MALAYSIA VACATIONS PLANNER (MVP)

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MALAYSIA VACATIONS PLANNER (MVP)

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This report is submitted in partial fulfillment of the requirements for the
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I hereby declare that this project report entitled

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ABSTRACT

Today, the growth of technology has lead into the development of many aspect, especially in tourism. Mobile technology is becoming vital for tourism business. Travelers are using their smartphone's Internet capabilities to help them gather holiday information and book tickets. However, planning a trip by your own is not easy. One needs to do a lot of research on particular travel area before they can plan their trip. This may use up a lot of time and cause burden for those who have no experience in planning a trip. As year 2014 is the nation biggest and grandest tourism celebration with Malaysia Truly Asia's, there is a need to develop a mobile application that will assist user to plan vacation in Malaysia. Basically, Malaysia Vacations Planner (MVP) is an easy-to-use, mobile application that allows user to plan their vacation in Malaysia. User just need to key in the visiting location and days, and the application will suggest a feasible itinerary. The application will suggest to user on which places to visit, duration per places and transport mode. The aim of this project is to assist tourist to plan their vacation and to ensure tourist could maximize the value of time spent in Malaysia with the optimal vacation plan. The agile software development methodology has been selected as the software development reference to this project. This methodology is an iterative, team-based approach to development and it emphasizes the rapid delivery of an application in complete functional components. It is a good model for environments that encounters changes. With MVP, user experience can be improved as the system will suggest the attraction places to visit once user select the travel area and enter the number of visiting days. This application will help user to save time in researching for attraction places in a state.

ABSTRAK

Kepesatan kemajuan teknologi maklumat pada hari ini telah membawa pembangunan yang drastik dalam bidang pelancongan. Teknologi mudah alih menjadi semakin penting dalam perniagaan pelancongan. Pelancong kini menggunakan kemudahan Internet yang terdapat dalam telefon pintar mereka untuk mengumpul maklumat bercuti dan menempah tiket. Namun, merancang sesuatu percutian bukanlah tugas yang mudah. Sebelum merancang percutian, pelancong perlu membuat banyak penyelidikan tentang kawasan pelancongan tertentu. Hal ini mungkin menyebabkan pembaziran masa berlaku dan secara tidak langsung membebankan pelancong yang tidak pernah merancang percutian. Tahun 2014 merupakan sambutan yang termegah bagi sektor pelancongan Malaysia. Justeru, pembangunan aplikasi mudah alih amat diperlukan untuk membantu pelancong merancang percutian di Malaysia. Secara umumnya, Malaysia Vacations Planner (MVP) merupakan satu aplikasi mudah alih yang membolehkan pengguna untuk merancang percutian di Malaysia. Pengguna hanya perlu pilih tempat destinasi, masa yang hendak diluangkan serta jenis percutian, dan aplikasi akan mencadangkan jadual percutian yang bersesuaian dengan pilihan pengguna. Aplikasi tersebut akan mencadangkan kepada pengguna tentang tempat untuk melawat, tempoh melawat bagi setiap tempat dan juga mod pengangkutan. Tujuan projek ini adalah untuk membantu pelancong merancang percutian dan juga memastikan pelancong boleh memaksimumkan nilai masa yang diluangkan di Malaysia. Metodologi pembangunan perisian tangkas telah dipilih sebagai perisian pembangunan untuk projek ini. Kaedah ini merupakan satu pendekatan lelaran yang berasaskan kerja berpasukan bagi tujuan pembangunan. Metodologi ini merupakan model yang baik untuk persekitaran yang terdedah kepada perubahan. Dengan MVP, pengguna boleh menjimatkan masa mereka tanpa perlunya membuat penyelidikan tentang tempat tarikan dalam sebuah negeri.

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DIAGRAM	TITLE	PAGE

LIST OF ABBREVIATIONS

ADT	-	Android Development Tools
ERD	-	Entity Relationship Diagram
GIS	-	Geographic Information System
iOS	-	iPhone Operating System
MVC	-	Model-View-Controller
MVP	-	Malaysia Vacations Planner
N/A	-	Not Applicable
PSiS	-	Personalized Sightseeing Planning System
POI	-	Point of Interest
SDLC	-	Software Development Life Cycle
SPETA	-	Social pervasive e-Tourism advisor
TRIP	-	Travel & Recreational Itinerary Planner

CHAPTER I

INTRODUCTION

1.1 Project Background

Today, the growth of technology has lead into the development of many aspects, especially in tourism. Mobile technology is becoming vital for tourism business. Travelers are now using their smartphone's Internet capabilities to help them gather holiday information and book tickets. However, planning a trip by your own is not easy. One needs to do a lot of research on particular travel area before they can plan their trip. This may use up a lot of time and cause burden for those who have no experience in planning a trip. As year 2014 is the nation's biggest and grandest tourism celebration with Malaysia Truly Asia's, there is a need to develop a mobile application that will assist user to plan their vacation in Malaysia.

Malaysia Vacations Planner (MVP) is an easy-to-use, mobile application that allows user to plan their vacation in Malaysia. User just need to key in the visit location and days, and the application will suggest a feasible itinerary. The application will suggest to user on which places to visit, duration per places and transport mode. The itinerary will be different based on the days the user key in. Compared to current existing application, MVP will be able to suggest itinerary within a state, so that user will not miss out any interesting attraction while they are visiting that particular state.

Besides that, all information provided in MVP is clear and concise. User will be able to obtain accurate and detailed information about the places that they are going to visit. For time-being, MVP will only cover the famous tourist attraction such as Penang Island. With the use of MVP, user is able to plan their vacation well and maximize the value of time spent in visiting places in Malaysia.

1.2   Problem statements

Travelling is getting popular among people. However, it is not easy to plan a trip as one must be fully prepared with research and planning process for each travel. It may cause burden for those who have no experience in planning a trip. Furthermore, the information obtained from Internet may not be sufficient enough to plan a trip. This eventually will cause a lot of problem for those who never visit Malaysia before and they might easily miss out great places in Malaysia. In addition, there is still lack of applications that ease the user in planning their trip according to states in Malaysia.

1.3   Objective

The objectives of this project are:

i)   To ensure tourist can maximize the value of time spent in Malaysia with the optimal vacation plan

MVP provides information such as places to visit and duration spend in each state. This information enables tourist to spend their time wisely and visit all interesting places in Malaysia.

ii) To assist tourist to plan their vacation in Malaysia

MVP is able to ease tourist's job by planning their vacation according to the travel area and days spend in that particular location that they have selected. With MVP, tourist will not miss out any interesting places in Malaysia as all the interesting places are categorized according to state.

iii) To save tourist's time on researching and planning a trip

Planning a trip by yourself is not an easy job. By using MVP, it will suggest a feasible itinerary once tourist has selected the travel area and days spend in that particular location. MVP helps tourist to save their time on researching interesting places in Malaysia.

1.4 Scope

User scope for this application is wide. There is no specific age or any restriction on the user. As long as the user's goal is to plan their vacation well, any user can use this application.

1.5 Project significance

With the optimal vacation plan that is suggested by MVP, tourists are able to maximize the value of time spent in Malaysia. User experience is also improved through MVP as they can save up a lot of time from planning their own trip. Besides that, MVP is portable and it is believed that MVP can enhance tourist's experience while they are exploring Malaysia.

1.6   Expected Output

At the end of this development, this project will produce a tool, which is MVP mobile application that acts as a portable plan advisor to assist tourist to spend their time in Malaysia. Besides that, MVP also act as an information provider, whereby the application provides user with detailed information such as duration per places and transport mode on the attraction places in Malaysia. With MVP, user experience can be improved as the system will suggest the attraction places to visit once user has selected the travel area and the number of visiting days. With the use of MVP, it is believed that user will be able to plan a successful vacation and experience a memorable trip in Malaysia.

1.7   Conclusion

This chapter focuses on the project background, problems that are currently faced by user, objectives and scope of this project. The need to develop this application is also being emphasized in this chapter.

The next chapter will focus more on the literature review and the methodology used in this project.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1   Introduction

This section discusses the literature review and methodology used for this project. The field of this study is tourism. Generally, tourism covers a wide range of areas. However, this project will only focus on the trip planning. There are total seven research projects and six existing systems were chosen for the literature study. Comparisons are made to see the strengths and weaknesses of each existing research project.

The methodology section describes on how Malaysia Vacations Planner (MVP) adopts the agile methodology and it also explains about the reasons for choosing agile methodology. Besides that, the project requirements and project schedule are also included in this chapter.

2.2   Fact and findings

This section discusses the past researches that have been done by other people.

2.2.1 Domain

As the growth of technology has lead into the development of tourism, mobile technology has become vital for tourism business. Büyüközkan and Ergün (2011) stated that electronic tourism is an efficient marketing channel for the travel agencies. They explained that intelligent systems can help the online travel agencies to develop special services.

Nowadays, smartphones can support a variety of information services, whereby user can access to it anytime and anywhere. It is believed that smartphones are highly potential in influencing tourist's experience. In the past research, Wang, Park and Fesenmaier (2012) revealed that smartphones can affect tourists' behaviour and emotional states by addressing a wide range of information needs. They explained that the instant information support of smartphones enable tourists to solve problems in an effective way and also allows them to share their experiences.

With the rapid development of technology, advanced digital application was introduced to tourist. Bongiorno (2012) described that a portable device for planning a vacation or business travel itinerary starts with customizable itinerary templates that used a stored database of destination information, including a country's regions, tourist sites, and other sites of interest location. With the Internet's capability, tourist can also obtained reservation-specific information for air-travel, hotels, and events. He explained that the software is able to assist tourist by providing cueing of itinerary segments, together with directions.

Vansteenwegen, Souffriau, Berghe and Oudheusden (2011) presented the City Trip Planner. They explained that this tourist expert system allows user to plan routes for five cities in Belgium. In order to predict personal interests, the system will consider user's trip constraints and interests before matching to the system database. Furthermore, Vansteenwegen and others also suggested that a real-time planning need to consider about user's personal constraints and the opening hours.

Anacleto, Figueiredo, Almeida and Novais (2013) presented PSiS Mobile, which is a mobile recommendation and planning application to support tourist during vacation. They described that the application provides recommendations about the point of interest to visit based on tourist preferences and suggests a visit planning which can be dynamically adapted based on current user and sight context. Furthermore, the application also records the tourist moves and tasks to help them

remember their trip. However, Anacleto and others also mentioned that it is uncomfortable for the user to be always looking at the small mobile device screen. Besides that, the battery power may run out before tourist finished their tour.

Overall, there are several works related to the project study. Yet, most of these works are web-based and they focus on recommendations about the point of interest to visit based on tourist preferences. However, maximizing the value of time spent in Malaysia is the most important requirement to be concerned in this project.

Table 1 records all the results after comparison has done on the selected research projects.

Table 1: Comparing Selected Research Projects

Author	Year	Tool/Project Name	Strength	Weakness
Mohd Shaznaz Shaharis	2009	Travel & Recreational Itinerary Planner (TRIP)	❖ Enable tourist to download personalized travel itinerary	❖ Minimum fee of 5 USD ❖ Not portable as it is a web portal ❖ Need Internet connection
Angel Garcia-Crespo, Javier Chamizo, Ismael Rivera, Myriam Mencke, Ricardo Colomo-Palacios, Juan Miguel Gomez-Berbis	2009	Social pervasive e-Tourism advisor (SPETA)	❖ Use geographic information system (GIS) map ❖ Portable ❖ Use social networks to extract user's information ❖ Record user's travel history ❖ Provide real-time location, weather forecast and time	❖ Need Internet connection

Author	Year	Tool/Project Name	Strength	Weakness
Syed Aminuddin Bin Syed Salleh	2009	Trip Planning System	❖ Provide route alternatives ❖ Provide online information such as traveling promotion ❖ Use geographic information system (GIS) map	❖ Not portable as it is web-based ❖ Need Internet connection
Pieter Vansteenwegen, Wouter Souffriau, Greet Vanden Berghe, Dirk Van Oudheusden	2011	City Trip Planner	❖ Consider tourist's trip constraints and interests ❖ Plan city visit of multiple days ❖ Can schedule lunch breaks ❖ Integrate the selection of Point of Interest (POI) and the routing between them	❖ Not portable as it is web-based ❖ Limited city selection
Ho Poi Yee	2011	E-Tour Guide and Itinerary Planner for Malacca	❖ Consider tourist's location preferences and time constraint ❖ Provide interactive map to guide tourist ❖ Provide news and events of Malacca ❖ Provide currency converter ❖ Provide forecast weather report	❖ Highly dependent on jQuery and CSS to provide interactive map

Author	Year	Tool/Project Name	Strength	Weakness
Wan-Shiou Yang, San-Yih Hwang	2013	iTravel	❖ Provide on-tour recommendations in a mobile with a peer-to-peer environment ❖ Has RF-communication that allows peers that are geographically close to exchange information ❖ Portable	❖ Need Internet connection
Ricardo Anacleto, Lino Figueiredo, Ana Almeida, Paulo Novais	2013	Personalized Sightseeing Planning System (PSiS) Mobile	❖ Consider tourist preferences and sight context ❖ Record tourist's move and tasks ❖ Connects to the WorldWeatherOnline web service ❖ Uses architectonic identification tag to indicate the point of interest	❖ Intended to support a tourist after he plan a trip for his vacations on PSiS Web portal. ❖ No access to new point of interest. ❖ GPS consume high battery power ❖ Need Internet connection

2.2.2 Existing systems

Table 2: Comparison among the existing systems

System / Features	Malaysia Trip Planner	TripIt	TouristEye	TripCase	TripAdvisor	WorldMate
Access itineraries anytime (even offline)		✓	✓		✓	
Latest events information during trip	✓					
Sync trip plans with Google Calendar/ Outlook		✓				✓
Itinerary manager	✓	✓	✓	✓	✓	✓
Get maps	✓	✓	✓	✓	✓	✓
Share your trip plans via email or social	✓	✓		✓	✓	✓
Weather forecast		✓		✓		✓
Currency converter						✓
Hotel booking				✓	✓	✓
History				✓		✓