Universiti Teknologi MARA

Development of Mobile Book Tracing System

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ABSTRACT

Mobile Book Tracing System is a mobile system that helps staff and students at UiTM Shah Alam trace the information of books by only clicking at their hand. These projects aims are to build a book tracing system that help librarians trace the ownership of the returned books or when they want to manage their book rack. The application can help librarians trace the information of the books with their own phones without check it manually by looking to the color tag placed beside the cover books. The system helps in ease librarians work since it is portable, easy to use and can install in any android phones. So, librarian can scan the books and get the information from where the books are from, either from Perpustakaan Tun Abdul Razak (PTAR) 1, PTAR 2 or PTAR 3. It also will reduce technical error since using color tag caused problems to them because it can be easily remove and broken. It also can reduce human error since librarians might do mistakes in matching tag color and placed of the books. The objective of this project are to identify the requirement for book tracing system using barcode, to design a book tracing system and to develop a web based book tracing system and meet user expectation. For this project, the Mobile Application Development Life Cycle is used in developing this mobile application because it is suit with the development plan strategies. Interview is conducted as a project findings in order to get the requirements that librarians need. In short, Book Tracing System would be able to give a perfect and useful information to librarians in order for them manage the book..

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CHAPTER 1

INTRODUCTION

1.0 Introduction

In this chapter, the focus of discussion will be a general view about the application that being develop. It will consist of project background, problems faces, aim, objective and research question of the application.

1.1 Project Background

The manual tracing systems are widely being used in library in modern and progressive country. The manual system of tracing book information especially in tracing the ownership and shelf it should be placed suffers from so many faults and gives a lot of troubles to user (Ali & Abdullah, 2013) such as huge in information and the search for specific data is hard.

At Perpustakaan Tun Abdul Razak (PTAR) Universiti Teknologi Mara (UiTM) Shah Alam, they have a few branches of library which are Perpustakaan Tun Abdul Razak 1 (PTAR 1), Perpustakaan Tun Abdul Razak 2 (PTAR 2), Perpustakaan Tun Abdul Razak 3 (PTAR 3), and Perpustakaan Tun Abdul Razak 4 (PTAR 4). To manage these huge books, librarians used High Frequency Radio Frequency Identification Device (HF RFID) tag and reader for students booking books and in arranging books at shelves. Besides, they also use barcodes for borrowing process as a backup in case the RFID tag is not work during the borrowing process. But currently, PTAR facing problems where they cannot detect the ownership of the books since students can returned the books booking at any branches. Usually, during the return process, students give the books to the librarian and librarian will do the return process. The return process through the existing device covers student's information, date booking and return and details of the books only. Tracing the ownership of the books is done manually by looking at the side of book's cover which has been stick with color notes.