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JUDUL: COMPETENCY LEVEL EXAMINATION ONLINE SYSTEM (CLEOS)

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This report is submitted in partial fulfillment of the requirements for the
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2007


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 without citations.

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DEDICATION

To my beloved husband,
Abdul Moes bin Mohamed Yusuf.

To my mother and father,
Rosnanee bte Pardi and Rusmani bin Kasimin.

To my son and daughter,
Ahmad Ashraf bin AbdulMoes, Ahmad Hafizuddin bin Abdul Moes, Ahmad Azhan
bin Abdul Moes and Ainun Fatin Mardhiah bte Abdul Moes.
Who inspired me with their love of learning, supporting and teaching.

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Especially to my beloved husband and family, I would like to forward my obliged to them for their continuous support during my study period, their patience and benevolence. Lastly, I would like to thank to everyone who has contributed during my Project Sarjana Muda. Your kindness and cooperation in completion of my paper work is much appreciated.

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ABSTRACT

Competency Level Examination Online System (CLEOS) is a web application that enables the government servant to apply the examination online, check and view the status of application, produce report and the most important things is the system provide facilities to perform an examination online (paperless). This system is developed by using Active Server Pages (ASP) technology; whilst, Rapid Application Development (RAD) methodology that used in developing CLEOS. The target users for this application are the government servant who is eligible with specific provision, administrator from the government agency and the staff who are working in the government agency. The main objective of the development of this system is to overcome the problems exist in the current manual system, which are the lack of facilities for applying the examination application, manage the bank question and also to use paperless method. Besides, extra features in the system such as security protection by using password, generating report, apply examination, manage bank question and perform examination online can even enhance the efficiency of the management in that department.

ABSTRAK

CLEOS adalah aplikasi web yang membolehkan kakitangan kerajaan memohon peperiksaan tahap kecekapan atas talian, memeriksa status permohonan, mengeluarkan laporan dan yang paling penting ialah sistem ini menyediakan kemudahan untuk menduduki peperiksaan PTK secara atas talian tanpa menggunakan kertas. Sistem ini dibangunkan menggunakan bahasa pengaturcaraan web iaitu teknologi ASP, dan dalam pada itu menggunakan kaedah RAD(Pembangunan Aplikasi Pesat) di dalam membangunkan CLEOS. Sasaran pengguna sistem ini terdiri daripada kakitangan kerajaan yang layak dan mempunyai syarat-syarat tertentu, pentadbir sistem dari agensi kerajaan dan staf yang bekerja di jabatan kerajaan yang menggunakan sistem ini. Objektif utama membangunkan aplikasi ini adalah untuk mengatasi masalah yang dihadapi oleh sistem manual sedia ada. Selain dari itu, fungsi-fungsi tambahan yang ada pada sistem seperti penggunaan katalaluan sebagai langkah keselamatan, menjana laporan, permohonan peperiksaan atas talian, pengurusan bank soalan dan menjalankan peperiksaan atas talian adalah untuk tujuan penambahbaikan dan meningkatkan kecekapan di dalam pengurusan jabatan.

TABLE OF CONTENTS

CHAPTER	SUBJECT	PAGE
	DECLARATION	i
	DEDICATION	ii
	ACKNOWLEDGMENT	iii
	ABSTRACT	iv
	ABSTRAK	v
	TABLE OF CONTENTS	vi
	LIST OF TABLES	xi
	LIST OF FIGURES	xii
CHAPTER I	INRODUCTION	1
	1.1 Project Background	1
	1.2 Problem Statements	3
	1.3 Objective	4
	1.4 Scopes	5
	1.5 Project Significance	7
	1.6 Expected Output	8
	1.7 Conclusion	9

CHAPTER II LITERATURE REVIEW AND PROJECT	
METHODOLOGY	10
2.1 Introduction	10
2.2 Fact and Finding	11
2.2.1 Domain	11
2.2.2 Existing System	12
2.2.3 Technique	18
2.3 Project Methodology	19
2.3.1 Justification in Choosing RAD Methodology	20
2.4 Project Requirement	22
2.4.1 Software Requirement	22
2.4.2 Hardware Requirement	23
2.5 Project Schedule and Milestone	24
2.6 Conclusion	28
CHAPTER III ANALYSIS	29
3.1 Introduction	29
3.2 Problem analysis	30
3.2.1 Background of Current System	32
3.3 Requirement Analysis	36
3.3.1 Data Requirement	36
3.3.2 Functional Requirement	38
3.3.3 Non-Functional Requirement	44
3.3.4 Other Requirement	45
3.4 Conclusion	47

CHAPTER IV DESIGN	48
4.1 Introduction	48
4.2 High-Level Design/System Prototype	48
4.2.1 High-Level Logical View / Architecture	49
4.2.2 User Interface Design	51
4.2.2.1 Navigation Design	51
4.2.2.2 Input Design	52
4.2.2.3 Output Design	62
4.2.3 Database Design	64
4.2.3.1 Conceptual and Logical Database Design	64
4.3 Detailed Design	66
4.3.1 Software Specification	67
4.3.2 Physical Database Design	67
4.4 Conclusion	67
CHAPTER V IMPLEMENTATION	68
5.1 Introduction	68
5.2 Software Development Environment Setup	69
5.3 Software Configuration Management	70
5.3.1 Configuration Environment Setup	71
5.3.2 Version Control Procedure	74
5.4 Implementation Status	75
5.5 Conclusion	79

CHAPTER VI TESTING	80
6.1 Introduction	80
6.2 Test Plan	80
6.2.1 Test Organization	81
6.2.2 Test Environment	81
6.3.3 Test Schedule	82
6.3 Test Strategy	83
6.3.1 Classes of Tests	85
6.4 Test Design	86
6.4.1 Test Description	86
6.4.2 Test Data	88
6.5 Test Result and Analysis	89
6.6 Conclusion	90
CHAPTER VII PROJECT CONCLUSION	91
7.1 Observation on weaknesses and strengths	91
7.2 Proposition for improvement	92
7.3 Contribution	93
7.4 Conclusion	94
BIBLIOGRAPHY	95
REFERENCES	96
APPENDIXES	97
APPENDIX A - DATA NORMALIZATION	97
APPENDIX B – DATA DICTIONARY	104
APPENDIX C – PROGRAM SPECIFICATION	110
APPENDIX D – PHYSICAL DATABASE DESIGN	127
APPENDIX E – USER MANUAL	133

APPENDIX F – GANTT CHART	152
APPENDIX G – LOG BOOK	153
APPENDIX H – SAMPLE REPORT	157

LIST OF TABLES

TABLE	TITLE	PAGE
Table 2.1	Comparison between case study and CLEOS	17
Table 2.2	Schedule and Milestones	24
Table 3.1	Non-Functional Requirement	44
Table 3.2	Other Requirement	45
Table 3.3	Hardware Requirement	47
Table 5.1	CLEOS: Configuration Environment Setup	73
Table 5.2	CLEOS :Number of Product Version	74
Table 5.3	CLEOS Implementation Detail	75
Table 6.1	Test Environment	81
Table 6.2	Test Cycle Allocation	82
Table 6.3	Login Testing Description	86
Table 6.4	Question Answer Test Description	87
Table 6.5	Login Test Data	88
Table 6.6	Test Result	89

LIST OF FIGURES

DIAGRAM	TITLE	PAGE
Figure 2.1	Interface view on www.tutor.com.my	14
Figure 2.2	Interface view MTQS	16
Figure 2.3	RAD Phase Diagram	19
Figure 3.1	Flowchart Diagram Current System	35
Figure 3.2	Data Model	37
Figure 3.3	Context Diagram	38
Figure 3.4	DFD Level 0	39
Figure 3.5	DFD Level 1 Application Module	40
Figure 3.6	DFD Level 1 Examination Module	41
Figure 3.7	DFD Level 1 Generate Report & Result	41
Figure 3.8	DFD Level 2 Application Module	42
Figure 3.9	DFD Level 2 Examination Module	43
Figure 4.1	Architecture CLEOS (External)	49
Figure 4.2	System Architecture CLEOS(Internal)	50
Figure 4.3	CLEOS Navigation Design	52
Figure 4.4	Login Interface	53

Figure 4.5	Schedule Info Interface	53
Figure 4.6	SignUp Interface	54
Figure 4.7	Application Form Interface	55
Figure 4.8	Question Info Interface	56
Figure 4.9	Generate result Interface	57
Figure 4.10	Produce Report	58
Figure 4.11	Application Status & Schedule Interface	59
Figure 4.12	Attendance Info Interface	60
Figure 4.13	Examination Online Interface	61
Figure 4.14	Produce Report	62
Figure 4.15	Examination Slip	63
Figure 4.16	Examination Result	63
Figure 4.17	ER Diagram	65
Figure 5.1	CLEOS Development Environment Setup	69
Figure 5.2	Server Configuration Overview	71

CHAPTER I

INTRODUCTION

1.1 PROJECT BACKGROUND

Competency Level Examination (PTK) is one method to assess an officer either achieve level of excellence prescribed from the aspect knowledge, skill and personal nature or otherwise. Each PTK have two parts that are general competency and specific competency. General competency cover things necessary possessed by officer all strata public as personal nature, leadership and communication. Specific competency is related with the specific task.

Competency Level Examination (PTK) introduced to inculcate development of the self, enhance organization culture learning and provide civil service officer in the implementation human resource management based upon competency. This in keeping with intention of the government to improve public service official capacity to confront challenges of globalization, enhance country competing strength, inculcate new attitude and culture and service delivery increase effectiveness (service system delivery).

Competency Level Examination Online System (CLEOS) is an online computerized system that developed to solve the manual business problem using Active Server Pages (ASP); web-programming language.

CLEOS will be able to give new innovation to conduct the examination those carried out all over government agency only for objective question. Other than easy, quick and effective to candidates seat the examination, it also facilitate system administrator that managing candidate application, bank preparation question and further issue reports related to official use etc. Application of the examination, examines application status and generate result can be done by online when use this system.

This system consist 3 major modules that are application module, examination module and report module. Application module is to allow candidates request to check application status by online. While examination module is the major process to ensure the candidate use the computer technology to seat the examination online.

Examination module include storage process examination questions base on category of classification, grades and level of the examination such as TK1, TK2 or TK3. Apart from that, system administrator also have role to check and update examination schedules that prescribed in the system.

It is develop to solve current problems such as to apply the examination for all government servant at all government agency who already in permanent status and also already pass for all the examination. The paper base manual system requires a space for storing all the question papers which is in reality a lot of file cabinet will be used and it will increase in time. The manual system also takes a long time to accomplish any task. With the new system, all the problems will be solved including saving time, lesser work and fast work rate because all the questions will be saved into database system and only authorized user can be granted access to the questions. The new system will develop have several task such as to apply, record keeping for bank question, set the scheduling online examination for certain group of government servant and etc.

1.2 PROBLEM STATEMENT

Generally, Competency Level Examination (PTK) in government agency is still using manual system to manage the examination process from apply the examination until result issued. Usually, the current manual system has several of problems, which are as below:

- i) The examination application form managed inefficiently

The applicant must fill the form before get the verification from head of department. Generally, too much information are needed such as grade of scheme, confirmation date and etc. All the form will be check one by one before status of the application approved. Other cases are the form didn't get through by management and received after closing date. After the status of the application already confirmed, the person in charge print the examination slip one by one manually done using Microsoft word processing.

- ii) Difficult to manage and produce the examination result.

The entire examination question will print out after the committee approved the question and answer. The examination paper will check and mark by examiner manually. After examined the papers the person in charge will determine level of competency staffs that take the examination either level I, level II, level III or level IV base on both of general and specific paper. All the process does manually and it is a very tedious job.

- iii) All the data who involved in the process manage an inefficiently

The most important matter is all the records and data that involved in the process from the start until end of the process. Bank question data record was unsafe without a proper system, all the detail data of examination such as questions, application and result will face big problem if the data lost or damage because some of the data may contain sensitive and private information.

- iv) Difficult to produce report and analyze the data.

After the candidate result issued, the officer in charge must prepare some progress report base on the result such as the statistic of candidate result, how many candidate pass all the level and etc. Without a proper report generator, the several reports can't produce immediately.

1.3 OBJECTIVE

There are several objectives of the Competency Level Examination Online System, which are:

- To build a system that has function that can help user manage the application. By using this system, user can do their application such as recording data, deleting data, display data, printing certain information, adding data, searching data, update data and etc.

- To build the system with provides user level and security level and manage the certain process with the authorization. The system was complete with the password because some of the data may contain sensitive data and private information.
- To develop an efficient Competency Level Examination Online System which is the administrator will generate the result and also can generate several report and user friendly.
- To ease the entire examination process such as examination application, approval application and process result efficiently.

1.4 SCOPE

a) Target User

- **Staff** from government agency will use this system to apply and register the examination, check approval of examination status and check the examination timetable. All of the candidate who applies the examination will seat the online examination without use the answer form to mark the answer.
- **Administrator** is responsible for managing the staff registration of the examination; setup the schedule of examination by category of employee grade, record keeping for the examination question

by category of grade and also generate candidate result for the objective question and produce some report.

b) Module

- The CLEOS is divided into three major modules, which are modules application of an examination for all employees by category of grade, examination module and report module.

- Application Module of CLEOS
 - Every staff that wants to take the examination needs to apply the examination base on the category of grade. CLEOS will provide application form to apply the examination with download the form for the first phase.
 - Administrator parties also would display and to issue examination slips in order to take the examination.

- Examination Online Module
 - The scope of module is focus on objective questions for the first phase. This module will provide objective questions by online and every candidate must answer the question within the examination period.
 - After examination carried out, system administrator parties will generate an examination result base on answer done by the candidate.

- Report Module
 - After all processes carried out, administrator parties would issue examination result and plenty involved candidate can get factual information examination result will be portrayed for time to time.

1.5 PROJECT SIGNIFICANT

The system will give some benefit to administrator, clerk and all staff who involved the examination. Following is the project interest, which are:

- i) CLEOS will save time and less cost. The entire applicant can access the CLEOS everywhere who provide the internet line. Clerk and administrator will save the entire application item at the database for the further action.
- ii) This system is secure with level of user for each page who can access or not. This will ensure that only the authorized users can access their own task, data and result because it may contain sensitive and private information. This system will display in a very user-friendly graphical user interface to ease the users even for the novice.
- iii) This system will help the administrator to generate result and produce report easily and effectively. Administrator should not be worried about too many tasks to prepare because the system will produce the reports automatically with layout design. Administrator just make sure that the reports are correctly and there have no any problem that occurred when the report is generated. Hence, more effective services for user will be provided. Administrator also do not waste much time in this process and can

spend a time to do other jobs that are related. It also can generate the result faster than using manual system.

iv) This online examination can also avoid case imitate happened base on random technique where as the different set of question for each candidate will implement.

1.6 EXPECTED OUTPUT

CLEOS provides a several functions for the staff such as view the examination schedule, check application status, download application form and the critical part is on an examination online using random technique.

For administrator, they can manage all information about application, arrange the examination schedule, arrange the bank question and always update any information. The critical part in this level is to generate the result after the entire candidate finish their examination both the general and specific paper. Administrator also can view and print several of report base on result and data such as examination slip, examination result and etc.

1.7 CONCLUSION

The main idea of developing this system is to improve the current manual system for managing the process with effective, efficient and less time. In this case, the system is using random technique on question online. This system will solve the entire problems that have been state above. In short, PTK objectives have been to promote the development person through continuous learning towards ensure civil service officer have level of excellence that prescribed. These aims to enable staff accomplish the task efficiently and effectively.

After this, literature review and project methodology will be continued as a next stage. This part will review the previous project and make a comparison with project that has been proposed. Besides that, this chapter also explains about the methodology that will be used in this project.