

**EXPLORING HEALTH INFORMATION USING WAP TECHNOLOGY:  
MATERNITY AND CHILDREN GUIDE**

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EXPLORING HEALTH INFORMATION USING WAP TECHNOLOGY:  
MATERNITY AND CHILDREN GUIDE

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## **Abstract**

The present study attempts to investigate WAP based application for pregnancy and after the birth of the baby. The system highlights the development of the fetus to the pregnant mother and the required physical exercises that the mother should go through during pregnancy. The system also provides information regarding the child's immunization which can be stored for future reference or course of action. This entire information is made available to the mothers through their mobile devices throughout the process. The system is evaluated by enabling selected respondents to test drive the developed prototype. The findings show that the respondents consider the benefit, usefulness, and ease of use of the Maternity and Children Guide (MCG).

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## List of Abbreviations

AnC	Antenatal Care
ARIs	Acute Respiratory Information
ASP	Active Server Pages
BLS	Basic Life Support
CHF	Congestive Health Failure
ECG	Electrocardiogram
EMD	Electronic Miscellaneous Document
GMDS	General Methodology Design Science
GSM	Global System for Mobile communication
HDML	Handheld Devices Markup Language
HTML	Hyper Text Markup Language
HTTP	Hyper Text Transfer Protocol
ICT	Information and Communication Technology
IEC	International Engineering Consortium
IEHMS	Integrated Emergency Healthcare And Medication Information System
IEEE	Electrical and Electronic Engineers
IT	Information Technology
MBTS	Mobile Based Bus Ticketing Service
MCG	Maternity and Children Guide
MIME	Multipurpose Internet Mail Extensions
MIDP	Mobile Information Device Profile
MMS	Multimedia Messaging Service
MOH	Ministry Of Health
PDA	Personal Digital Assistants
PHC	Primary Health Care
PnC	Postnatal Care
RAD	Rapid Application Development
SMS	Short Message Service
TCP/IP	Transmission Control Protocol/Internet Protocol

TLS .....	Transport Layer Security
UDP.....	User Datagram Protocol
UML.....	Unified Modeling Language
VPN.....	Virtual Private Network
WAE .....	WAP Application Layer
WAP.....	Wireless Application Protocol
WBMP .....	Wireless Bit Map Protocol
WDP.....	Wireless Datagram Layer
WHO .....	World Health Organization
WML.....	Wireless Markup Language
WMLS.....	Wireless Markup Language Script
WSE.....	WAP Session Layer
WSP .....	Wireless Transaction Layer
WTE.....	WAP Transaction Layer
WTLS.....	Wireless Transport Layer Security
WTP .....	Wireless Transection Layer
XML.....	Extensible Markup Language

# **CHAPTER ONE**

## **INTRODUCTION**

The chapter presents the general explanatory view of the study. It introduces the topic of study and elaborates on the problem statement. It also includes the research questions and the study's objectives. This is followed by the significance of the study and the final part deals with the content organization of the chapters.

### **1.1 Introduction**

The dynamic and significant development of Internet and communication technologies during the past two decades has transformed the lifestyle of human beings all over the world. People residing in urban and rural areas have similar access to lifestyles of high quality owing to the presence of communication technologies' improvement of education, health and economics of people residing in all parts of the world.

The number of mobile phone users in the world was recorded around 2.2 billion in 2005 and the number of Internet users was reported to be 1 billion (ITU, 2006). This development in the usage of phones has resulted in the development of mobile's reach to a wider population. Equipped with higher speed, easy usage and affordable rates, subscribers to mobile phones are enabled to acquire high quality pictures, multimedia content like movies and news and they are also enabled to connect to the Internet. Along the same lines, relevant and accurate information regarding pregnancy can be accessed through mobile phones at any time or place. The service

The contents of  
the thesis is for  
internal user  
only

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