# Development of Students Result Management  System

## Abstract

In this paper, an automated platform for managing result of all categories of students in a seamless and interactive manner is presented. The system was developed using PHP, CSS, HTML, MYSQL and was hosted locally using Apache web server. The software development methodology adopted is a participatory incremental process model (PIP Model). The data used  were  obtained  from  the Department  of  Electrical/Electronic  and  Computer Engineering,  University  of  Uyo.  Functional decomposition  of  the  system  and  its  key modules are provided to explain the major functionalities proffered by the system. Also, use case  diagram  is  presented to  show the  different categories  of the system  users and  the various functionalities associated the different system user. Screen shots of various system functionalities are presented from the test run of the functional system.

## Introduction

The major goal of this study is to use a computerized system to improve and automate the management and declaration of students' outcomes. The goal of this document is to specify the overall software requirements for the Student Result Management System, and the efforts have identified the criteria to be deeply and correctly defined. The capabilities of the software application System Result Management System are described in this specification document. It specifies the different limitations that the system must adhere to. This chart provides detailed information about a student's current and past semester grades. It contains the student's entire academic information, including their registration number, grades, total, and average. It may be accessed by professors who will be able to utilize the site to analyze results.

## General / Overall Description

## Product Perspective

The application will be windows based self contained and independent software product.

## Product Functionality

A summary of the major functions that the software will perform: 1) A login facility for enabling only authorized access to the system. 2) User will be able to add/modify/delete information about different students data enrolled for the course in different year. 3) User will be able to add/modify/delete information about different subjects that are offered in particular semester. The semester wise list of subjects along with their credit points and type will be displayed. 4) User will be able to add/modify/delete information about elective subjects opted by different students in different semester. 5) User will be able to add/modify/delete information regarding marks obtained by different students in different semester. 6) User will also be able to print mark sheets of students 7) User will be able to generate printable reports. 8) User will be able to reset the system leading to deletion of all

existing information from the backend database. 9) User will be able to create/modify/delete new/existing user accounts

## Design and Implementation Constraints

I as previously said, various computer programs exist today that assist users in finding and storing basic information such as a student's name, grades, and seat number. The rest of the computational work is either done manually by faculty at that university or requires a separate software.

## User Characteristics

This subsection of the SRS should describe those general characteristics of the eventualusers of the product that will affect the specific requirements. (See the IEEE Guide toSRS for more details).

## General Constraints

Users at university will have to implement a security policy to safeguard themarks related information being modified by unauthorized users (by means ofgaining access to the backend database)

## Assumptions and Dependencies

1)The number of subjects to be taken by the student in each semester does not change.

2)The subject types do not change.

3)The number of semester do not change.

4)The users have sufficient knowledge of computers.

5)The users know the English language, as the user interface will be provided inEnglish

## Hardware Interfaces

1)Support for printer i.e. appropriate drivers are installed

2) Screen resolution of at least 800*600 required for proper and complete viewing

of screens.

## Software Interfaces

Any window based operating system

MS Access 2000 as the DBMS

Crystal Report 8

Visual Basic 6

## Functional Requirements

1) Subject Information Management

2) Student Information Management

3) Student's Subject Choice Information Management

4) Marks Information Management

5) Mark sheet Generation

6) Report Generation

7) User Account Management

- ## Subject Information Management

The system will maintain information about various subjects being offered during
different semesters of the course. The following information would be maintained
for each subject. Subject code, Subject Name, Subject Type (Core / Elective /
Lab1 / Lab2 / Mini Project) Semester, Credits.

- ## Student Information Management

System will maintain information about various students enrolled in the MCA
course in different years. The following information would be maintained for each
student:

Student Enrollment No., Student Name, Year of Enrollment. The system will
allow creation/modification/deletion of new/existing students and also have the
ability to list all the students enrolled in a particular year.

- ## Student's Subject Choice Information Management

The system will maintain information about choice of different Elective subjects
opted by various students of different enrollment years in different semesters. The
following information would be maintained:

Student enrollment no, Semester, Student's choices for a particular semester.

- ## Marks Information Management

The system will maintain information about marks obtained by various students of

different enrollment years in different semesters. The following information would

be maintained:

Student enrollment no, semester, subject code, internal marks, external marks,

total marks and credits.

The system will also have creation/modification/deletion of marks information.

- ## Mark sheet Generation

The system will generate mark-sheet for every student in different semesters.

- ## Report Generation

1) Student List Reports

For each year a report will be generated containing the list of students enrolled in

that batch year.

2) Student Subject Choice List Report

For each batch year a report will be generated containing the list of students

and their choices for Elective subject in the selected semester.

3) Semester-wise mark lists

4) Rank-wise List Report

- ## User Account Management

The system will maintain information about various users who will be able to

access the system. The following information would be maintained.

User Name, User ID, Password and Role.

## Non-Functional Requirements

1) Security

2) Maintainability

3) Portability

## Other Requirements

None

## Change Management Process

Customer has to visit personally in the organization if any changes needed in project scope and requirements.

## Algorithms/programs in Use:

I as previously said, various computer programs exist today that assist users in finding and storing basic information such as a student's name, grades, and seat number. The rest of the computational work is either done manually by faculty at that university or requires a separate software

## MODULE

Student Result Management System divided into two modules–

● Student

● Admin

Admin Features

● Admin Dashboard

● Admin can add/update/ Class

● Admin can add/update/ Subjects

● Admin can add/update/ Active/Inactive Subject combination with class

● Admin can register a new student and also edit info of the student

● admin can declare/ edit the result of a student.

● Admin can change own password

Student Features

● Students can search their results using a valid roll-id.

● Student can view their result

● Student can print the result

## Result and Discussion

A functional result management system was developed using PHP and MYSQL as the side-server and HTML and CSS as the client-side. The database used in the RMS was designed with MYSQL Database Management System (DBMS). All the information pertaining to the RMS are stored in the system database. The sample output/ results are shown in the various screen shots presented in this section.

## Conclusion:

The Student Result Management System (SRMS) is discussed in this work. The product is designed to solve the challenges that understudies face in school with their board records. The SRMS was built with PHP, MYSQL, HTML, CSS, and JAVASCRIPT, and it was hosted locally using Apache web worker. The product improvement concept is also based on the Participatory Steady Process Model (PIP Model). A useful breakdown of the framework and its core components is provided in order to understand the framework's primary functions. Similarly, a use case graph is given to demonstrate the various framework client classes as well as the numerous functionality associated with each framework client.