Universiti Teknologi MARA

The Development of
Umrah Booking System

Amirah Aimi Binti Zulkiflee

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

January 2017
STUDENT’S DECLARATION

I certify that this report 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.

.................................
AMIRAH AIMI BINTI ZULKIFLEE
2013636044

JANUARY, 2017
ABSTRACT

Umrah Booking System is the system that is developed to help admin, staff and customer to manage Umrah booking through KRS Travel Sdn Bhd. The aim of this project is to develop an Umrah Booking System for KRS Travel Sdn Bhd. This project has three objectives that has been achieve which include gather and analyze the requirement, design and develop the Umrah Booking System. There were few problems encountered with manual Umrah booking process which leads to data redundancy and a lot of paper usage. It also consumes time to check on the seat availability. Besides, the current booking process leads to difficulties for the staff to keep track of the payment made by the customers. Mainly, this system focuses on Umrah booking. It also allows both staff and customer to check on seat availability of each package. Receipt of the payment also can be generate from this system. The methodology used for this system is Waterfall Model. This project involved four phases that begin with knowledge acquisition, requirement gathering and analysis, system design and system development. The programming language used for this system is JAVA language. As for the database, the author used SQL Developer to store the system’s data. The future enhancement that can be made for this project is to enlarge the scope for other travels and can notify customer on the payment. To summarize, Umrah Booking System was developed from manual booking to online booking to reduce the current problem of Umrah booking process.
# TABLE OF CONTENT

## CONTENTS

<table>
<thead>
<tr>
<th>SUPERVISOR’S APPROVAL</th>
<th>ii</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENT’S DECLARATION</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>iv</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>v</td>
</tr>
<tr>
<td>TABLE OF CONTENT</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>x</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xi</td>
</tr>
</tbody>
</table>

## CHAPTER ONE: INTRODUCTION

1.1 Background of Study .................................................. 1
1.2 Problem Statement .................................................... 2
1.3 Aim ........................................................................... 3
1.4 Objectives .................................................................... 3
1.5 Project Scope ................................................................ 3
1.6 Project Limitation ....................................................... 4
1.7 Project Significance .................................................... 4
1.8 Project Outline of the Thesis ........................................ 5
1.9 Summary ....................................................................... 5

## CHAPTER TWO: LITERATURE REVIEW

2.1 Booking System ............................................................. 7
2.2 Manual Booking Process ................................................ 7
2.3 Automated Booking System ............................................ 9
2.4 Online Booking ............................................................ 9
2.5 Overview of Umrah Booking System ................................. 10
2.6 Overview of Mobile Application ..................................... 11
2.7 Overview of Web-Based ................................................ 12
2.8 Related Work ................................................................ 14
2.8.1 Ar-Raudhah Travel & Tours Sdn Bhd ............................ 14
2.8.2 Tiram Travel ............................................................ 21
2.8.3 Shahidah Travel ....................................................... 23
2.8.4 Comparison of Related Work ...................................... 26
2.9 Software & Tools ........................................................... 27
2.10 Development Approach ................................................ 27
CHAPTER THREE: METHODOLOGY

3.1 System Development Life Cycle (SDLC) 33
3.2 Waterfall 33
3.3 Knowledge Acquisition 35
3.4 Requirement Gathering and Analysis 36
  3.4.1 Interview 36
  3.4.2 Use Case Diagram 37
  3.4.3 Create Activity Diagram 39
  3.4.4 Create System Sequence Diagram 40
  3.4.5 Create Domain Class Diagram 41
3.5 System Design 41
  3.5.1 Design User Interface 42
  3.5.2 Design Detailed Class Diagram 42
  3.5.3 Design Multilayer Sequence Diagram 42
3.6 System Development 42
  3.6.1 Construct Database 43
  3.6.2 Develop Fully Working System 43
3.7 Summary 44

CHAPTER FOUR: RESULTS AND ANALYSIS 45

4.1 Requirement Gathered on Umrah Booking in KRS Travel 45
  4.1.1 Analysis of Interview 45
  4.1.2 Software Requirement Specification (SRS) Documentation 47
4.2 Prototype of Umrah Booking System 47
  4.2.1 Model Designed 48
  4.2.2 Database System 49
  4.2.3 Software Design Document (SDD) Documentation 50
4.3 Umrah Booking System 50
  4.3.1 Login Interface 51
  4.3.2 Staff Interface 52
  4.3.3 Admin Interface 59
  4.3.4 Summary 60

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION 61

5.1 Conclusion 61
5.2 System Strengths 62