INTERACTIVE BOOK PRACTICES OF PREGNANCY FOR MUSLIMAH

NOR SYAFFIHAH BINTI ZAMANI

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

This report is submitted in partial fulfillment of the requirement for Bachelor of Computer Science (Media Interactive)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2016

BORANG PENGESAHAN STATUS TESIS

JUDUL: INTERACTIVE BOOK PRACTICES OF PREGNANCY FOR MUSLIMAH

SESI PENGAJIAN: 2015/2016

Saya NOR SYAFFIHAH BINTI ZAMANI mengaku membenarkan tesis (PSM/Sarjana/Doktor Falsafah) ini disimpan di Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dengan syarat-syarat kegunaan seperti berikut:

1. Tesis dan projek adalah hakmilik Universiti Teknikal Malaysia Melaka.
2. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan untuk tujuan pengajian sahaja.
3. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan tesis ini sebagai bahan pertukaran antara institusi pengajian tinggi.
4. ** Sila tandakan (/)

_____ SULIT (Mengandungi maklumat yang berdarjah keselamatan atau kepentingan Malaysia seperti yang termaktub di dalam AKTA RAHSIA RASMI 1972)

_____ TERHAD (Mengandungi maklumat TERHAD yang telah ditentukan oleh organisasi/badan di mana penyelidikan dijalankan)

_/____ TIDAK TERHAD

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

(TANDATANGAN PENULIS)

Alamat tetap : LOT 874 TMN TAYA, JLN. RAJA PEREMPUAN ZAINAB 2, 16150 KOTA BHARU, KELANTAN.

Tarikh : 23/8/2016

(TANDATANGAN PENYELIA)

Muhammad Helmy Bin Emran

Tarikh : 24/8/2016

MUHAMMAD HELMY BIN EMRAN
Pensyarah
Fakulti Teknologi Maklumat dan Komunikasi
Universiti Teknikal Malaysia Melaka (UTeM)

DECLARATION

I hereby declare that this project report entitled

INTERACTIVE BOOK PRACTICES OF PREGNANCY FOR MUSLIMAH

is written by me and is my own effort and that no part has been plagiarized without citations

STUDENT : _____ Date : 23/8/2016

(NOR SYAFFIHAH BINTI ZAMANI)

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

I hereby declare that I have read this project report and found this project report is sufficient in term of scope and quality for the award of

Bachelor of Computer Science (Media Interactive) With Honours

SUPERVISOR : _____ Date : 23/8/2016

(MUHAMMAD HELMY BIN EMRAN)

MUHAMMAD HELMY BIN EMRAN
Pensyarah
Fakulti Teknologi Maklumat dan Komunikasi
Universiti Teknikal Malaysia Melaka (UTeM)

DEDICATION

I dedicate this thesis to my beloved family for guiding me with efforts and love which enabled me to reach at this level. Encouragements and praysof day and night make me able to get such successfully work in this project.

Also all those who have supported, encouraged, motivated, and inspired me for giving such good work in this thesis.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

ACKNOWLEDGEMENTS

In the name of Allah, the Entirely Merciful, the Especially Merciful. Peace and blessings be upon his most beloved prophet muhammad ibni abdullah, a member family of the blemish and his companions of the selected. I extend gratitude to illahi because the consent of grace and guidance enabled me to complete my final year project.

My deepest appreciation and thanks to En. Muhammad Helmy Emran for giving assistant to complete this project successfully.

Millions of thanks to the parents who helped give the support and motivation during produce this project.

Thanks to friends who assisted in the completion of this project with more perfect especially my housemates.

Not forgetting thanks to people who always give motivate and support in completing this project more smoothly.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

ABSTRACT

Every year there are recorded of pregnant woman increase from year to year. Every women experience pregnancy different from one to other and from one person to another. Healthcare information during pregnancy is very important to avoid any possibility of the baby in the womb. Media technology is the best platform to disseminate information about pregnant women.

Difficulty to get information about practise that can be performed by pregnant women according to Islamic based. Most of the information obtained did not include the entire practises performed by pregnant women. Scope covers pregnant women which practicing lifestyle according to the sunnah. Its more focus into Muslims which want to practise according to sunnah and Islam.

In developing this interactive book of pregnancy using instructional model is ADDIE. Analysis, where in this phase, to carry out analysis of existing interactive book entitled about pregnancy. Design, where in this phase to know what equipment will be used to build this application. Development where from the data collected previous phase and used to develop interactive book. Implementation where in this phase, the Pregnancy Interactive Book is released to get feedback from pregnant women on the acceptance. Evaluation, where in this phase, ensuring that what is required to be achieved according to it delivered.

The testing held with users using the interactive book and answer questionnaire is provided. The pregnant women can provide suggestions and comments about interactive book that has been used. This testing needs 10 respondents and a content expert.

The pregnant women can know the pregnancy using an interactive book that meets all the required information about pregnancy. With contribution of interactive books can improve interactive books available with more information and contains about Islamic practices. User can understand in more detail about the pregnancy and make it as a daily reference.

ABSTRAK

Setiap tahun direkodkan peningkatan wanita mengandung dari tahun ke tahun. Setiap wanita hamil mengalami pengalaman yang berbeza. Maklumat penjagaan kesihatan semasa hamil adalah sangat penting untuk mengelakkan sebarang kemungkinan permasalahan bayi di dalam rahim. Teknologi media adalah platform terbaik untuk menyebarkan maklumat mengenai wanita hamil.

Kesukaran untuk mendapatkan maklumat tentang amalan yang boleh dilakukan oleh wanita yang hamil mengikut ajaran Islam. Kebanyakan maklumat yang diperolehi tidak termasuk amalan keseluruhan yang dilakukan oleh wanita hamil. Skop wanita hamil meliputi mengamalkan gaya hidup yang mengikut sunnah. Tumpuan yang lebih kepada Muslim bagi mengamalkan mengikut sunnah dan Islam. Dalam membangunkan buku interaktif kehamilan ini menggunakan model pengajaran ADDIE. Analisis, di mana dalam fasa ini, untuk menjalankan analisis sedia ada mengenai buku interaktif bertajuk tentang kehamilan. Rekabentuk, di mana dalam fasa ini tahu apa peralatan yang akan digunakan untuk membina aplikasi ini. Pembangunan di mana data yang dikumpul fasa sebelumnya dan digunakan untuk membangunkan buku interaktif. Pelaksanaan di mana dalam fasa ini, buku interaktif kehamilan dikeluarkan untuk mendapatkan maklum balas dari wanita yang hamil berdasarkan penerimaan. Penilaian, di mana dalam fasa ini, memastikan bahawa apa yang perlu dicapai mengikut keperluan wanita hamil.

Ujian diadakan dengan wanita hamil yang menggunakan buku interaktif dan menjawap soal selidik yang disediakan. Wanita hamil boleh memberikan cadangan dan komen tentang buku interaktif yang telah digunakan. Ujian ini memerlukan 10 responden dan seorang pakar kandungan. Wanita hamil boleh mengetahui kehamilan menggunakan buku interaktif yang memenuhi semua maklumat yang diperlukan tentang kehamilan. Dengan sumbangan buku interaktif dapat meningkatkan buku-buku interaktif yang tersedia dengan maklumat lebih lanjut dan mengandungi mengenai amalan Islam. Pengguna boleh memahami dengan lebih terperinci tentang kehamilan dan menjadikannya sebagai rujukan harian

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

TABLE OF CONTENTS

CHAPTER	SUBJECT	PAGE
	DECLARATION	**iii**
	DEDICATION	**iv**
	ACKNOWLEDGEMENTS	**v**
	ABSTRACT	**vi**
	ABSTRAK	**vii**
	TABLE OF CONTENTS	**viii**
	LIST OF TABLES	**xii**
	LIST OF FIGURES	**xiii**
	LIST OF ABBREVIATIONS	**xv**
CHAPTER I	**INTRODUCTION**	
	1.1 Project Background	1
	1.2 Problem Statement	3
	1.3 Objectives	3
	1.4 Scope	4
	1.5 Project Significance	4
	1.6 Expected Output	5
	1.7 Conclusion	5

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

CHAPTER II LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction 6

2.2 Domain 7

2.3 Existing System 8

2.3.1 Comparison Of Existing System 10

2.4 Project Methodology 11

2.4.1 Instructional Design 12

2.5 Project Requirement 15

2.5.1 Software Requirement 15

2.5.2 Hardware Requirement 16

2.6 Conclusion 16

CHAPTER III ANALYSIS

3.1 Current Scenario Analysis 17

3.2 Requirement Analysis 20

3.2.1 Project Requirement 20

3.3 Project Schedule and Milestones 22

3.4 Conclusion 22

CHAPTER IV DESIGN

4.1 Introduction 24

4.2 System Architecture 25

4.3 Preliminary Design 26

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

4.3.1 Storyboard Design 26

4.4 User Interface Design 27

4.5 Conclusion 30

CHAPTER V IMPLEMENTATION

5.1 Introduction 31

5.2 Media Creation 31

5.3 Media Integration 34

5.4 Product Configuration Management 35

5.5 Implementation Status 35

5.6 Conclusion 36

CHAPTER VI TESTING

6.1 Introduction 37

6.2 Test Plan 37

6.2.1 Test User 37

6.2.2 Test Environment 38

6.2.3 Test Schedule 38

6.3 Test Strategy 39

6.4 Test Implementation 39

6.4.1 Test Description 39

6.4.2 Test Data 40

6.5 Test Result and Analysis 42

6.6 Analysis Testing 43

6.7 Conclusion 54

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

CHAPTER VII CONCLUSION

7.1 Observation on Weaknesses and Strengths 55

7.1.1 Weaknesses 55

7.1.2 Strengths 56

7.2 Propositions for Improvement 56

7.3 Project Contribution 56

7.4 Conclusion 56

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

LIST OF TABLES

TABLE	TITLE	PAGE
2.1	Comparison of Existing System	10
2.2	Chapter in Pregnancy Interactive Book	14
3.1	Software Requirement	22
3.2	Hardware Requirement	23
4.1	Design of Storyboard	28
5.1	Configuration Management	37
5.2	Status of Implementation	37
6.1	Schedule of Testing Activities	40
6.2	Details of Content Expert	42
6.3	Testing from Respondent	44
6.4	Respond from Content Expert	53

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

LIST OF FIGURES

TABLE	TITLE	PAGE
2.1	eBook of The Pregnancy Book	8
2.2	Amalan & Nasihat Bagi Ibu Hamil	9
2.3	Apps of eBook Panduan Kehamilan Muslimah	10
2.4	Course Map of Pregnancy Interactive Book	13
3.1	Flowchart of eBook The Pregnancy Book	18
3.2	Flowchart of Amalan & Nasihat Bagi Ibu Hamil	19
3.3	Flowchart of Panduan Kehamilan Muslimah	20
3.3	Project Schedule and Milestones for PSM 1	24
3.4	Project Schedule and Milestones for PSM 2	24
4.1	Flowchart of The Pregnancy Interactive Book	27
4.2	Site Map of Interactive Book	30
4.3	Template Design	32
5.1	Example of Text	34
5.2	Example of Image	34
5.3	Example of Audio	35
5.4	Example of Video	36
5.5	Example of 2D Animation	36
6.1	Images of Content Expert	42
6.2	Images of Half from Respondent	43
6.3	Times of Pregnant Respondent	46

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

6.4	**Knows about Interactive Book**	**46**
6.5	**Read Interactivee Book**	**47**
6.6	**Respondent Prefer on Reference**	**48**
6.7	**Frequency of Question 1**	**48**
6.8	**Frequency of Question 2**	**49**
6.9	**Frequency of Question 3**	**49**
6.10	**Frequency of Question 4**	**50**
6.11	**Frequency of Question 5**	**50**
6.12	**Frequency of Question 6**	**51**
6.13	**Frequency of Queston 7**	**51**
6.14	**Frequency of Question 8**	**52**
6.15	**Overall Mode of Questions**	**52**
6.16	**Respond of Question from Content Expert**	**53**

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

LIST OF ABBREVIATONS

pdf	-	portable document format
eBook	-	electronic book
dslr	-	digital single lens reflex

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

CHAPTER I

INTRODUCTION

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

1.1 Project Background

Every year there are recorded of pregnant woman increase from year to year. Every women experience pregnancy different from one to other and from one person to another. Healthcare information during pregnancy is very important to avoid any possibility of the baby in the womb. Media technology is the best platform to disseminate information about pregnant women. The rampant uses of media technology allows all the information can be delivered successfully. Therefore the creation of interactive books to enable pregnant women get pregnant references. This system provides information about practises that can be adopted by pregnant women during pregnancy. This system also facilitates the pregnant women to obtain information about Islamic practises in which can be practiced such as readings of dua, surah in the Al Quran, food taken according to sunnah, practises of ziqr and so on. Nearly all pregnant women difficult to get information about the practises that should be done during pregnancy and difficult to get information about

practises that can be performed by pregnant women according to Islamic based. That is all the reason for developing this system to make easily for pregnant women to get information about practises during pregnancy. Send this information directly to pregnancy is an innovative way to empower women about practises for taking action to improve their own health and wellness of baby in the womb. Besides that, it provides the initial setup for the newly pregnant for the first time pregnancy. From literature review research most of the pregnant women search and use their media technology to get any information about their experience pregnancy. Media technology spread widely information and may be searched at any time in worldwide area. Using technology to reach mothers directly with health information customized to their stage of pregnancy or the age of their baby is not theoretical nearly 25 million mothers around the world receive these types of messages through the Internet; hundreds of thousands of mothers receive them on their phone – "*Shadrack Kioko, October, 2012".* Think about the lifestyle factors that might affect your ability to get pregnant and have a healthy pregnancy – "*The Pregnancy Book, COI Department of Health,2009".* Most of the pregnant women difficult to get accurate information about practices that need to be done by pregnant Muslim. Includes all the important elements to be used as a guide in daily practices for pregnant women. By using this interactive book, making it easy for pregnant women to use them at any time with the input that is so compact and accurate. Target user for the application is for pregnant women from early pregnant until due to labour. From the research making it will be conclude that never find any interactive book of pregnant women according to sunnah and Islam method. Information will be collect from many kinds of books. Furthermore, it will be commercial widely without having any competitor.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

1.2 Problem Statement

A challenge for first-time pregnant mothers acquires the experience of pregnant so difficult to get any information about pregnancy. Nearly all pregnant women difficult to get information about the practises that should be done during pregnancy. Pregnant women get information about baby in the womb through pregnancy book, find information on the internet and advice from parents. Almost the whole of the information obtained on the internet did not include Islamic-based. Difficulty to get information about practise that can be performed by pregnant women according to Islamic based. Most of the information obtained did not include the entire practises performed by pregnant women. Some of it has a lot of information gained in the form of a print-out that is so long of its information and most pregnant women in favour of reading using media technology that can be read at any time. In addition it is hard to get information about the practises according to Islamic guidelines that require references from people who are more knowledgeable in religion. Moreover, by developing this application can overcome problems faced by pregnant women who are experiencing difficulties in getting accurate information. With the hope that more pregnant women use this application with extensive. Hope more pregnant women are aware to practise life during pregnancy according to good practice.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

1.3 Objectives

This project embarks on the following objectives:

a. To study of practises needed by pregnant women and interactive book in pregnancy lesson.
b. To develop interactive book for providing practises of pregnant women information according to Islamic way.
c. To test the acceptance of interactive books towards pregnant mother.

1.4 Scope

Scope covers pregnant women which practicing lifestyle according to the sunnah. Its more focus into Muslims which want to practise according to sunnah and Islam. All pregnant women in all country may use of this interactive book because others country also having Muslims so they may practise of it. In this interactive book using English British because mostly using this language as a second language. In develop this interactive book, using Adobe Photoshop for editing images and vector images using Adobe Illustrator. Also using Adobe Premiere for making editing video. Combine all the content into Adobe Indesign. Using Audacity for editing mp3 of surah and dua that will be include in this interactive book. This application will be test into dekstop and smart phone which view in PDF. It to be ensure that all gadget will be display and view of it. Interactive book will be published into media technology by using smart phone, personal computers and others.

اونيۏرسيتي تيکنيکل مليسيا ملاک
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

1.5 Project Significance

Pregnant women will get benefit by an interactive book will be produce. This interactive book contains a variety of information such as mental preparations for the birth awaited by pregnant women. The information obtained can be used as a daily guide for pregnant women. With the availability of interactive books issued can help pregnant women to take the information needed for daily use. Change the way presentation of information into the form of increasingly sophisticated technologies by facilitating for pregnant women. Help more pregnant women to find information about pregnancy with filling according to Islamic.

1.6 Expected Output

Build applications interactive book that can be used on all pregnant women. Interactive book will be view on PDF format. Mostly pregnant women spend their time at workplace so by the lunch hour can be filled by reading surah, dua and ziqr. Publish into application where easy to get it and download. With the hope that pregnant women get benefit from interactive book produced specifically for Muslim women pregnant and turned into daily practises. Hoping that most of pregnant women using interactive book to be used as a daily guide.

1.7 Conclusion

Conclusion the majority of pregnant women difficult to get accurate information about practices that need to be done during pregnancy. In addition difficult to get application that contain all the information in the same application which need to download in different application. By developing this application can help pregnant women to get a good practice during pregnancy. Interactive book is an application where mostly used nowadays to get full information with attractive design which attract to use it and as a guide in lifestyle. Media platforms is the best way to obtain all the information and many use it widely.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

CHAPTER I I

LITERATURE REVIEW AND PROJECT METHODOLOGY

UNIVERSITI TEKNIKAL MALAYSIA MELAKA
UTeM
اونيۏرسيتي تيکنيکل مليسيا ملاک
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2.1 Introduction

Interactive book of practices for pregnant women according to Islamic way. It also include multimedia elements which attract to use it. Muslim pregnant women may use this interactive book where include hadith, surah, dua' and ziqr to practice in daily life. Most of the information in pregnancy not directly clear and difficult to get it in Islamic practices in daily life. Pregnant women experience difficulty to find an accurate information about pregnancy guides. Develop interactive book to improve a traditional method from read of the book into viewing into devices. It will be view into PDF for making easier to read anywhere and attract to use it. According to Riwayat Thabrani says "Women who are pregnant and give breastfeed until runs out of time breastfeeding as fighter in the front lines of fi sabiilillah. And if it is passed between the time indeed for him the reward of martyrs". According to Riwayat Ahmad dan Baihaqi says "One of the blessing women is it quickly of marriage, fast of pregnancy (childbirth) and low of dowry".

2.2 Domain

Interactive book is an application that uses methods of reading through a technology that can be used for learning process and contains elements of the media to attract readers to read the reading materials. Interactive book contains audio, video, animation, graphics and text make it easier for readers to understand what is delivered. Reading material is available everywhere through the existing books and applications of cell phones. Existing books should be purchased with large quantities due to necessary information requires different book genre to obtain various types of information. With the existing technology can be used to facilitate the recovery of information. According to Philip Webb (2012), interactive books offer such tantalising advantages over traditional print that it is easy to be seduced into thinking that the reading experience can only be improved by the introduction of interactions. Therefore women pregnant just using interactive book for getting necessary information. Information about care during pregnancy with accordance through the Islamic method.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

Pregnancy is the process of fertilization between the egg with a sperm that merged to become the fetus in the mother's stomach. Implanted in the lining of the uterus that builds into placenta and embryo then subsequently in the fetus. According to Christian Nordqvist (2014), pregnant is a male sperm penetrates an egg and fertilizes it and usually happens in the woman's fallopian tube after ovulation (the matured egg was released from one of her ovaries). Based on Islamic faith, according from al quran 3:6 mention that Allah it is Who shapes you in the wombs as He pleases. There is no god but He, the Exalted in Might, the Wise. It explains about the formation of the fetus in the mother's womb with the will of the Most Gracious. Its also include basic practices which pregnant women may do in daily life. Then, Muslimah pregnant women suitable to use this interactive book where contains related into Islamic.

2.3 Existing System

There are many electronic book about pregnancy where may get from online and apps from Google Play Store. Rafferty, Alex Hallat, Anne Wadmore & Florence Woolgar(2009).“The Pregnant Book”.United Kingdom:COI Department of Health. In The Pregnant Book explain more details about pregnancy. It also include images and colourful text to attract user. Provided link on the side which may into the others chapter. This using PDF format to view it.

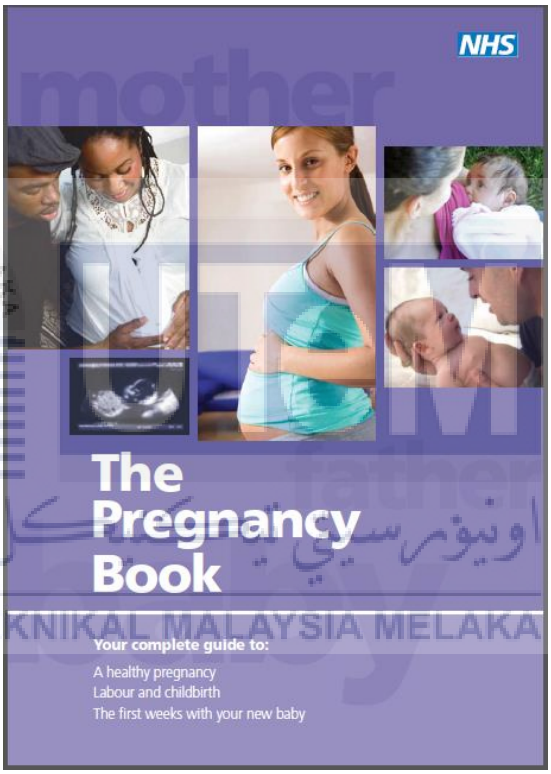

Figure 2.1 eBook of The Pregnancy Book

Another existing book is Fatimah Hj. Omar.2015.”Amalan & Nasihat Bagi Ibu Hamil.”2nd edition. Selangor:Al-Hidayah. In this book content many information where good for Muslimah in pregnancy. Its provide guide in pregnancy start from pregnant until labour. Furthermore, provide the good names for babies in Islam meaning. It also include hadith which relate into any explaination that support on the statement. Its contains more about Islamic during pregnancy where may practices in daily life.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

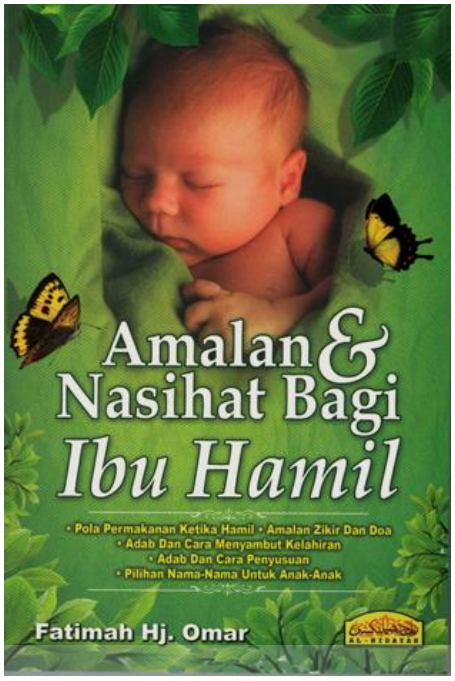

Figure 2.2 Amalan & Nasihat Bagi Ibu Hamil

There is also another existing electronic book in Google Play Store. Dr.H.Imam Rasyidi. ”Panduan Kehamilan Muslimah.”3rd edition.Jakarta: Reproduction and Women Health.This eBook need to download from Play Store and view in any devices. It contains a lot of information start from how to get pregnant until labour with complete explaination. Contains text and some pictures with black and white theme.Viewing as a PDF format.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA