Universiti Teknologi MARA

Travelook: Mobile Application to Assist Tourist by using Location-Based Service (LBS)

Muhammad Aizat bin Ibrahim

Thesis submitted in fulfilment of the requirements for Bachelor of Computer Science (Hons.) Netcentric Computing Faculty of Computer and Mathematical Sciences

January 2019
STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

....................................
MUHAMMAD AIZAT BIN IBRAHIM
2016317035

DECEMBER 21, 2018
ABSTRACT

Travel is a process of searching and identifying the destination including attractions places, restaurants, and accommodation during vacations. One of the emerging technology that available is location-based services, it is focus on providing information based on user’s position that has been located by Global Positioning System (GPS). Due to the growing number of devices, mobile application has been a major part for most of human being in this world, to make their lives easier. To create a mobile application by using location based services for tourists becomes a critical and need a lot of research. According to the survey that has been conducted, there are several problems that they usually faced such as they tend to overlooked some interesting places, lost during their vacation and felt cumbersome for accessing many sources to gather information. The principal aim of this research was to provide a mobile application to the tourist during their vacation. Moreover, user able to find a specific places based on the user location and get the places details. Other than that, user also able to calculate their budget for upcoming vacation in order to avoid from overspent. This application has been evaluated on functionality, usability and performance in order to make sure the application able to meet user requirement and expectation. For the future work, since the target user for this application is tourist, it can be a social media platform for tourist and share their vacation with friends. With the development of this application, more or less can help tourist during their vacation by maximizing the places that they can visit and keep their budget on track.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPERVISOR APPROVAL</td>
<td>i</td>
</tr>
<tr>
<td>STUDENT DECLARATION</td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>iii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iv</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xii</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xiii</td>
</tr>
</tbody>
</table>

## CHAPTER ONE: INTRODUCTION

1.1. Project Background                           1
1.2. Problem Statement                            4
1.3. Project Objective                            5
1.4. Scope of the Project                         5
    1.4.1. User                                     5
    1.4.2. Device Supported                         6
    1.4.3. Functionality                            6
1.5. Significant of the Project                   7
CHAPTER TWO: LITERATURE REVIEW

2.1. Tourism 8
2.2. Mobile Application 9
   2.2.1. Native 9
   2.2.2. Web Apps 10
   2.2.3. Hybrid 10
2.3. Global Positioning Systems 11
   2.3.1. Space Segment 12
   2.3.2. Control Segment 12
   2.3.3. User Segment 13
2.4. Location Based Services 14
   2.4.1. Geo-Location 15
2.5. Application Programming Interface 16
   2.5.1. Nearby Places 17
   2.5.2. Weather Forecast 17
2.6. Related Work 18
   2.6.1. Triowolf 18
   2.6.2. Foursquare 19
   2.6.3. Trip 20
   2.6.4. Comparison 22
2.7. Conclusion 23

CHAPTER THREE: METHODOLOGY

3.1. Waterfall Methodology 24
3.2. Analysis 26