CHAPTER 1

INTRODUCTION

1.1 Background

Nowadays, the number of internet users has rapidly growing. It is reported that there are about 2 billion people who subscribe to Internet by the beginning of year 2011 [1]. In Indonesia itself, the number of Internet subscribers is increasing significantly. By the year 2000, Internet subscribers from Indonesia were 2 million subscribers, and the number keep growing until now, the number has become 39 million [2]. Moreover, the number of mobile phone subscriber is also increasing frequently. The number of mobile phone subscriber was only 500 million in the year 2000, and now those numbers have mushroomed to over 5 billion mobile users by the beginning of the year 2011 [3].

It is very common for mobile users to have an Internet access in their mobile device. Furthermore, from 5 billion mobile phone users worldwide, there are 1 billion mobile phone subscribers that able to utilize the Internet service from mobile device, plus this number is increasing frequently [4]. These numbers indicate that the importance level of Internet and Mobile phone is increasing tremendously.

These days, Internet has become part of people's daily life activity. People use Internet for tons of activities such as reading news, gathering information, chatting, playing games, accessing emails or social networking sites, shopping online, get transportation schedule, etc. However, by the time goes, people get more interested in using Internet from mobile device because more handy, easier to use and carry. The mobile phone brand may vary since the technology is getting more developed. One of the most well-known mobile phone brands is Android. Several years ago, only small group of people who use Android for their mobile phone. But Android is quickly growing, and become one of the biggest competitors among the top mobile phone brands. The functionalities, sophisticated features, and easiness of application development are the successor key for Android [5]. The Android achievement can be seen also from the fact that 20% of Smartphone in Indonesia is Android [6].

Not only the interface of the applications that plays role in determining the success of the application, but also the functionality. Many applications have become crucial for user's life. One of the most important applications used nowadays is Travel Planner. This is strengthened by statistics gathered in the year 2009 which reported almost 70% Internet activity is Travel Planning [7]. This number is predicted to be rising as the number of travelers is growing significantly. Those travelers surely eager to have their needs quickly fulfilled. This means, the services offered must be easily accessed and used.

Travelers don't want to lose their time for visit and queue at the travel agencies, or sit down in front of their PC's or laptops to see list of prices of available Airline Ticket. In order to solve this kind of problem, developing an Android application would be one of the best solutions.

1.2 Scope

There are several aspects that will be discussed in this thesis, which are:

- Research and analysis of the existing Android applications specifically in the applications that provide Flight Schedule Information

- Research and analysis of how the Airline scheduling works

- Develop a generic travel planner application for Android user in Indonesia

- Analyze the advantage and disadvantage of existing system of Travel Planner

There will be done some method in the future, in order to get all of the particular information needed in this research. Those methods including read particular articles, journals, books, and also interview & discussion with relevant Android application developers.

1.3 Aims

The basic aims of this thesis are to research & analyze the existing system of Travel Planner application, and also to develop a generic travel planner application for Android. The main aims of this thesis are:

- Provide information of the generic travel planner system

- Provide information about the architecture of the designed Android application

1.4 Benefits

This thesis might provide beneficial information for some parties. Firstly, this thesis would be beneficial for airline companies, since this thesis will access and show their flight information to users.

Secondly, this thesis would be beneficial for application development team of Android. This thesis might be used furthermore in order to develop more advanced and sophisticated generic travel planner application.

Thirdly, this thesis would be beneficial for other researchers, as this thesis could be used for reference materials.

Fourthly, this thesis would also be beneficial for people who needInformation about Flight Schedule quickly.

Moreover, this thesis would also be beneficial for the Flight Schedule API provider because the application developed by the author will give a brief explanation about the API provider.

Finally, this thesis would be beneficial for the author in order to finish the author's undergraduate degree in Computer Science major at Bina Nusantara International University.

1.5 Structures

This thesis will be divided into seven chapters. Explanation of each chapter will be described briefly below.

Chapter 1 – Introduction

This chapter describes the background of the problem, scope, aims, benefits, and structure of this thesis.

Chapter 2 – Theoretical Foundation

This chapter describes the theories about the solution from various sources such as journals, articles, books, and so on. All of these data is needed in order to support the solution of the problem. The explanation of supporting tools that will be used for the solution of the problem will also be included in this chapter.

Chapter 3 – Problem Analysis

It describes the analysis of existing problem. Advantages and disadvantages of the existing systems will also be included in this chapter.

Chapter 4 – Solution Design

This chapter will explain the details of author's proposed solution for existing problem. The details of solution design including diagrams and other chart will also be discussed.

Chapter 5 – Implementation and Testing

Results of the implementation and testing of proposed solution will be explained and discussed in this chapter.

Chapter 6 – Discussion

This chapter will analyze and evaluate the result. The difficulties in designing the proposed solution will be discussed in this chapter. It will then compare the advantages and disadvantages of the proposed solution to the existing solutions.

Chapter 7 – Conclusion and Recommendation

This chapter contains the conclusion of the results of implementing the proposed solution. The summarization of important findings, as well as advices for further development will also be included.