

UNIVERSITI TEKNOLOGI MARA

**ROOM BOOKING SYSTEM FOR SK PERWIRA
TELUK INTAN**

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ABSTRACT

The Sekolah Kebangsaan Perwira Room Booking System (SKPRBS) is a web-based system designed to streamline and improve the management of room bookings. During the early development phase, several issues were identified, including double bookings, scheduling conflicts, and the lack of proper records of room usage. To address these problems, the Sekolah Kebangsaan Perwira Room Booking System (SKPRBS) was developed with three main objectives: to identify existing problems in the current booking process, to design and develop an efficient booking system, and to evaluate the functionality and usability of the system. The development followed the Adapted Waterfall Model, which includes six stages: planning, analysis, design, implementation, testing, and documentation. This model was chosen for its structured approach, which supports revisions at each stage if necessary. The system was guided by Usability Theory, with a focus on Nielsen's Heuristics, which served as a framework to ensure the system is efficient and easy to navigate. System testing was conducted using a structured test plan involving three user roles: teacher, office staff, and ICT teacher. Additionally, expert evaluations were carried out to assess usability based on five key components: learnability, memorability, efficiency, error handling, and satisfaction. The findings showed that all system functions performed as intended, and expert feedback confirmed that the system adhered to essential usability principles. In conclusion, SKPRBS offers a more organized, accurate, and efficient method for managing room bookings in the school.

TABLE OF CONTENTS

CONTENT	PAGE
SUPERVISOR APPROVAL	ii
STUDENT DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	ix
LIST OF TABLES	xii
LIST OF ABBREVIATIONS	xv
CHAPTER ONE : INTRODUCTION	1
1.1 Background of Study	1
1.2 Current Business Process	2
1.3 Problem Statement	6
1.4 Objectives	7
1.5 Scope	7
1.6 Significance	8
1.7 Project Framework	10
1.8 Gantt Chart	12
1.9 Conclusion	13
CHAPTER TWO :LITERATURE REVIEW	14
2.1 Introduction	14
2.2 Management Information System	14
2.2.1 Overview of MIS	15
2.2.2 Concept of MIS	15

2.2.3	Definition of MIS	16
2.2.4	MIS in Educational Sector	17
2.3	School	18
2.3.1	Room Booking System for School	19
2.3.2	Advantages of Room Booking System for School	19
2.4	Usability Theory	20
2.5	System Development Life Cycle (SDLC)	22
2.5.1	Waterfall Model	23
2.6	Similar Existing System	26
2.6.1	Room Booking for Nottingham University Malaysia Campus	26
2.6.2	Room Booking System for Western University	29
2.6.3	Reservation Study Workplace at Radbound University	31
2.6.4	Comparison of Existing System	33
2.7	Implication of Literature Review	34
2.8	Conclusion	36
	CHAPTER THREE: METHODOLOGY	38
3.1	Introduction	38
3.2	Project Methodology	38
3.3	Planning Phase	43
3.4	Analysis Phase	44
3.5	Design Phase	47
3.5.1	Context Diagram	47
3.5.2	Data Flow Diagram	48
3.5.4	Use Case Diagram	52
3.5.5	Site Map	53
3.5.6	User Interface Design	54
3.6	Implementation Phase	57
3.7	Testing Phase	58