

UNIVERSITI TEKNOLOGI MARA

**ELDERLY HEALTHCARE REMINDER AND
WELLNESS SYSTEM**

NOR NAZREEN BINTI KHAIRI

BACHELOR'S DEGREE IN COMPUTER SCIENCE (Hons.)



Faculty of Computer and Mathematical Sciences
Universiti Teknologi MARA
2021

SUPERVISOR'S APPROVAL

ELDERLY HEALTHCARE REMINDER AND WELLNESS SYSTEM

By

NOR NAZREEN BINTI KHAIRI
2020985335

This thesis was prepared under the direction of thesis supervisor, Dr. Nahdatul Akma Binti Ahmad. 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 Computer Science (Hons).

Approved by:



.....
Dr. Nahdatul Akma Binti Ahmad
Thesis Supervisor

JANUARY 27, 2022

TABLE OF CONTENT

CONTENTS	PAGE
PREFACE	i
TABLE OF CONTENTS	iii
LIST OF FIGURES	viii
LIST OF TABLES	x
ABSTRACT	xi
 CHAPTER ONE: INTRODUCTION	
1.1 Introduction	1
1.2 Background of Study	1
1.3 Problem Statement	3
1.4 Project Questions	4
1.5 Project Objectives	4
1.6 Project Scope	5
1.7 Significance of Study	5
1.8 Conclusion	5
 CHAPTER TWO: LITERATURE REVIEW	
2.1 Introduction	6
2.2 Healthcare	8
2.2.1 Healthcare	8
2.2.2 Elderly	9
2.3 Web Applications	10
2.4 Techniques	11
2.4.1 Static and Web Application	11
2.4.2 Discussion	14

2.5	Features	17
2.5.1	Notification Reminders	17
2.5.2	Activity Planner and Wellness	17
2.5.3	Spiritual	18
2.5.4	Project Features	18
2.6	Chosen Techniques and Features	22
2.7	Summary	23

CHAPTER THREE: METHODOLOGY

3.1	Introduction	24
3.2	Research Design	24
3.3	Project Framework	25
3.3.1	Planning	26
3.3.2	Information Gathering	27
3.3.3	Requirement Analysis	28
3.3.4	System Design	29
3.3.5	Implementation	30
3.4	Development Methodology	31
3.4.1	Requirement Planning	32
3.4.2	User Design	32
3.4.3	Construction	33
3.4.4	Cutover	34
3.5	System Architecture	34
3.5.1	Presentation Layer	35
3.5.2	Business Layer	35
3.5.3	Data Access Layer	35
3.6	Software and Hardware Requirement	36
3.6.1	Hardware Requirement	36
3.6.2	Software Requirement	36
3.7	Summary	38

ABSTRACT

This project describes the development of the medication web applications to help the elderly in cater their medications. Currently, dementia diseases frequently happened among older adults which are loss of cognitive performing thinking to such an extent which can interferes with a person's daily life and activities. Managing medications is such a burden situation for the older adults as it could lead to medication non-adherence. Research about medication reminder and wellness web applications component has been made and found some of the criteria that need to be highlighted to help the older adults in decreasing the potential of medication non-adherence like practical research-based guidance, suggestions and recommendations on developing web application interfaces and other important forms of technology that convenient for the senior citizens use. This web application also will push a notification message based on the medication that has been recorded by the user. This project is focusing to fulfil what the client requirement which might have adjustment from time to time, the suitable methodology would be agile methodology instead of waterfall methodology since waterfall methodology is a well plan schedule and it will be less adjustment within the development. Agile Rapid Application Development or also known as RAD model is chosen for this research methodology. This project has argued that Elderly Healthcare Reminder and Wellness web application would be the best instrument to help the older adults in medicating their medications with the notification reminder features and also fulfil the adults need as it is coming with the spirituality element.