

Universiti Teknologi MARA

**Development of Inventory Management System
for Layar Biru Trading (IMSLBT) using Rapid
Application Development (RAD)**

Muhammad Zarif Bin Amir Izat

**Thesis submitted in fulfilment of the requirements for Bachelor
of Information Technology (Hons.) Faculty of Computer and
Mathematical Sciences**

July 2017

ACKNOWLEDGEMENT

Alhamdulillah, I am really grateful to Allah S.W.T for giving me healthy, strength, idea and opportunity to complete my final year project for this semester as a fulfillment of the requirements for the course CSP650. Without his blessing and permission, this project could not have been completed. I was able to finish this project within the time duration given.

Firstly, I would like to take the opportunity to thank those who have helped and supported me all this while. My special thanks goes to my supervisor Puan Jamaliah Taslim, the ever patient advisor. Without her guidance and help, this project would not have been a successful one.

Special appreciation also goes to my beloved parents who is always there whenever I'm in need, mentally and financially.

Last but not least, I would like to give my gratitude to my dearest friends and classmates. It has been such a wonderful year being with all of you, through all the bitter and sweet memories.

ABSTRACT

Inventory Management System for Layar Biru Trading (IMSLBT) is developed for the management of Layar Biru Trading Seksyen 5, West Country, Bandar Baru Bangi, Selangor. Currently, the management of the company does not have a system that can help them in managing their data and all the data are being managed manually. A user friendly system is needed and can be functioned in managing the company data such as create, retrieve, update and delete the data. The objectives of this project are to identify the user requirements for IMSLBT, to design IMSLBT and to develop IMSLBT. This system will help user to manage the information systematically. This system able to generate the dashboard and report to improve the quality of the management in the company. Besides that, data matching will be used to search specific data stored in the database. In additional, the data can be stored safely and can be retrieved quickly from anywhere and at any time since this system can be accessed online. This system will help the management to process order more quickly and efficiently with supplier email notification. This project used Rapid Application Development (RAD) methodology to develop IMSLBT which is suitable for this project because RAD are focused on development process that involves in short number of time, have usability, features and high speed. For the future works, this project can be extended focusing by adding more interactive web design interfaces, applying the Short Message Services (SMS) notifications and customizable report to increase company efficiency and the performance.

TABLE OF CONTENT

| CONTENT | PAGE |
|------------------------------|-------------|
| SUPERVISOR APPROVAL | ii |
| STUDENT DECLARATION | iii |
| ACKNOWLEDGMENT | iv |
| ABSTRACT | v |
| TABLE OF CONTENT | vi |
| LIST OF FIGURE | ix |
| LIST OF TABLES | xii |
| LIST OF ABBREVIATIONS | xiii |

CHAPTER 1: INTRODUCTION

| | |
|--------------------------------|---|
| 1.1 Project Background | 1 |
| 1.2 Problem Statement | 4 |
| 1.3 Aim | 5 |
| 1.4 Research Question | 5 |
| 1.5 Objectives | 5 |
| 1.6 Scopes | 5 |
| 1.7 Significance | 6 |
| 1.8 Summary of Research design | 8 |

CHAPTER 2: LITERATURE REVIEW

| | |
|--|----|
| 2.1 Definitions | 11 |
| 2.1.1 Inventory | 11 |
| 2.1.2 Inventory management system | 12 |
| 2.1.3 Web Based System | 14 |
| 2.1.4 System Development Life Cycle (SDLC) | 15 |
| 2.1.5 Rapid Application Development (RAD) | 16 |

| | |
|--|----|
| 2.1.6 Web Development Life Cycle (WDLC) | 19 |
| 2.1.7 User Interface (UI) Design | 21 |
| 2.2 Tools/Technique/Technology of Inventory Management System | 23 |
| 2.2.1 phpMyAdmin | 23 |
| 2.2.2 Notepad ++ | 24 |
| 2.2.3 PHP/Client-Server Application | 24 |
| 2.2.4 Apache HTTP Server | 24 |
| 2.2.5 XAMPPServer | 25 |
| 2.2.6 Notification | 25 |
| 2.2.7 Report | 27 |
| 2.2.8 Payment Method | 28 |
| 2.2.9 Online Registration | 29 |
| 2.3 Reviewing Existing/Similar Web Based System/Application | 30 |
| 2.3.1 Inflow Inventory | 30 |
| 2.3.2 Cin7 Inventory | 32 |
| 2.3.3 Skyware Inventory | 33 |
| 2.3.4 Bubble Inventory | 33 |
| 2.3.5 Stockpile Inventory | 34 |
| 2.4 Design Requirement | 35 |
| 2.4.1 Functional Requirement | 35 |
| 2.4.2 Non-Functional Requirement | 36 |
| 2.5 Summary of Reviewing Existing/Similar Web Based System/Application | 36 |

CHAPTER 3: METHODOLOGY

| | |
|------------------------------------|----|
| 3.1 Project Approach | 38 |
| 3.2 Research Plan/Framework Phases | 40 |
| 3.2.1 Requirement Planning | 41 |
| 3.2.2 User Design | 43 |
| 3.2.3 Construction | 44 |
| 3.2.4 Cutover | 46 |
| 3.3 Summary | 46 |