

**WEATHER FORECAST AND WARNING
PORTAL FOR RURAL FISHERMEN**

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UNIVERSITI UTARA MALAYSIA

2010



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WEATHER FORECAST AND WARNING PORTAL FOR RURAL FISHERMEN

A report submitted Dean of Postgraduate Studies and Research
in partial fulfilment of the requirement the degree
Master of Science of Information Communication Technology
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ABSTRAK

Nelayan menaruh kehidupan mereka di ambang maut setiap kali mereka pergi ke laut. Hal ini lebih buruk jika cuaca di laut buruk. Satu sistem ramalan cuaca dan amaran akan dapat membantu nelayan membuat keputusan yang lebih baik sebelum mereka pergi ke laut. Ini akan membantu mengurangkan kos mereka dan membantu menyelamatkan nyawa. Fokus utama kajian ini adalah untuk merancang model keperluan peramalan cuaca dan aplikasi peringatan untuk nelayan luar bandar dengan menggunakan portal. Pada akhir projek ini, portal akan dibina berdasarkan keperluan sistem. Harapan dari projek ini adalah bahawa portal perkhidmatan ramalan cuaca akan sepenuhnya digunakan oleh para nelayan luar bandar untuk merujuk maklumat berkaitan cuaca pada bila-bila masa dan di mana saja melalui aplikasi internet.

ABSTRACT

Fishermen put their lives on the brink every time they go out to the sea. This is worse if the weather at the sea is bad. A weather forecast and warning system will help fishermen make better decisions before them to go out to the sea. This will help reduce their costs and help save lives. The main focus of this research is to design a requirement model of the weather forecasting and warning application to rural fishermen by using a portal. At the end of this project, a portal will be designed based on the requirement model of this system. The expectation of this project is that the weather forecast service portal will be fully utilized by the rural fishermen to refer when they require the information about weather anytime anywhere via the Internet.

ACKNOWLEDGEMENTS

In the Name of Allah, Most Gracious, Most Merciful.

Alhamdulillah, grateful to Allah S.W.T with the mercy of,
this research can be accomplished.

I wish to acknowledge the support of many individuals who helped me to complete this thesis and throughout my graduate education. Each of them had unique perspectives which contribute to my project development. Grateful acknowledgement is given to Assoc. Prof. Dr. Wan Rozaini bt. Sheik Osman, who was my lecturer and project supervisor, for her invaluable insights, professional advice, scholarly guidance and patience towards the completion of the study.

My sincere appreciation is also extended to my friends and lecturer of university Utara Malaysia, particularly, Mrs. Syamila Zakiah bt. A Wahab and who have helped during the Master's course and completion of this project. Special thank and appreciation to Ms. Ruziana bt. Mohamad Rasli, who is willing to be an evaluator to this project.

Finally and most specially, I extend my sincere appreciation and gratitude to my parents, Haji Johar b. Ismail and Hajah Zaharah bt. Yusof and also to my lovely wife Afiza bt. Muhammad and my daughters, Amyra Husna and Adryana Husna for their encouragement, reassurances and support throughout my pursuance of the course in Masters in Information and Communication Technology and ultimate achievement of this project.

CONTENTS	PAGE
PERMISSION TO USE	i
ABSTRAK	ii
ABSTRACT	iii
ACKNOWLEDGMENTS	iv
TABLE OF CONTENT	v
LIST OF TABLES	ix
LIST OF FIGURES	ix
LIST OF BAR CHARTS	x
LIST OF ABBREVIATIONS	xi
 CHAPTER ONE: INTRODUCTION	
1.0 Introduction	1
1.1 The weather in Malaysia	2
1.2 Problem Statement	4
1.3 Research Objectives	5
1.4 Research Questions	5
1.5 Scope and Limitation of Research	5
1.6 Significance of research	5
1.7 Report structure	6
1.8 Summary	6

CONTENTS	PAGE
 CHAPTER TWO: LITERATURE REVIEW	
2.0 Introduction	7
2.1 Categorization of portal and blog	8
2.2 Definition of Weather Forecast	9
2.3 Definition Rural and Fishermen	9
2.4 Definitions of Functional Requirement	10
2.5 Definitions of Non-Functional Requirement	12
2.6 Prototyping Requirement	12
2.7 Extensible Markup Language	14
2.8 Related Works	15
2.9 Summary	16

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction	17
3.1 An important phase in the prototyping methodology	19
3.1.1 Planning	19
3.1.2 Analysis	20
3.1.3 Design	20
3.1.4 Implementation	21
3.2 Methodology of data collection	22
3.3 Methodology of data interpretation	22
3.4 Summary	23

CONTENTS	PAGE
 CHAPTER FOUR: FINDING AND RESULTS	
4.0	Introduction 24
4.1	The phases of prototyping methodology 24
4.1.1	Planning the portal formation 24
4.1.1.1	Features planning and contents of portal 24
4.1.2	Requirements analysis of portal development 27
4.1.2.1	List Requirements of WFWP 27
4.1.2.2	Purpose requirements WFWP for fisherman 28
4.1.2.3	Requirement ID and name 28
4.1.2.4	Functional and non-functional requirements WFWP 30
4.1.3	Design the portal formation 33
4.1.3.1	URL Registration 33
4.1.3.2	Structure of portal design 34
4.1.3.3	The comparison WFWP against MMD official website 35
4.1.4	Implementation of the portal 40
4.2	System maintenance 41
4.3	Summary 41

CHAPTER FIVE: FINDING AND DISCUSSION

5.0	Introduction 42
5.1	Questionnaires distribution 42
5.2	Requirement phase analysis 45
5.2.1	Section A 45
5.2.2	Section B 48
5.3	Validation and verification phase analysis 51

CONTENTS	PAGE
5.3.1 Section A	51
5.3.1.1 Interpretation validation and verification of section A	54
5.3.2 Section B	55
5.3.2.1 Interpretation validation and verification of section B	61
5.3.2.2 The clarification through a pie chart	63
5.4 Expected findings	65
5.5 Summary	65

CHAPTER SIX: CONCLUSION

6.0 Problem and limitations	66
6.1 Future plan and recommendation	67
6.3 Conclusion of the research project	68

REFERENCES

APPENDIX

CONTENTS	PAGE
List of Tables	
Table 4.0: The requirement ID name	29
Table 4.1: Functional and non-functional requirements	32
Table 4.2: URL registration flow	34
Table 4.3: The comparison WFWP against MMD official website	39
Table 5.0: Questionnaires distribution of requirement phase	43
Table 5.1: Questionnaires distribution of validation & verification phase	44
Table 5.2: Pictures of recent surveys	44
Table 5.3: The interpretation of the validation and verification of section A	54
Table 5.4: The analysis of the validation and verification of section B (Q1 – Q6)	61
Table 5.5: The analysis of the validation and verification of section B (Q7)	62
List of Figures	
Figure 1.0: Malaysian climate	3
Figure 2.0: Integrated Functional Requirement Model	11
Figure 2.1: Waterfall Methodology (Kothari, 1985)	12
Figure 3.0: Prototyping Methodology (Bowman, 2009)	18
Figure 3.1: Planning phases (Steele, 2009)	19
Figure 3.2: Designing phases(Steele, 2009)	21
Figure 4.0: Use Case Diagram for WFWP	25
Figure 4.1: Sequence Diagram for WFWP	40
Figure 5.0: Requirement phase analysis- Section A	46
Figure 5.1: Requirement phase analysis- Section B	49
Figure 5.2: Validation & verification phase analysis- Section A	52
Figure 5.3: Validation & verification phase analysis- Section B (Q1 – Q5)	56
Figure 5.4: Validation & verification phase analysis- Section B (Q7)	59

CONTENTS	PAGE
List of Bar Chart	
Bar chart 1.0: Analysis percentage of section A	47
Bar chart 2.0: Analysis percentage of section A	50
Bar chart 3.0: Analysis percentage of section A	53
Bar chart 4.0: Analysis percentage of section B (Q1 – Q5)	57
Bar chart 5.0: Analysis percentage of section B (Q7)	60
Bar charts 5.1: The portal content	63
Bar charts 5.2: The portal quality	63
Bar charts 5.3: Easily accessible of portal	64
Bar charts 5.4: The portal design	64
Bar charts 5.5: Use of Malay language	64

List of Abbreviations

List	Abbreviation
Answ	Answers
ICT	Information Communication Technology
IP	Internet Protocol
ISP	Internet Service Provider
ISO	International Organization for Standardization
GPRS	General packet radio service
GPS	Global Positioning System
GOES	Geostationary Operational Environmental satellite
HTML	Hyper Text Markup Language
MMD	Malaysian Meteorological Department
NOAA's	National Weather Service
Q	Question
Resp	Respondent
RTM	Requirements Traceability Matrix
SDLC	Software Development Life Cycle
SMS	Short Message Service
SOS	Descriptions for international Morse code
URL	Uniform Resource Locator
WAP	Wireless Application Protocol
WFWP	Weather Forecast and Warning Portal for Rural Fisherman
Widget	A portable chunk of code that can be installed and executed
XML	Extensible Mark-up Language
%(52R)	Percentage of 52 respondent
%(60R)	Percentage of 60 respondent
°C	Degree of Celsius

CHAPTER ONE

INTRODUCTION

This chapter clarifies the main idea of the project, detailing the main element involved in the research. This chapter also describes the general research preparation which related to the current scenario and the basic requirement to lead the project development.

1.0 Introduction

Malaysia has grown rapidly in the field of Information and Communication Technology (ICT). The government and private sector use information technology in planning and making decisions. The internet mobile system too has grown to be an important tool in each country whether in urban or rural areas. Malaysia has more than 100% mobile penetration as advancement in technology had made it easier to use and cost less that make it a flexible tool for rural development.

While ICT is growing rapidly in our country, there are some people who are still lagging behind in ICT development, they are the rural fishermen. They still use traditional methods of weather forecasting as a guide for their daily activities, even as Malaysian Meteorology Department has prepared a variety of Internet facilities to

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