picture of attraction, Global Positioning System (GPS), Mobile Application Development Lifecycle (MADLC)

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CHAPTER ONE

INTRODUCTION

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This chapter focuses on the background of the project. In addition, it also offers specifics of this project's issue statement, objectives, aim, scope and project significant.

1.1 Project Background

Interactive map is a visual representation that allows user interaction via scanning around, zoom in and zoom out, classifying specific features and querying underlying data such as by topic or a specific indicator (e.g., socioeconomic status) (Macfarlan, 2014). It utilizes GIS (Global Information System) to show pinpoint data such as location of town or farm on a map. In comparison to static maps that only show static data, interactive maps have the advantage of features designed to enhance display of large volumes of complex data such as viewing routes or images (Macfarlan, 2014).

Interactive map is widely use by people in their daily lives. For example, the use of Google Maps or Waze for navigation. Hotel.com also uses interactive map to display the hotel location on the map. Waze uses crowd-sourced driver data to alert drivers regarding potential road hazards, deliver accurate ETAs and optimize routes (Latta, 2018). Another example of interactive map is Norfolk Botanic Garden mobile application to guide users throughout the botanical garden which can help them avoid losing their way. It is easier to get lost as botanical gardens such as Longwood Gardens and Hawaii Tropical Botanical Garden contain several sections such as research institute, museum collection, herbarium, library, conservation agency, educational academy, theme park, cafeteria, and gift shop (Willoughby, 2019).