WAP-based Library Services and Online E-book Service for Rural Community

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WAP-based Library Services and Online E-book Service for Rural Community

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ABSTRACT

Both the wireless data market and the Internet are growing very quickly and are continuously reaching new customers. The explosive growth of the Internet has fuelled the creation of new and exciting information services. Many rural people are not able to enjoy facilities and opportunities to improve their quality of lives as those in the urban. Thus the goals of this research were to develop library services application for rural community using WAP and Web technologies. The development process and problems encountered when designing the prototype were discussed. The usability testing conducted in this research revealed the application is effective.

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LIST OF ABBREVIATIONS

ASP.NET: Active Server Pages
CIDA: Community and Individual Development Association
DANIDA: Danish International Development Agency
E-Book: Electronic Book
E-Centres: Electronic centres
E-Learning: Electronic Learning
E-Mail: Electronic Mail
FAO: Food and Agriculture Organization
HREOC: Human Rights and Equal Opportunity Commission
HTTP: Hypertext Transfer Protocol
ICT: Information and Communication Technology
ICT4D: Information and Communication Technology for Development
IDRC the International Development Research Centre
IT: Information Technology
ITU: International Telecommunications Union
ITC: International Association of Telecentres
IS: Information System
LS: Library Service
PC: Personal Computer
PDA: Personal Digital Assistant
TV: Television
UUM: Utara University Malaysia
UNDP: United Nations Development Programme
U.S: The United States
USA: The United States of America
UN: United Nations
UNESCO: United Nations Organisation for Education, Science, Culture and Communications'
UML: Unified Modeling Language
URL: Unified Modeling Language
WAP: Wireless Application Protocol
Web: World Electronic Broadcast
WHO: World Health Orgnization
WML: Wireless Markup Language
WWW: World Wide Web
XML: Extensible Markup Language
GPRS: General Packet Radio Services
ISP: Internet Service Provider

CHAPTER ONE

INTRODUCTION

1.1 Introduction

WAP is defined as an open specification that offers a standard method to access Internet based services and content using wireless devices such as mobile phones and PDAs. The WAP model is very similar to the traditional desktop Internet. WAP is also can be defined as an enabling technology that will bridge the gap between the mobile world and the Internet world, bringing sophisticated solutions to mobile users, independent of the user and network (Salvatore, 2006).

Web services; usually include some combination of programming and data, which are made available by web server for web users and other web connected programs. The accelerating creation and the availability of these services is a major computing trend as software is becoming increasingly distributed and also web-based. Web services are the next logical step for web-based computing and will have a great impact in the future on the way business is conducted on the web. As web services involve many different systems that communicate with each other, they are particularly important following the proliferation in the range of computing devices (PCs, PDA's mobile telephones, hand held computers etc). Web services extend the WWW infrastructure to provide the means to make software connect to other software applications. Applications can access Web services via ubiquitous Web protocols and data formats such as XML and HTTP, with no need to worry about how each Web service is

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