

E-LOCATOR2U: FAST FOOD LOCATION SERVICE PROVIDER

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This report is submitted in partial fulfillment of the requirements for the
Bachelor of Information & Communication Technology
(Software Development).

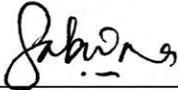
**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
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2004**

ADMISSION

I admitted that this project title name of
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DEDICATION

Specially dedicated to my beloved parents, family and fellow friends, who had encouraged and supported me in my entire journey of learning...

ACKNOWLEDGEMENTS

Assalamualaikum Wbt.

Praise to Allah SWT, the Most Merciful and the Most Benevolent who has given His blessing to complete my thesis that was conducted during semester 7, 21th June – 22th October 2004.

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ABSTRACT

E-Locator2u is one of the location service providers that will concern on the customer services. The purpose of doing the research for the project is to apply the wireless application in daily life, to promote the fast food outlets to public and also to promote the Malacca tourism industry. Beside the research will also identify the requirement for the system such as software, hardware, system and user requirement as well.

The project will be scoped on several factors such as focus on the selected fast food outlets that operates in Malacca. The selected fast food outlets will be KFC, A&W, Mc Donalds, Pizza Hut, Shakey's Pizza and US Pizza. Moreover the project will be using several software and hardware such as Openwave browser, WML, PHP, Apache server and MySQL for database. The user for the system will come from variety of age, gender and nation.

The project also has its significance in many aspects. This includes the significance to the user, organization, state and country as well. The user will be able to apply the new technology of WAP application in order to solve their problem. Moreover the project will also be the medium to promote the fast food and tourism industry in Malacca.

The Software Development Life Cycle (SDLC) has been chosen as the project methodology. This methodology will be follow as plan in order to complete the entire project development.

As for the conclusion, E-Locator2U is the right solution for those who are having a problem on finding for a fast food locations. This system will provide the best customer services to make sure it will satisfy the user's desire. All the data and appropriate sources had been studied in order to gather all the information and provide the best solution to the user.

ABSTRAK

E-Locator2u adalah salah satu sistem yang menawarkan servis mencari lokasi dan tertumpu kepada servis pengguna. Tujuan penyelidikan ini adalah untuk mempraktikkan aplikasi tanpa wayar dalam kehidupan seharian, mempromosikan kedai makanan segera kepada pengguna. Ini secara tidak langsung dapat mempromosikan industri pelancongan di Melaka. Selain itu, penyelidikan ini akan mengenalpasti keperluan utama sistem seperti perisian, perkakasan, pelaksanaan dan juga keperluan pengguna.

Skop bagi projek ini adalah tertumpu kepada beberapa faktor seperti memfokuskan kedai makanan segera yang beroperasi di Melaka. Kedai-kedai makanan segera yang terpilih adalah seperti KFC, A&W, Mc Donalds, Pizza Hut, Shakey's Pizza dan US Pizza. Selain itu, projek ini akan menggunakan beberapa perisian dan perkakasan seperti Openwave, WML, PHP, Apache dan MySQL untuk pangkalan data. Pengguna bagi sistem ini pula adalah terdiri daripada pelbagai lapisan umur, jantina dan bangsa.

Setiap pembangunan projek pastinya mempunyai kepentingan tersendiri. Antara kepentingan projek ini adalah termasuk kepada kepentingan kepada pengguna, organisasi, negeri dan negara amnya. Pengguna sistem ini secara tidak langsung akan mengaplikasikan teknologi terkini iaitu WAP dalam menyelesaikan masalah mereka. Selain itu, projek ini juga merupakan medium penting dalam mempromosikan kedai makanan segera dan meningkatkan industri pelancongan di Melaka.

Kitar Hayat Pembangunan Perisian (SDLC) telah dipilih sebagai metodologi projek. Metodologi ini akan menjadi panduan dalam menyiapkan keseluruhan pembangunan projek.

Secara kesimpulannya, E-Locator2u adalah pilihan tepat bagi pengguna yang mempunyai masalah dalam mencari lokasi kedai makanan segera. Sistem ini akan menawarkan perkhidmatan pengguna yang terbaik untuk memastikan ianya memenuhi kehendak pengguna. Sumber-sumber yang boleh dipercayai telah dikaji dengan teliti bagi memastikan sistem ini mampu memberi penyelesaian masalah yang terbaik kepada pengguna.

TABLE OF CONTENTS

CONTENTS	PAGES
PROJECT TITLE.....	I
ADMISSION.....	II
DEDICATION.....	III
ACKNOWLEDGEMENTS.....	IV
ABSTRACT.....	V
ABSTRAK.....	VI
TABLE OF CONTENTS.....	VII
LIST OF TABLES.....	XI
LIST OF FIGURES.....	XII
LIST OF ACRONYMS AND ABBREVIATIONS.....	XIII
LIST OF APPENDICES.....	XIV
INTRODUCTION.....	1
1.1 PREAMBLE / OVERVIEW.....	1
1.2 PROBLEM STATEMENT.....	3
1.3 OBJECTIVES.....	4
1.4 SCOPES.....	5
1.5 CONTRIBUTIONS.....	6
1.6 EXPECTED OUTPUT.....	7
1.7 CONCLUSION.....	7
LITERATURE REVIEW.....	9
2.1 INTRODUCTION.....	9
2.2 FACT AND FINDING.....	10
2.2.1 WAP APPLICATION ARCHITECTURE.....	10
2.2.2 OTHERS WIRELESS PROTOCOLS, PLATFORMS AND LANGUAGES.....	13
2.2.2.1 WAP 2.0.....	13
2.2.2.2 HANDHELD DEVICES MARKUP LANGUAGE (HDML).....	14
2.2.2.3 COMPACT HTML (cHTML) AND i-MODE.....	14
2.2.2.4 JAVA AND JAVA2 MICRO EDITION (J2ME).....	15
2.2.2.5 HYPERTEXT PREPROCESSOR (PHP).....	16

2.2.2.6	BINARY RUN-TIME ENVIRONMENT FOR WIRELESS (BREW).....	16
2.2.2.7	BLUETOOTH WIRELESS TECHNOLOGY.....	17
2.2.3	FORMER RESEARCH ON 'EASY ACCESS' BY MAXIS CORP.....	18
2.2.4	PROPOSED PROJECT.....	19
2.2.5	CONCLUSION OF FORMER RESEARCH.....	20
2.3	CONCLUSION.....	21
PROJECT PLANNING AND METHODOLOGY.....		23
3.1	INTRODUCTION.....	23
3.2	HIGH-LEVEL PROJECT REQUIREMENTS.....	24
3.2.1	PROJECT FACILITIES REQUIREMENT.....	24
3.2.2	SOFTWARE REQUIREMENT.....	25
3.2.2.1	DEVELOPMENT TOOLS.....	25
3.2.2.2	OPERATING SYSTEM.....	26
3.2.2.3	DATABASE SYSTEM.....	26
3.2.3	HARDWARE REQUIREMENT.....	26
3.3	SYSTEM DEVELOPMENT APPROACH.....	27
3.3.1	PRELIMINARY INVESTIGATION.....	27
3.3.2	ANALYSIS.....	28
3.3.3	LOGICAL DESIGN.....	29
3.3.4	PHYSICAL DESIGN.....	30
3.3.5	IMPLEMENTATION.....	30
3.3.6	MAINTENANCE.....	30
3.4	PROJECT SCHEDULE AND MILESTONES.....	33
3.5	CONCLUSION.....	34
ANALYSIS.....		36
4.1	INTRODUCTION.....	36
4.2	ANALYSIS OF CURRENT SYSTEM.....	38
4.2.1	BUSINESS PROCESS.....	38
4.2.2	PROBLEM ANALYSIS.....	39
4.2.3	PROBLEM STATEMENTS.....	41
4.3	ANALYSIS OF TO BE SYSTEM.....	42
4.3.1	FUNCTIONAL REQUIREMENT.....	42
4.3.1.1	SEARCH FOR LOCATION.....	42
4.3.1.2	REQUEST FOR MENU.....	43
4.3.1.3	REGISTER FOR MEMBERSHIP.....	43

4.3.2	TECHNICAL REQUIREMENT.....	44
4.3.2.1	IMPLEMENTATION / DEPLOYMENT REQUIREMENT.....	44
4.4	CONCLUSION.....	44
DESIGN.....		46
5.1	INTRODUCTION.....	46
5.2	PRELIMINARY / HIGH-LEVEL DESIGN.....	47
5.2.1	RAW INPUT / DATA.....	47
5.2.2	SYSTEM ARCHITECTURE.....	49
5.2.2.1	APPLICATION LAYER.....	49
5.2.2.2	BUSINESS SERVICES LAYER.....	49
5.2.2.3	MIDDLEWARE LAYER.....	50
5.2.3	USER INTERFACE DESIGN.....	55
5.2.3.1	NAVIGATION DESIGN.....	58
5.2.3.2	INPUT DESIGN.....	60
5.2.3.3	OUTPUT DESIGN.....	62
5.2.4	DATABASE DESIGN.....	65
5.2.4.1	LOGICAL DATABASE DESIGN.....	65
5.3	DETAILED DESIGN.....	66
5.3.1	SOFTWARE SPECIFICATION.....	66
5.3.1.1	SEARCHING LOCATION.....	66
5.3.1.2	MENU SELECTION.....	69
5.3.1.3	E-LOCATOR2U ARTIFACTS.....	73
5.3.2	PHYSICAL DATABASE DESIGN.....	76
5.4	CONCLUSION.....	79
IMPLEMENTATION.....		80
6.1	INTRODUCTION.....	80
6.2	SOFTWARE DEVELOPMENT ENVIRONMENT SETUP.....	81
6.2.1	OPENWAVE SDK INSTALLATION AND INSTRUCTION.....	81
6.2.2	APACHE CONFIGURATION.....	82
6.2.3	LAUNCH THE OPENWAVE SIMULATOR.....	83
6.3	SOFTWARE CONFIGURATION MANAGEMENT.....	84
6.3.1	VERSION CONTROL PROCEDURE.....	84
6.4	IMPLEMENTATION STATUS.....	85
6.5	CONCLUSION.....	87

TESTING.....	88
7.1 INTRODUCTION.....	88
7.2 TEST PLAN.....	89
7.2.1 TEST ORGANIZATION.....	89
7.2.2 TEST ENVIRONMENT.....	90
7.2.3 TEST SCHEDULE.....	91
7.3 TEST STRATEGY.....	91
7.3.1 CLASSES OF TESTS.....	93
7.4 TEST DESIGN.....	94
7.4.1 TEST DESCRIPTION.....	94
7.4.2 TEST DATA.....	94
7.5 TEST CASE RESULTS.....	97
7.5.1 UNIT TESTING.....	97
7.5.2 MODULE TESTING.....	98
7.5.3 SYSTEM INTEGRATION TESTING.....	99
7.5.4 ACCEPTANCE TESTING.....	100
7.6 CONCLUSION.....	100
 PROJECT CONCLUSION.....	 101
8.1 OBSERVATION ON WEAKNESSES AND STRENGTHS.....	101
8.2 PROPOSITIONS FOR IMPROVEMENT.....	102
8.3 CONCLUSION.....	102
 BIBLIOGRAPHY.....	 103
APPENDICES.....	105

LIST OF TABLES

NO.	TABLES TITLE	PAGES
Table 3.1	Activities and Deliverables during the SDLC.....	31
Table 5.1	Raw Data.....	48
Table 5.2	Data Dictionary (Table User).....	76
Table 5.3	Data Dictionary (Table Current Location).....	76
Table 5.4	Data Dictionary (Table Register)	77
Table 5.5	Data Dictionary (Table Outlet Lists)	77
Table 5.6	Data Dictionary (Table Related Outlet)	78
Table 5.7	Data Dictionary (Table Map)	78
Table 6.1	Summary of VCP.....	84
Table 6.2	Summary of Implementation Status.....	85
Table 7.1	Summary of Personnel's Responsibility.....	90
Table 7.2	Test Schedule.....	91
Table 7.3	Classes of Tests.....	93
Table 7.4	Test Data for Searching Location.....	95
Table 7.5	Test Data for Menu / Get Info.....	95
Table 7.6	Test Data for Registration.....	95
Table 7.7	Module Test.....	96
Table 7.8	System Requirement Test.....	96
Table 7.9	Test Data for Searching Location.....	97
Table 7.10	Test Data for Request Menu / Get Info.....	97
Table 7.11	Test Data for Registration.....	98
Table 7.12	Module Testing.....	98
Table 7.13	System Integration Test.....	99

LIST OF FIGURES

NO.	FIGURES TITLE	PAGES
Figure 2.1	Wireless Application Architecture.....	10
Figure 3.1	Software Development Life Cycle.....	27
Figure 5.1	Architecture Layer.....	51
Figure 5.2	Class Diagram in Searching Location.....	52
Figure 5.3	Class Diagram in Menu Selection.....	52
Figure 5.4	Class Diagram in Registration.....	53
Figure 5.5	Class Diagram in E-Locator2u Artifacts.....	53
Figure 5.6	External System Interface.....	54
Figure 5.7	Interface in Handphone Service Provider.....	54
Figure 5.8	Main Page.....	55
Figure 5.9	Main Menu Page.....	55
Figure 5.10	Services Page.....	56
Figure 5.11	Get Info Page.....	56
Figure 5.12	Membership Page.....	57
Figure 5.13	About Us Page.....	57
Figure 5.14	Navigation Design.....	58
Figure 5.15	Locate 'Urself' Input Page.....	60
Figure 5.16	Selection of Location Input Page.....	60
Figure 5.17	Fast Food Outlets Input Page.....	61
Figure 5.18	Related Outlets Input Page.....	61
Figure 5.19	Results Outlets Output Page.....	62
Figure 5.20	Map Output Page.....	62
Figure 5.21	Map(2) Output Page.....	63
Figure 5.22	More Info Output Page.....	63
Figure 5.23	Registration Success Output Page.....	64
Figure 5.24	ERD (Entity Relationship Diagram)	65
Figure 5.25	SearchingLocation Structural Diagram.....	66
Figure 5.26	MenuSelection Structural Diagram.....	69
Figure 5.27	E-Locator2u Artifacts Structural Diagram.....	73

LIST OF ACRONYMS AND ABBREVIATIONS

ADO	– Activex Data Objects
BREW	– Binary Run-Time Environment for Wireless
cHTML	– Compact HTML
DBMS	– Database Management System
DFD	– Data Flow Figure
ERD	– Entity Relationship Figure
GUI	– Graphical User Interface
HDML	– Handheld Devices Markup Language
HTML	– HyperText Markup Language
HTTP	– HyperText Transfer Protocol
ICT	– Information and Communication Technology
IIS	– Internet Information Services
J2EE	– Java 2 Enterprise Edition
J2ME	– Java 2 Micro Edition
J2SE	– Java 2 Standard Edition
MMS	– Multimedia Message Service
MPEG	– Moving Pictures Experts Group
MP3	– MPEG Layer 3
OOAD	– Object-Oriented Analysis and Design
PAN	– Personal Area Network
PHP	– HyperText Preprocessor
PDA	– Personal Digital Assistant
RAD	– Rapid Application Development
SDK	– Software Development Kit
SDLC	– Software Development Life Cycle
SMS	– Short Message Service
SQL	– Structured Query Language
SRS	– Software Requirement Specification
TCP/IP	– Transmission Control Protocol/Internet Protocol
UML	– Unified Modeling Language
VOPC	– View of Process Control
WAP	– Wireless Application Protocol
WML	– Wireless Markup Language
W3C	– World Wide Web Consortium
XHTML	– Extensible HyperText Markup Language
XML	– Extensible Markup Language

LIST OF APPENDICES

APPENDICES	PAGES
Appendix A.....	105
Appendix B.....	106
Appendix C.....	107
Appendix D.....	108
Appendix E.....	109
Appendix F.....	113
Appendix G.....	116
Appendix H.....	120
Appendix I.....	121
Appendix J.....	147

CHAPTER I

INTRODUCTION

1.1 Preamble/Overview

E-Locator2u is one of the location service providers to user. Basically this project will apply the wireless technology to user. It will provide the best solutions to get into the nearest location as requested by users. It will ask for the user's location and proposed the step-by-step instructions to user.

This project will be group in the ICT, advertisement sector and tourism industry. Besides that, the cell phone industry will also apply this wireless technology which had become the most demand tools nowadays. Moreover, the main application for this project will be the wireless technology, intelligent and decision support in order to perform client's request.

E-Locator2u will only concentrate on finding the best way to the fast food outlets in Malacca. This project will give all the appropriate and relevant methods to guide user into their requested fast food outlets. By using the suitable wireless protocols and intelligent support, this project can easily perform and give the best solutions.

During the personal survey via Internet, there is no existent wireless application that applied the e-locator idea in Malacca or Malaysia. Mostly, there are a lot of website that provide the whole maps and route in Malacca without focusing on any product or places. The existing website will only show the best places, historical places or main road in Malacca. In short, the existing website will focus on tourism purposes only.

Therefore, the idea of E-locator2u that provides the best solution to get to the nearest fast food outlets had come out. The value added in the project will be the wireless and sequence of selection which will ask for the user location and directly give the nearest fast food location.

This project will also have commercial value which can be applied in tourism industry. It can be also promotes all the fast food outlets and increase the user needs on this industry especially in Malacca. The selected fast food outlets are KFC, A&W, Mc Donalds, Shakey's Pizza, Pizza and US Pizza in Malacca. These organizations will be the references to the system developer.

Lastly, the system developer will apply the Waterfall Life Cycle Model as the methodology tools. This methodology has been selected because of many reasons that will be discussed more in next chapter.

1.2 Problem Statements

People will have desire to eat in their routine life. It is normal for people who have desire on selecting for a place to eat. However, the problem may arise when people do not know the location of place which they want to go. This may happened to the tourist and first timer.

Currently, there is no graphical map provided to user. On the current system, the user will only be provided by a little information such as contact number and address without a direct route on a map. The user may find difficulty on getting to their desire place without these important sources.

Furthermore, people will not get any information about the direct route whenever they browse on the Internet. There is no specific website that focusing on finding a location to eat. Usually, the website only gives several of places to be visit or any attractive place that used to be the most popular one.

Based on the statement above, there are many problems that arise on the current and reality environment. The problem statement will be discussed in detail on the next chapter.

1.3 Objectives

The main objective of this project is to provide a new idea of locator service provider to user. Besides that, the other objectives of the project that are related to its development as listed below:

- ▶ To give the best on customer services
This project will concentrate on the customer services. Each user has unique needs and variety of requested location. This project will provide every user with the highest level of service.
- ▶ To apply wireless application in daily life
System developer is intends to apply wireless application to solve the problems. This application is very suitable to be applied in searching for a location. Furthermore, the user will get familiar with this growing technology in order to solve their daily problems.
- ▶ To promote the fast food organizations to public
In general, this project will promote the fast food organizations to public. By using this locator services, people will notices all the existent fast food outlets that is operated in Malacca.
- ▶ To promote the Malacca tourism industry
This project will also introduce Malacca to the tourist either local or foreigners. The user will get the maps and scenic routes when they requested for a fast food location. Indirectly, the user may also want to know others interesting places and this will increase the tourism industry in Malacca.

1.4 Scopes

E-Locator2u will concentrate on wireless application. This project will be using the WAP browser known as Openwave Simulator, WML as the main language and PHP as the server-side scripting.

For this phase, the output of the project will be displayed in Openwave Simulator. This means that this project is only the simulator version to perform client request. User may have to specify their current location and the simulator will find the best solution to get to the nearest fast food outlets. The selected fast food outlets are KFC, A&W, Mc Donalds, Shakey's Pizza, Pizza Hut and US Pizza and only operated in Malacca.

The user for this project will come from variety of age, gender and nation. It is also open to the tourists or any local peoples who visit the Malacca. Besides that, this project can be used by all people who wish to know the fast food outlets in Malacca. This project can also be accessed by handheld device such as cell phone that supports WAP application.

The software that will be implemented in this project WML and Openwave Simulator. This software had been used to perform the wireless application. Beside that, MySQL and MySQL-Front will be implemented in the system database application. Besides, the other applications such as Apache for server and Adobe Photoshop will be used to support the needs of system.

1.5 Contributions

Every system development has its own contributions in many aspects. The system developer would like to list out clearly about the project contribution or significance to user, organization and others. By doing this, the most important value in the project will be traced out. The project significances can be categorized as below:

► Significance to the user

This system will simplify user's task in terms of finding for a fast food locations. By the WAP applications and other good services of this system, the user will just have to state their current locations and the system will give the best solution for them. This method will save the time and effective to be use.

► Significance to the organizations

The system will give a lot of benefits to the fast food organizations. This includes of promoting the fast food outlets to users and increasing the demand for fast food products especially in Malacca.

► Significance to state and country

The demand for new technology has increasing nowadays in Malaysia. Therefore, WAP application that used to be applied to the system will be the most wanted application in order to solve the problems. The idea of implementing the searching for locations in handheld device will be one of the most requirements for the country. Indirectly the system will also promote the tourism industry in Malacca and Malaysia as well.

1.6 Expected Output

The last stage of this project development will be the output to be delivered to the user. The system developer had expected that all the main functions of E-Locator2u will be working as planned. The expected output of this project will be the nearest fast food location based on current user location.

Basically, the user will query on the direct map to get to their selected fast food outlets. The system will be then giving the best solution on getting to that selected place as for the response. This response will be sent directly to the user's devices which is handphone as for the output. There will be a graphical map which has the important source and direct route of fast food location. This map will be displayed in the Openwave screen as for the output.

1.7 Conclusion

Chapter 1 had discussed about the overview of E-Locator2u. This wireless application project will provide the location of fast food outlets as requested by users. It will simplify the user's task in terms of finding for a desired fast food outlets.

There are several objectives need to be achieved for this project. This including providing a new idea of location service provider, giving the best on customer services, applying the wireless application in daily life, to promote the fast food organizations to public and to promote the Malacca tourism industry.

E-Locator2u will concentrate on finding fast food outlets around Malacca town and Ayer Keroh. The selected fast food outlets are KFC, A&W, Mc Donalds, Shakey's Pizza, Pizza Hut and US Pizza. Beside that, the system development has its own contribution and significance in many aspects which are significance to the user, organization, state and country.

Based on the current situation, many problems have arisen during the user's routine life. For instance, there is no graphical map provided and no information on direct route whenever the user browses on the Internet. This has led the system developer to the new idea of implementing this project. It is hoped that the system will deliver the best output in order to solve the problem and simplify the user's task.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

Generally, all the important sources will be retrieved via Internet, fast food organizations and other methods of research such as interviewing and surveying.

A lot of information can be traced out in many web pages via Internet. This information however, must be sorted properly to satisfy the project needs. There are varieties of web pages that give details information about WAP, WAP browsers, WML sources and so on.

Besides that, the system developer will need to study on menus and get details of it from all the selected fast food organizations. These menus will be the input in menu selections in the system.

Moreover, the system developer will also do some interviewing and surveying during the initial stage of development for the project. The questionnaire will also be given to public in order to get the feedback from user.

There are a lot of purposed from the former research. This includes getting the main requirement for system, to identify the current problems and also to upgrade the performance of current system. The former research will be the main resources for this project. It will collect all the important resources and can be applied to the new project.

Beside that, the former research can retrieve the best services or other function that been offered in the recent project. By getting this information, the system developer will easily trace out the comparison between the recent project and the new ones.

2.2 Fact and Finding

In order to develop the project, the system developer will gathered all the theory and information based on former research to be applied in the project. This is the main important part in doing a research of the project. The system developer had doing the case study and listed it as below:

2.2.1 WAP Application Architecture

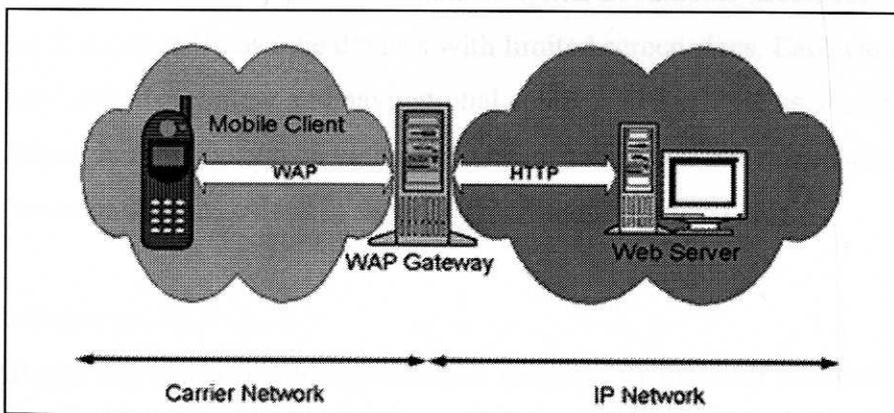


Figure 2.1: WAP Application Architecture