STUDENT ENROLMENT SYSTEM FOR PTPL COLLEGE

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ABSTRACT

Year by year, the world fast growing with modernization of Information Technology, many implementations of which has been brought up in processing data. The new technologies have brought up the environment to develop new system each year. People get established knowledge and know more in using any computerized system. The implementation of Student Enrolment System for PTPL College is based on Visual Basic interface that integrates with Microsoft Access database platform. It is developed to meet the organization's requirements. This system will function mainly to register student’s information and subjects taken. In students’ registration information, administrator can add, view, modify and delete student’s information in easy way and more secured. In subject registration, administrator also can register students’ subject registration according to the subject requirements in each semester. Therefore, the students have to register their information and subjects by manually (i.e., filling the form). Student Enrolment System is implemented to make filing system more systematic and secured.
CHAPTER 1: INTRODUCTION

1.1 Introduction to Student Enrolment System for PTPL College (SES)

Student Enrolment System has commonly used in every universities or colleges. The appearance of this system has made the registration process for student goes well, easier and systematically. According to Hornby, (2000) enrolment is the act of officially joining course, school, etc. Besides, SES briefly gives a meaning of the registration system, which contains a joining of the few features for PTPL College. SES is the computerized system that allows administrator to register new student, subject registration and search student record. Administrator can modify student and subject registration and can view list of student in department. In other words, SES will give faster access and give the most recent data to the administrator or registrar. Besides, registrar can save a lot of time and the whole registration process will become easier.

1.2 Introduction to Current System (Paper-based System)

According to Rob and Coronel, (2002) Paper-based System or Filing System is the registration system based on form and all the form are kept using files and all the files are kept inside the provided filing cabinet mainly for important files. This paper-based system was used by the PTPL College at Sarawak branch. Each new student in the beginning of semester will fill out registration forms from, such as student information, parent information, subject registration and etc. After completing the forms, students present the forms at the registrar’s office. The staff in the registrar’s office then will help the student to register based on the availability of the courses he/she chooses and keep safely the student’s important information
in the files. The files are divided into several sections. For example, the diploma students’
files are kept in the diploma section and the certificate students’ files go to the certificate
student section. The files are systematically kept.

Basically, paper-based system is indeed needed for the registrar to handle the important data
systematically. Therefore, paper-based system must be handled carefully by the existing
registrar at PTPL College. The paper-based system has the following features:

i) Keep all the complete forms that have been filled up by the students using
categories:
   a) Certificate
   b) Diploma

ii) The entire student’s information are recorded in paper-based system and kept
    safely in the filing cabinet.

iii) Registrar has to store and search student’s record manually.

iv) No security is provided to the paper-based system. [11]
1.3 Problem Statement

Nevertheless, as a traditional system, there are many problems with regards to the paper-based system. The problems that have been identified are as follows:-

i) There is no security provided in the paper-based system. Without security, students’ records can be accessed by unauthorized person and the information is no longer private and confidential.

ii) The space needed to keep the data will increase along with the increase in student’s intake.

iii) The current existing manual usage in subject registration uses a lot of papers. This will involved a lot of workloads.

iv) Replacing experienced registrar with that of new registrar will consume time for the new registrar to familiarize with the location of the files kept.

v) Only one worker handles the registration and the works may overload one’s shoulder only.

vi) Missing or losing data may occur during the transmission of data into the files. More time will be needed to search and locate the missing data.

vii) Searching for a particular student’s record will be inconvenience and a time is wasted as no search function is provided. It is a slow searching process and
complicated. In addition, there is the possibility of the registrar disturbing or changing position of other student’s record whenever searching for a particular student’s record.

1.4 Objectives of Project

The objectives of developing Student Enrolment System for PTPL College (SES) are as follows:

i) To improve the subject registration process from manual subject registration to computerized subject registration.

ii) To make an easier subject registration process by reducing typical human error.

iii) To build a user-friendly interfaces student registration system where administrator can easily familiarize himself/herself with the new computerized system.

iv) Improving the management of storing and searching student’s record using the functions that will be developed SES.

v) To enable administrator to register old and new students’ subjects and information in computerized form. Administrator can add, drop and modify subject and information for students and view the subject lists available.
vi) To provide a security on the students’ records where all records are saved and cannot be easily accessed by unauthorized staff member.

1.5 The Purpose of Study

The main objectives of this research are to understand how well paper-based system and manual registration’s management and to gain more knowledge in the key areas that should be well apprehended to develop a computerized registration as a replacement to manual registration. The purposes are listed below:

i) To design a student registration system that can adapt with the needs of the organization and general requirements.

ii) To know the needs of the manual registration in order to determine the features and functionality of student registration system in implementing SES.

iii) Analysing the possibilities and risk of developing the SES.

iv) To know the effective and efficient methods completion and implementation of the SES.
1.6 The Scope of Study

Student Enrolment System for PTPL College (SES) can improve the paper-based system and other available student registration system in the market as its base of development in producing high-end software that will meet the need and satisfaction of organization requirements.

The research scope has no limitation and depends on the organization requirements from time to time. The scope concentrates on the developing of the basic needs and functionality for registration system before moving on the enhancements and solutions from the study. Below are the scopes that have been defined to implement the SES:

i) Register new student and keep the information in the database.

ii) Register subjects for each semester.

iii) Modify subjects and users information

iii) Print transcripts for subjects registered as requested

v) Print a student who has registered.

vi) Search the student information and subject information.

This registration system will be developed by using Visual Basic that integrates with Microsoft Access 2000 database.
1.7 Motivations and Significance of Study

The significance of this research is the ability in producing a student registration system that is able to meet the need and satisfaction of the organization as follows:-

i) Ability in providing faster processing techniques in terms of registration of students and registration of subjects.

ii) Able to manage a large volume of students’ data as students’ increase in every new intake.

iii) More accurate and better in quality.

iv) Information can be easily stored, modified and deleted. It is also easy to understand the procedures of entering data.

v) Security provided to unable data can be accessed by unauthorized staff member.

vi) It is compatible and integrated with other existing platform and environment.

The Organization’s benefits in term of:

i) Saving students’ and subjects’ registration processing time.
ii) Improves and provides more efficiency in staff’s performance by working with computerized system.

iii) Easier and faster work for registrar to store and search students’ records.

iv) Reducing missing or losing data.

v) Less paperwork involved.

vi) Reduce spacing for keeping data in provided files.

In fulfilling end-user requirements, system functionality must be able-:

i) To add or drop subjects:

Adding subjects enables the student to compose the subject schedule that he/she desires. Dropping subjects enables the student to drop some of the subjects to fit their schedule.

ii) Add, drop or modify subjects’ and students’ information:

Administrator can modify the subjects’ and students’ information that have been registered earlier. Administrator also can add new subjects and new students’ information.

iii) Can view the list available course:

Enable the students to view the availability of courses.
iv) Easy to use and user-friendly:
The interface is user-friendly where every user can understand easily the procedures of registration system.

v) Produce and print-out a report or transcript on request:
The system can print out the result or transcript as it requested by the administration.

vi) Performance is consistent and free from any error or bug:
There are no errors during the registration process or transaction data.

vii) Ability to run any compatible of low-end computer system:
The system can be installed in any compatible of low-end computer system and run it.

viii) Registrar and administrator can view the students’ record:
Registrar and administrator can view the student’s report such as student results, list of subjects taken per semester and other information.

ix) Fast processing in terms of registration, searching of data and updating data:
It is faster registration process, searching a particular data and updating data.

Student Enrolment System for PTPL College (SES) is developed to improve the paper-based system to computerized registration system. It has more advantages in terms of saving time for students and subject registration process, storing of data accurately, security and
standardization. Student Enrolment System for PTPL College (SES) is customized to fit the needs of organization such as being user-friendly, faster, involved less paperwork and better management in searching and storing of data. This system features are based on the appropriate registration functionality such as add or drop subjects’ functions, add, drop and modify subjects’ or students’ information, viewing list availability subjects and student in each department.

1.8 Report Outline

Report Outline is very important to ensure the project goes through on the right track and complete successfully. It is a guideline to develop implementation of the system in proper and consistent steps. There are two phases of implementing this system. The two phases are:

a) Phase One

i) Chapter 1: Introduction

In this chapter, the problem statement of the existing system have been identified and from the analysing of the information could be used to determine the objective and scope of the Student Enrolment System for PTPL College (SES).

ii) Chapter 2: Literature Review

Literature review is organized to study on other people works in the same area of research. The result or knowledge derived from the analysing of the information gathered could be used as efficient and effective guidelines for
implementation of Student Enrolment System for PTPL College (SES). The advantages and disadvantages among the similar system available could be seen in an analytical perspective and the understanding of such occurrences could contribute to the enhancement on the system in term of features and functionalities.

ii) Chapter 3: Methodology

In this chapter, we will describe the methodology that we used to develop Student Enrolment System for PTPL College (SES). By using suitable methodology, developing the system become more easily and we can detect the problem in early stage. There are a few types of model which are system developed life cycle, waterfall model, evolutionary development, formal system development and reused-based development.

iii) Chapter 4: System Design

The objective of this chapter is to determine how the system will develop and how the system will look like. Design is an iterative process where informal ideas are transformed to detailed definition of how the system can be implemented. Using system design, user also can easily understand the internal and external flow of the system that we will develop. Few types of system design are that of flow design, database design and interface design.
b) Phase Two

i) Chapter 5: System Implementation

This chapter discusses the implementation of the system prototype which is based on the methods and information system design in the previous chapter. In this chapter, the software design is released as a set of program and this will describe the prototype based on its function and different parts of the source code.

ii) Chapter 6: System Testing and Evaluation

Testing and evaluation are the final stage of the system development life cycle. After the system is well implemented, it is important to test and evaluate the system whether the prototype really meets the users’ main objectives or not. In this chapter, it will show how testing and evaluation works and its end result.

iii) Chapter 7: Conclusion and Recommendation

In this chapter, we describe about the conclusion of the system and the recommendation to improve the Student Enrolment System for PTPL College.
CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Literature review is organized to study on other people works in the same area of research. The result or knowledge derived from the analysing of the information gathered could be used as efficient and effective guidelines for implementation of Student Enrolment System for PTPL College (SES). The advantages and disadvantages among the similar system available could be seen in an analytical perspective and the understanding of such occurrences could contribute to the enhancement on the system in term of features and functionalities.

2.2 Studies on Current System (Paper-based System)

Small organization as PTPL College is able to keep track of necessary data by using a manual file system such as paper-based system. A paper-based system was traditionally composed of a collection of file folders, each properly tagged and kept in a filing cabinet.

Therefore, the data collection was relatively small and PTPL College’s organization has few reporting requirements on students’ and subjects’ information. However, as the amount of student increases, so is the requirements on students’ and subjects’ information becoming more complex, and thus keeping track of data in a paper-based system became more difficult to handle. In fact, finding and using data in a growing collection of file folders became time-consuming and cumbersome task that made it become less likely that such data would ever generate useful information. Paper-based system also does not provided security. Without a security, students’