

UNIVERSITI TEKNOLOGI MARA

**HOUSE RENTAL SELECTION SYSTEM USING
ANALYTIC HIERARCHY PROCESS (HRSS)**

SITI NAEMAH BINTI MD AZLAN

**Thesis submitted in fulfillment of the requirements for
Bachelor of Science (Hons) Business Computing
Faculty of Computer and Mathematical Sciences**

JANUARY 2014

DECLARATION

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



.....
SITI NAEMAH BINTI MD AZLAN
2011199671

JANUARY 19, 2014

ABSTRACT

Shelter is the one of the basic necessity to every people besides of cloth and food to live. A comfortable place is the most important thing for student to have a good environment to study. The problem is student difficult to find the right house such as the nearest distance with UiTM, lower rental fees and other criteria. In order to solve the problem, House Rental Selection System using Analytic Hierarchy Process (HRSS) is developing to ease the students to find house for renting that meet the best selection of house. The objective to developing the system is to identify the suitable criteria in selecting rental house among students. The other objective is to develop the system to ease the student to find the rent house and lastly to evaluate the usefulness of the system by the user. Selection of the house is made based on the criteria by implementing the AHP technique. AHP is a decision making model that aids decision making in our complex world. The criteria are identified from the Literature Review, interview and questionnaire which are rental fees, facility and house type. While the sub criteria for facility are furnish, convenience and the distance. The HRSS is developing based on Waterfall Model which comprises of Planning, Analysis, Design, Implementation and Documentation. To accomplish the study, questionnaire has been distribute among 30 students to get the feedback on the developed system. Based on the feedback from the respondents, the highest mean for construct usability is 4.5667, ease of use is 4.3667, content is 4.5, user interface is 4.333 and selection using AHP is 4.4667. Most of the students responded that the system was ease to use and would enable them to make a booking more efficient.

TABLE OF CONTENTS

CONTENTS	PAGE
SUPERVISOR'S APPROVAL	ii
DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	x
LIST OF TABLES	xii
LIST OF ABBREVIATIONS	xiii
CHAPTER ONE: INTRODUCTION	
1.1 Introduction	1
1.2 Problem Statement	3
1.3 Objectives	3
1.4 Scope	4
1.5 Significant Student	4
1.6 Framework	5
1.7 Expected Outcomes	5
1.8 Conclusion	6
CHAPTER TWO: LITERATURE REVIEW	
2.1 Introduction	7

2.2	Multi Criteria Decision Making (MCDM)	7
2.2.1	MCDM process	7
2.3	Analytic Hierarchy Process (AHP)	9
2.3.1	The steps in AHP	10
2.3.2	The second step in AHP	12
2.3.3	The third step in AHP	12
2.3.4	The fourth steps in AHP	13
2.3.5	The reasons of using AHP	16
2.3.6	Benefit of AHP	16
2.3.7	The Research Paper using AHP in selection	17
2.4	Web-based system architecture	17
2.5	Website	19
2.5.1	User Emotional	20
2.6	Study of Similar Existing System	21
2.7	System Development Life Cycle	22
2.7.1	Waterfall Model	22
2.8	Implication of Literature Review in the Development	24
2.9	Conclusion	25

CHAPTER THREE: RESEARCH METHODOLOGY

3.1	Introduction	26
3.2	Research Methodology	26
3.3	Waterfall Model	29
3.3.1	Planning Phase	29
3.3.2	Analysis Phase	30