

CHAPTER 1

INTRODUCTION

1.1. Background of the Study

Today, social networking has a major impact on human life. Relationships between people are easier to do. Therefore, the information about someone is easier to get at this time. It can't be separated from the development of internet and computer technology which rapidly increasing (Ahmad Syarif Afandi, 2012).

Reading is important for everyone and it's a need for human being. Nowadays, reading becomes a new lifestyle for people that must be fulfilled every day. If not, then it seems as if something is missing in our lives. Sometimes, the high enthusiasm of people is not comparable with their ability to buy books, especially for foreign students in China. Some of them can't get the book easily, because the price of a book is quite expensive and is hard to find the English book, or the book stocks are limited. However, the author is sure that every people have their owned library, even only one or two books. The important thing is they have their own book collection in their room. So, the other way to have this book is to borrow the book from friends. But, we don't have the information about friend's book collection completely. So, if everyone can share their books with others, it will help someone who needs the book that he doesn't have. It can easily to use, find and borrow the book, even they are not belonging to your close friend.

Based on this problems, it comes an idea of how to let someone can know the collection of books owned by others and the collection of books that they owned. To solve this problem, it is expected to facilitate

someone in finding out who is the owner of the book which he was looking for. Then, get in touch with the book owner to borrow the books.

For this system, the author will develop the application by using WeChat Mini Program feature, which it will be embedded inside WeChat application. Why? Because it will be easy and convenient to use. WeChat Mini Programs are being used in everyday life, especially in China. It is the most popular messaging App in China. So, everyone definitely has this application, include foreigners who live in China.

This is a breakthrough towards current applications. “Download – Install – Use” is a complicated process, and not everyone wants to install applications on their phones. Moreover, it’s a newly developed application. So, WeChat Mini Program can reduce the first two processes.

WeChat Mini Programs are embedded APPs which do not require to download and install. Just open, use, share and be done! We just need to have WeChat application itself. Although WeChat application is installed on iOS or Android platform, we can use the developed WeChat Mini Programs in both of the environments. The development of this program is the same as web programming. However, the difference is in front-end side, which uses their own programming language for developing

Based on the above descriptions, the author intends to conduct research by taking the thesis paper title “Pick a Book : Book Sharing Application Based on WeChat Mini-Program for Foreign Student in China”.

1.2. Problem Identification

Based on the background, the author can identify the problems for the development of this application, as follows:

- a. How to design the book sharing application that can let someone know the collection of books owned by others and the collection of books that he owns?
- b. How to build an embedded application in WeChat Mini-program?
- c. How does this book sharing application work in connecting people by WeChat application?
- d. How interested are foreign students in China with book sharing activity?

1.3. Purpose of the Study

The purposes of this system development are listed as follows:

- a. This application is used to make it easier to search and borrow books to other people, especially foreign students in China on book sharing activity.
- b. This application is designed to share and show collections of books owned by others and the collection of books that the user owns.

1.4. Limitation of the Study

Some limitations of this study are listed follows:

- a. This application focus on sharing a private library with friends and let them borrow books through WeChat Application.
- b. This application displays collections of books owned by others and the books that the user owns.
- c. The user only can connect to book owner by adding them as friends using WeChat-QR code or calling their provided phone number.
- d. This application is embedded in WeChat Application, which only can open if the user has the WeChat application.

1.5. Benefit of the Study

The benefits of this research are as follows:

- a. This application can help users and make it easier to borrow and lend a book with each other.
- b. This application can make people easy to know other people's book collections.
- c. This application based on WeChat Mini Program which can make users be easy to connect with other people.

1.6. Research Methodology

In this thesis, the methodology to be used are as follows:

1. Data Collection Method

In this method, the author utilizes the resources of the library reference such as books, journals, articles and from the Internet to get the supporting theories and references for the development of this *Pick a Book : Book Sharing Application Based on WeChat Mini-Program for Foreign Student in China.*

2. Software Design Method

Software development method used in this application development is RAD (Rapid Application Development) model. The author chooses RAD, because of the limited time that the author has to endeavor this application. So, developing a simple application does not require a long time, RAD method is a method intended for the development of short-term software in accordance with the application developed. There are the following stages (Kendall, 2010) :

a) Planning Phase

At this stage the author analyzes the problem requirements and system planning for the development of mobile applications in WeChat Mini Program, determines the purposes of making this application.

b) Design Phase

At this stage, the author will design the processes that will occur in the created system. Then, design a user interface

of the system using WXML and WXSS programming language, based on the requirement of WeChat Mini Program development. At this stage the author also uses UML as a tool to simplify research and system development.

c) Construction Phase

At this stage, the author does the coding program in accordance with the requirements and designs those have been specified before. In this study, the author uses WeChat Developer Tools as IDE (Integrated Development Environment) to create applications for the WeChat Mini Program.

d) Implementation Phase

At this stage the author will test the application that has been made. Testing is done by black box method to all parts and each application functions.

3. Documentation

This stage is the preparation for the application documentation.

1.7. The Writing Structure

As for the systematical structure, this thesis is divided into five chapters, with an explanation for each chapter is as follows:

CHAPTER I INTRODUCTION

This chapter, the author discusses the background of the study, problem identification, and limitation of the study, purpose and benefits of the study, research methodology, and schedules.

CHAPTER II THEORETICAL BASIS

In this chapter discusses the basic theories that support and relate to this research.

CHAPTER III ANALYSIS AND DESIGN

This chapter discusses the analysis and design of the system. Analysis of the general description or the current condition, analysis of the current system, analysis of system needs and write the conceptual framework to generate a new system. This chapter also discusses the system design.

CHAPTER IV IMPLEMENTATION AND TESTING

This chapter discusses the implementation of the results of analysis and design of the system into coding to produce a system that can be used by the user. Moreover, it also illustrates the user interfaces of the system and conducts testing of the system to determine whether the system is already OK or still in need of improvements.

CHAPTER V CLOSING

This chapter contains the conclusions of this thesis and advices those are used as references for future development.