

**i-BANK QUESTIONS (iBQ):
MULTIPLE CHOICE QUESTION (MCQ) PAPER**



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

BORANG PENGESAHAN STATUS TESIS

JUDUL : i-Bank Questions System: Multiple Choice Question Paper
SESI PENGAJIAN : 2015/2016


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**i-BANK QUESTIONS (iBQ):
MULTIPLE CHOICE QUESTION (MCQ) PAPER**



This report is submitted in partial fulfilment of the requirements for the
Bachelor of Computer Science (Database Management) with Honours

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2016

DECLARATION

I hereby declare that this project report entitled
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is written by me and is my own effort and that no part has been plagiarized
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DEDICATION

This final project is dedicated

To my beloved father and mother, En. Ahmad Faris Draman and Pn. Norlida Nasaruddin
who always pray, support and give me inspiration, motivation and advices

To my respected supervisor, En. Yahya Ibrahim
who has guided me through this project

To my supportive brother, Anas Nasri Ahmad Faris
who always provide spaces in helping me to finish this project

And to my fellowship friends for all the co-operation and knowledge sharing in
completing this project.

اونيورسيتي تېكنيكل ماليسيا ملاك
Thank you very much

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ABSTRACT

i-Bank Questions (iBQ) System is one of the platform for teacher and non-teacher to upload their question to the worldwide. This iBQ system coverage primary and secondary school. All teachers and non-teachers are able to forward their speciality in making a good questions and the worldwide will acknowledge them regarding to their question. To attract them making and making a good question, the system will automatically reward the uploader based on number of upload question for each uploader. Besides, this system also provide search. iBQ System is using Model-View-Controller (MVC) Architecture. Software that involve in this project development are Eclipse Java EE IDE Luna, Apache Tomcat, Notepad++, Oracle SQL Developer, Oracle 9i Edition, Windows 8.1 and Google Chrome as web browsers.



ABSTRAK

i-Bank Questions (iBQ) System merupakan satu tempat untuk pengajar dan bukan pengajar memuatnaik soalan mereka di seluruh dunia. *iBQ System* ini merangkumi sekolah rendah dan menengah. Kesemua pengajar dan bukan pengajar berkelebihan mengetengahkan kemahiran mereka dalam membuat soalan-soalan yang bagus dan seluruh dunia dapat mengetahui diri mereka berdasarkan soalan mereka. Untuk menarik minat mereka untuk terus membuat soalan yang bagus, sistem ini akan memberi penghargaan kepada pemuatnaik secara automatik berdasarkan jumlah soalan setiap pemuatnaik. Selain itu, sistem ini juga menyediakan utiliti carian. *iBQ System* menggunakan seni bina *Model-View-Controller (MVC)*. Perisian yang terlibat di dalam pembangunan projek ini ialah *Eclipse Java EE IDE Luna, Apache Tomcat, Notepad++*, *Oracle SQL Developer, Oracle 9i Edition, Windows 8.1* dan *Google Chrome* sebagai pelayar laman sesawang.

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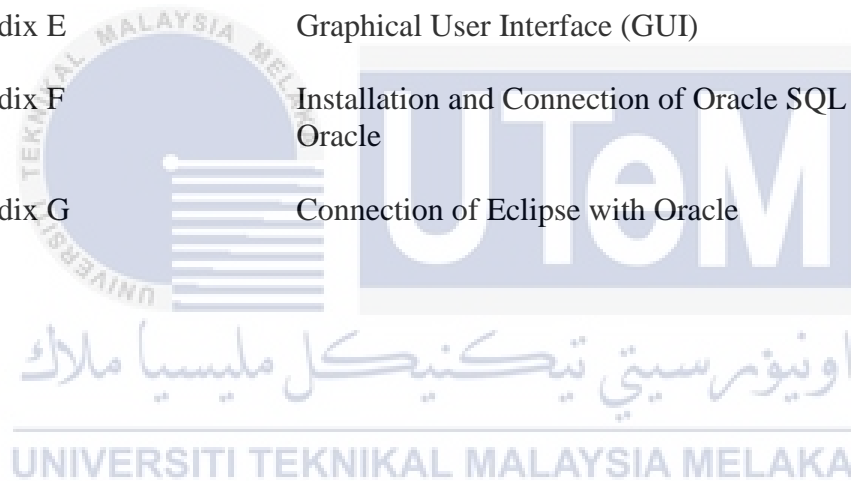


LIST OF ABBREVIATIONS

ASD	-	Agile Software Development Model
DBLC	-	Database Life Cycle
DBMS	-	Database Management System
DDL	-	Data Definition Language
ERD	-	Entity Relationship Diagram
GUI	-	Graphic User Interface
iBQ	-	i-Bank Questions System
JSP	-	Java Server Page
MCQ	-	Multiple Choice Question
MVC	-	Java Model View Controller
RAM	-	Random Access Memory
UTeM	-	Universiti Teknikal Malaysia Melaka

LIST OF ATTACHMENTS

ATTACHMENT	TITLE
Appendix A	Flow Chart
Appendix B	Data Flow Diagram
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Appendix D	Creating Syntax
Appendix E	Graphical User Interface (GUI)
Appendix F	Installation and Connection of Oracle SQL Developer with Oracle
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CHAPTER I

INTRODUCTION



1.1 Project Background

i-Bank Questions (iBQ) is an online system that provide a platform for teachers and non-teachers to upload their questions to the cloud storage so that a worldwide able to refer and use it. This iBQ system coverage primary and secondary school. All teachers and non-teachers are able to forward their speciality in making a good questions and the worldwide will acknowledge them regarding to their questions. It is such a waste if a good questions or a good question makers are not shared or forward themselves to the worldwide. With their speciality in making a good question, these will soaring towards brilliant person of the next generation.

In order to make this iBQ system more interesting and to attract them making and making a good question, the iBQ system will automatically reward the uploader based on number of question upload for each uploader and their name will be list in a special place, likes hall-of-fame, so that whole user will recognise the question maker of the most question upload.

Besides, this iBQ system also provide search utility to ease the uploader and users on searching the specific question for upload and search purpose, either based on primary or secondary school or based on year of study or topic or subtopic or level of difficulty. Lastly, this iBQ system also includes an online examination with auto-marking exam function so that the result will be shown at the end of examination.

1.2 Problem Statements

There are four problems that can be handled by iBQ system. The problems are such as:

- i. **No platform for teachers and non-teachers to upload their questions so that a worldwide can use it.**

Teachers from different schools or places need a lot and multiple kind of questions in order for giving their students exercises with all type of questions.

- ii. **Takes time to know which uploader are the highest number of question upload.**

In order to reward the uploader, each questions must be count correctly so that the reward is giving to the right uploader.

- iii. **Takes time to search specific question.**

Sometimes, not all questions are needed. Only the questions that meet the needed requirements are needed.

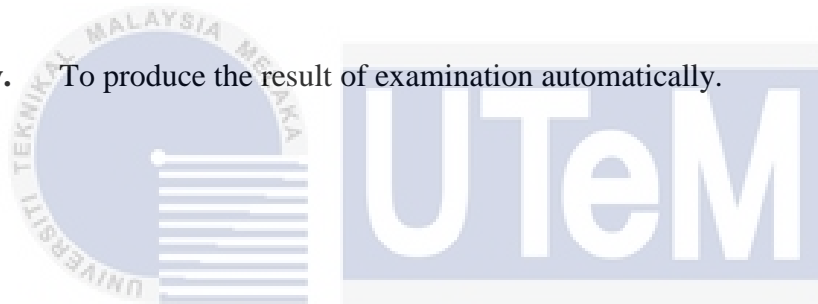
- iv. **Takes time to get result of examination.**

Checking answer sheets takes time but the examination candidates curious to know their result immediately.

1.3 Objectives

The main objectives in this iBQ system are:

- i. To develop a platform for teachers and non-teachers uploading objective questions together with schema.
- ii. To investigate which uploader are the highest number of question upload and automatically awarding them.
- iii. To ease the user searching the specific questions.
- iv. To produce the result of examination automatically.



1.4 Scope

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The scope of iBQ system divided into two categories which are user scope and system scope. User scope is defined who will involve in the iBQ system and system scope is defined what kind of module involves in the iBQ system.

1.4.1 User Scope

The user that will use this iBQ system is Teacher only.

- i. **Teacher**

Teacher have all authority, such as view, add, edit, search and delete towards their questions. Teacher only can view and search other teachers' questions. Teacher can view their profile and uploaders ranking. Teacher also can take examination.

1.4.2 System Scope

The iBQ system scope is based on system modules.

i. Managing the question

This module is for view, add, edit, search and delete questions.

ii. Managing the ranking

This module is for view the uploaders ranking.

iii. Managing the profile

This module is for view the user's profile.

iv. Managing the examination

This module is for taking online examination and auto-marking exam automatically.

1.5 Project Significance

iBQ system is a web based system provides multi-platform viewport which is can be open the system from all devices as long as users open with web browser by google chrome. This iBQ system will provide a platform for uploading questions. As a result, all teachers from worldwide can use and share any questions, that have in this

iBQ system. Besides, there will be no mistake in rewarding the uploader. From search utility, any users able to search specific questions. Lastly, the examination candidates able to get their result immediately with no mistake in checking answer sheet.

1.6 Expected Output

The iBQ system must be fulfil all the objectives which are develop a platform for teachers and non-teachers uploading objective questions together with schema, investigate which uploader are the highest number of question upload and automatically awarding them, ease the user searching the specific questions and produce the result of examination automatically. Besides, the iBQ system must also be easy to use and easy to understand by the user.

1.7 Conclusion

As a conclusion, this chapter covers the initial analysis part of developing iBQ system, which have project background, problem statements, objectives, user scope, system scope, project significance and expected output.

Chapter II will explains about project methodology and planning of the iBQ system. Next chapter will including project schedule and milestones of this iBQ system.

CHAPTER II

PROJECT METHODOLOGY AND PLANNING



2.1 Introduction

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Methodology or in software engineering it is called, software development methodology is viewed as a general framework of phases or activities that is used to structure, plan and control the process of developing a system. iBQ system is used Agile Software Development (ASD) model as a methodology approach on Database Life Cycle (DBLC) in order to develop the system. This is because it able to minimize the risk of failure of the system. In addition, each of it phase always will integrate with the current system and test in order to make sure it is able to synchronize, before continuing developing next step. Generally, there are six stages in agile software development model which are Planning, Analysis, Design, Implementation, Testing and Maintenance. Figure 2.1 shows the ASD model phases.

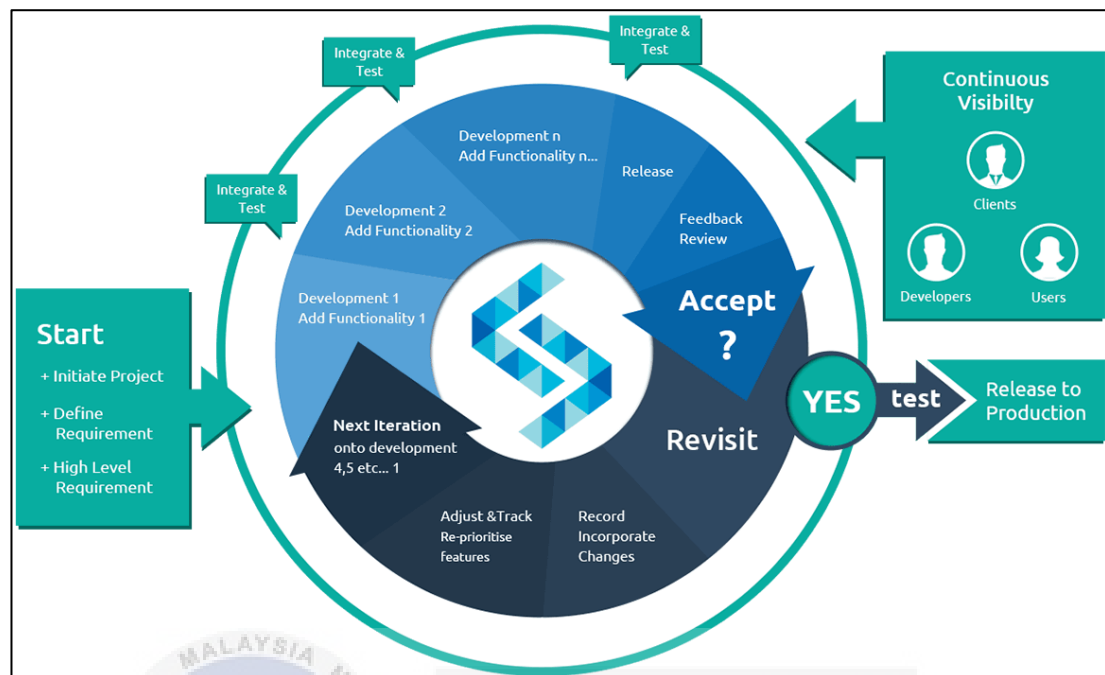


Figure 2.1: Agile Software Development (ASD) Model Phases

2.2 Project Methodology

ASD model and DBLC are related to successfully develop the iBQ system. DBLC also have it phase. There are six phases in DBLC which are database initial study, database design, implementation and loading, testing and evaluation, operation and maintenance and evaluation. Figure 2.2 shows the DBLC phases.