CHAPTER 1. INTRODUCTION

1.1 Background

Indonesia is one of the largest country in the world and was rated as the second in vastness for Asia, and the first in vastness for Southeast Asia. Indonesia also has the highest number of islands, spread from Sabang to Merauke and has many beautiful natural sights, which are frequently visited by local and foreign tourists. The island of Bali, Lombok, Borobudur, Raja Ampat in Papua, and many more have been well-know by other countries for its uniqueness. The tourism site types can be varied too, such as: nature tourism, marine tourism, water tourism, educational tourism, culinary tourism, historical tourism, health tourism, and tourist art.

With the development of national economy and technology, tourism has become more and more people's choice during the holiday. Tourism can become one of the alternative for Indonesia to expanding and equalizing business opportunities and employment opportunities, encouraging regional development, and increase national income. But the problem found in the activities related to vacation or tourism is the difficulty of obtaining accurate and efficient information for tourists, but along with current technology developments, tourists can find the information they need via the internet or mobile application. The importance of mobile application has remarkably increased in tourism over the last year, because it has the ability to support the tourist during all trip phases, in particular move and within the destination. The tourist is getting more demanding concerning available to relevant information at anytime and anywhere. It's also the other reason why mobile application really important, because mobile application enable access to information more or less anytime and anywhere.

In the role as a personal assistant, mobile application can easily take into account user preferences and even user location in order to filter relevant information and avoid information in the on-trip phase. Based on these circumstances, mobile applications already play a significant role in tourism marketing and information distribution. With the proliferation of more powerful and especially GPS-enabled mobile devices, mobile applications will play an increasingly important role in tourism. The mobile tourist guide aims to provide a comprehensive up-to-date information and assistance in travel-related decision making, especially during the trip to enrich

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tourist experiences.

This paper will describe an Android-based Application for helping the tourist that want to visit Indonesia. This application is expected to help the tourists to get information quickly and easily, so they can get the information through the Android application via smartphones at home or anywhere as long as their mobile phone connected with the internet. This application also has a purpose to help the users to get the exact position of the recommended location using Google Maps technology.

1.2 Related Works

Tourism is a worldwide industry which involves the propagation of large amounts of information. As in most industries, Information Technology has penetrated the field of tourism for the manipulation such information. The convergence of information technology and communication has been one of the most influential factors in tourism that change travelers' behavior [8]. With the rapid growth of mobile device user base raises a demand for using such devices for accessing Internet resources. The use of mobile devices as means for supporting tourist and cultural activities is not an entirely new idea. In fact, mobile audio guides are being used in museum environment for years [9].

In the past few years, many tour applications have been made and developed by developer. Every application that has been developed has great features that can help the users. One of those application, such as tour guide application for museum using context-aware or tour guide application using location-based technology. In 2003, Simcock, T., Hillenbrand, S.P., and Bruce, T.H. from the University of South Australia developed a location-based tourist guide application using GPS navigation technology for outdoor environment. The application also focusing in user's context, such as buildings in view, attractions and equipment nearby.

1.3 Problem Identification

- 1. How to develop an Android mobile application to help the tourists that visit Indonesia?
- 2. How to implement the maps technology in TravBan application?
- 3. How can TravBan application help tourists when visiting Indonesia?
- 4. How to input, update, and delete information related to the cities in Indonesia?

1.4 Purpose of Study

The purpose of this application development are:

- 1. To develop the Android-based mobile application related to tourism
- 2. To develop the application that can use maps technology for a better traveling experience
- 3. To develop the application that can give information needed before visiting Indonesia

1.5 Limitation of the Problem

- 1. The application is only available on smartphones with Android OS version 5.0 (Lollipop) and above
- 2. The application requires an internet connection
- 3. The users are only able to see and search the information, users can not upload the information they know

1.6 Benefit of the Study

The benefits of designing this application are listed as follows:

- 1. This application can help users to find best location to visit in Indonesia
- 2. This application can show users the information that they should know before visiting Indonesia
- This application can give users some recommendation and information about the things that you can not do when visiting Indonesia's cities

1.7 <u>Research Methodology</u>

1.7.1 Data Collection Method

The method used to get the data is by using many resources such as books, journals, and articles related to mobile programming using Android, as well as the journals related to Indonesia's province to get information related to the provinces or cities in Indonesia. Beside of that, contacting the local people from the Indonesia's province to get more specific information.

1.7.2 Software Design Methodology

In this research, the author implemented Software Development Life Cycle (SDLC) to

make the software development processes simple and systematic. Software Development Life Cycle (SDLC) model is a conceptual framework describing all activities in a software development project from planning to maintenance. This process is associated with several models, each including a variety of tasks and activities.

1.8 Writing Structure

The systematic writing is made to facilitate the writing of the final project report. Thus, the systematic writing of this thesis id divided into sic chapters, with the explanation for each chapter, as follows:

CHAPTER 1 INTRODUCTION

This chapter discusses the background of the study, problem identification, purposes, limitations, benefits of the study, and research methodology of this study.

CHAPTER 2 THEORITICAL BASIS

This chapter discusses the basic theories that support and relate to this study.

CHAPTER 3 ANALYSIS AND DESIGN

This chapter discusses the analysis and design of the system. Analysis of the current system, analysis of problem, implementation of the methodology, problem solving with analyze thee system needs and conducting the system design to generate a new system.

CHAPTER 4 IMPLEMENTATION AND TESTING

This chapter discusses the result of the analysis and design into code to build a working application, and testing to find out whether the application is working or still needs improvements.

CHAPTER 5 CONCLUSION

This chapter discuss the conclusion of this thesis and suggestions for further research.