

UNIVERSITI TEKNOLOGI MARA

**DEVELOPMENT OF QR CODE
BASED LIBRARY MANAGEMENT
SYSTEM FOR MANAGING
BUILDING PLAN FROM HR
DEPARTMENT AT RANHILL
HOLDINGS BERHAD**

NUR HUSNINA BINTI SAHARUDDIN

**BACHELOR OF INFORMATION
TECHNOLOGY (Hons.) INFORMATION
SYSTEMS ENGINEERING**

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By

**NUR HUSNINA BINTI SAHARUDDIN
2014905519**

This thesis was prepared under the supervision of the project supervisor, Miss Siti Fatimah Binti Mohd Rum. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Information Technology (Hons.) Information Systems Engineering.

Approved by

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Miss Siti Fatimah Binti Mohd Rum

Project Supervisor

FEBRUARY 10, 2017

STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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NUR HUSNINA BINTI SAHARUDDIN
2014905519

FEBRUARY 10, 2017

CHAPTER 1

INTRODUCTION

This chapter provides the background and rationale for the study. It includes background of study, highlight the problem faced in managing building plans, research objectives, and aim of the project, research scope, significance of the project as well as research expected outcomes.

1.1 Background of Study

A recent study by Saranya, Reminaa and Subhitsha (2016) defined that Quick Response Code which also known as QR code is a machine-readable optical label that stores the information of the associated item or product. They also added that QR code can hold a larger amount of data in a smaller space and performs reliable error-correction at higher speed and has faster response time. QR code technology helps HR department to reduce HR staff's time spent to store the building plan information. Attempting QR code technology in Library Management system would allow rapid performance for the library and will improve library process in checking the availability of building plans.

Building plan is used to indicate the overall appearance, inside or outside the structure and indicate precise measurement and other details for construction (Bhui, 2015). In Ranhill Holdings Berhad, before starting any building development, the building plan needs to be developed to get an approval to proceed with the project development. Ranhill Holdings Berhad is a provider of construction, engineering and infrastructure management services in environment, power, infrastructure and petrochemical. Ranhill Holdings Berhad is located at Level 23, Plaza Permata, Kuala Lumpur and lead by Mr Yap Yuen Thye, Chief Executive Officer (CEO) of Ranhill Holdings Berhad with 400 other workers. Ranhill Holdings Berhad has seven divisions which

are Water Supply, Transportation, River and Maritime, Mechanical, Electrical, Structural and Geotechnical. These are the several departments in Ranhill Holdings Berhad; Human Resource (HR), Administration, Business Services, Finance and Credit Control. This project will be focusing on building plan management that takes place at Human Resources department.

After finishing the project, the building plans have to be sent to HR department for storing purposes. HR staffs gather the returned building plans in different boxes according to its project. Each box has its own form that consists about the building plans details; project details and the date of received the building plan. The staff in Ranhill Bersekutu is allowed to borrow the blueprint that managed by HR department. Currently, the process to borrow and return the blueprint is done manually where the staffs need to fill in form to get the permission from HR. The biggest concern of the HR department is a systematic building plan management that gives good quality for HR department and staffs to access information. However, it is considered low efficient to manage the building plan manually as the number of the building plans keep increase. Therefore, it is needed for HR department to improve the building plans management for make it more convenient to staffs at Ranhill Holdings Berhad.

This project will ease the management of building plans by using library management system which is developed to handle basic duty of library processes like acquisition, cataloging, circulation, serials management and reference. The project entitled QR code based Library management system at Ranhill Holdings Berhad for managing building plan will be developed indicated for reducing the problems that HR staffs at Ranhill Holdings Berhad encounter as well as the staff that involve in the process of borrowing and returning the building plan.