INFOSYS TRAINING PROGRAM SYSTEM (ITPS)

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UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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INFOSYS TRAINING PROGRAM SYSTEM

(ITPS)

YAM HENG YEOW

This report is submitted in partial fulfillment of the requirements for the Bachelor of Computer Science (Software Development)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI TEKNIKAL MALAYSIA MELAKA 2009

DECLARATION

I hereby declare that this project report entitled

INFOSYS TRAINING PROGRAM SYSTEM

(ITPS)

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

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DEDICATION

To my beloved parents, your moral support is my greatest divine inspiration. To my friends, your encouragement is the essence of my determination. To PM Norhaziah Md. Salleh, my supervisor, your recommendations has truly been my source of inspiration in the quest of completing this application. To all my friends, who always give me the moral support and been there whenever I am in need.

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ABSTRACT

Infosys Training Program System or in abbrevitaion ITPS is a web-based system made especially to simplify the management process of the program. Benefits include for the administrator to manage all the records of system users, class management, assignment of instructors, test and schedules. For the instructors, ITPS helps them to create questions for tests, marking up participant test, publishing results and test schedules management. Users of ITPS may take online examination, check results and give feedbacks. Currently, the program management is done on paper-based forms. With the advancement in technology, the management process should move along with the technology. Therefore, ITPS is developed to help all instructors and particiapants in managing and using the program.

ABSTRAK

Infosys Training Program System atau dengan ringkasnya ITPS adalah satu sistem yang berdasarkan web telah dibangunkan dengan tujuan utamanya adalah untuk kemudahan semua pengendalian untuk program tersebut. Kemudahan termasuklah untuk administrator program untuk mengendalikan semua rekod pengguna sistem, pegendalian kelas, pengagihan pengajar, peperiksaan, jadual dan sebagainya. ITPS juga membantu pengajar membuat soalan peperiksaan, permarkahan peperiksaan perserta, pegumuman keputusan dan pengendalian jadual peperiksaan. Perserta program pula mengguna ITPS untuk menjalankan online peperiksaan, penyemakan keputusan dan memberi balas. Pada masa kini, semua pengendalian program dilakukan di atas kertas. Seiring dengan pengembangan teknologi, pengendalian yang diadakan juga perlu bergerak seiring dengan teknologi. Oleh itu, ITPS telah dibangunkan untuk untuk membantu semua pengajar program dan perserta program dalam pengendalian dan peggunaan program tersebut.

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LIST OF ABBREVIATIONS

ASP Microsoft Active Server Pages

DBMS Database management System

Data definition language

ER Entity Relationship

ERD Entity Relationship Diagram

HTML Hypertext Markup Language

ITPS Infosys Training Program System

JDK Java Development Kits

JSP Java Server Pages

OOADM Object Oriented Analysis and Design Method

RUP Rational Unified Process

SCM Software configuration management

SDLC Software Development Life Cycle

SQL Structured Query Language

SSADM Data Flow Diagram

HS Text-to-Speech

Unified Modeling Language UML

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CHAPTER I

INTRODUCTION

1.1 Project Background

The system that is developed is an integrated online examination and web-based system entitled "Infosys Training Program System (ITPS)". ITPS is developed to enhance the management process during Infosys Training Program. This system replaces the manual system which is time consuming and inefficient. The targeted users of the system are mainly program instructors, program administrator, and program participants that are taking Infosys Training Program.

The concept of an online examination system is to allow participants to login and take examinations through the internet. This can ensure fairness during examination since participants can take examination together at the same time without being restricted by place or time. Random question generator is used in this online examination system where the order of the examination questions is different for each

participant. Time limit will be used in this online examination system where participants are required to finish the questions within the time provided.

In the perspective of web-based program management system, ITPS manage all the information of the training program including login, class, program instructors, course module, program participants, questions, marks and schedule during this program.

1.2 Problem Statements

The motivation of this project comes from problems where there is no system that can efficiently help program administrator and program instructors of Infosys Training Program to record and manage all the program information. The problems are as below:

i. Manual Data Record Process

The data related to Infosys Training Program are recorded manually in MS-Excel Worksheets where program administrator needs to fill in each data and these records are kept in files. As amount of data increases, the amount of files also increases. Program instructors need to search the files to get a particular data. Thus, the manual recording and storing of records is not only a waste of time but also waste of space and money.

ii. Manual Participant Examination Process

Below are the problems that occur when examinations are conducted manually:

Time Wasting

the time needed to prepare examination paper is extraordinary long and exhausting. Time needed to collect past year questions, to create questions, to arrange the questions, and to recheck the questions.

Manually Update Mark into Excel Worksheets

Instructor will need to spend a long time marking all the question papers. They also need to update the marks manually into the Excel Worksheets.

Cheating occurs in examination

Chances of participants sharing answers during examination are high as all the questions are printed in the same order

Participants not available to check their result on time

Participants cannot check their results on time. Participants have to wait until program instructors finished marking the papers to know their results.

1.3 Objective

Essentially, the main objective of this project is to develop a web base program management system that helps the program administrator and program instructors during the Infosys Training Program.

i. To Develop an Online System for National Level Infosys Training Program

A computerized management and online examination system is developed to replace the manual process of program management and participants examination where it can be used at the national level.

II. To Develop A Online Examination System

An online examination system is developed to allow participants to take examinations through the internet without being restricted by place and time. Questions in this system are generated randomly for each participant. Participants are required to submit the answers within a time limit that is allowed in this system.

1.4 Scope

In general this system is a web-based application that records and manages all information related to Infosys Training Program and an online examination system for participants.

i Users

The users of the system are:

- Program Instructors
- Program Administrator
- Program participants

ii Modules

The modules of this system are:

Program Management