#### **Examination Management System**

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May 2006

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"This dissertation is submitted in partial fulfillment of the requirement for the Degree of MSc in Information Technology

> of the University of Moratuwa."



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#### Declaration

" I certify that this dissertation does not incorporate, without acknowledgement, any material previously submitted for a Degree or Diploma in any University and to the best of my knowledge and belief, it does not contain any material previously published or written by another person or myself expect where due reference is made in the text. I also hereby give consent for my dissertation. if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations"

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#### Abstract

The project is a proposed examination management system (EMS) for National Institute of business Management (NIBM), Sri Lanka, which is an higher educational institutes under the under the Ministry of youth affairs and skills development. It conducts Information Technology (IT) and management oriented courses from foundation level to higher diploma level. Current Examination Process (EP) of the NIBM is running manually and EMS waste time of students, lecturers, and examination staff and make mistakes unreasonably.

The present paper outlines a proposed online Examination Management System in order to improve the current EP of the NIBM. Through the study of Questioner Survey, it has been identified the six major areas to be developed in the NIBM EMS as exam scheduling, exam registration, exam result view, exam awardees selection, exam transcript generation and exam result analysis. Technology is very important to developing the proposed system. Mainly four types of technologies have been used to address the solution, such that PHP as the programming technology, MYSQL as database management technology, SMS, e-Mail as communication technologies and HTML, CSS as interface design technology. Development of the solution is based on waterfall approach following main steps of requirement gathering, system design, system development and testing.

proposed solution consists of three users as Student, lecturer and examination staff and six main modules to generate the examination schedule, helps students to online register for repeat examinations, to view the examination results of the students easily, to select the awardees of each batch in different courses, to request their transcript online using exam transcript and to analyze the examination results in different views on exam result analysis module. Implementations of the solution needs different requirements as Client computer, server computer, PHP, MYSQL, Mobile Phone, Database, web browser, etc. In the evaluation of the proposed software conducted unit test to check the accuracy of each code segments, system test to test the whole system and user accept testing to test the user satisfaction.

The appraisal of the whole EMS software with reference to my aims and objectives is a better solution as a cost and time effective EMS, shall be used in future examinations in NIBM.

Key words: Examination Management System (EMS), National Institute of Business Management (NIBM)), Information Technology (IT), Short Message Service (SMS).

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## LIST OF ABBRIVATIONS

COE	-	Controller of Examinations
СРА	-	Certified Practicing Accounts
CSS	-	Cascading Style Sheet
DCSD	-	Diploma in Computer System Design
DMC	-	Detailed Marks Cards
EMS	-	Examination Management System
ERP	-	Enterprise Resource Planning
GBP	-	Great Britain Pounds
HDCBIS	-	Higher Diploma in Computer Based Information System
HR	-	Human Resource
HTML	-	Hyper Text Markup Language
IT	-	Information Technology
LAN	-	Local Area Network
MAP	-	My Aston Portal
MIS	-	Management Information System
NIBM	-	National Institute of Business Management
PIN	-	Personal Identification Number
PMD	-	Productivity and Management Development
SMS	-	Short Message Service
UMS	-	University Management System
VTE	-	Vocational and Technical Education
WYSIWYG	-	"What You See Is What You Get"