

SOFTWARE REQUIREMENTS SPECIFICATION

Student Result Management System

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1 Introduction:

An individual report card of each student has to be displayed and printed at a keystroke according to any selected format. An important aid for teachers and students to judge their performance. Merit list printing by totals for a class by individual subject marks for a class. Student performance in a particular subject or all the subjects must be expressed. This project shows some ease in adding, editing and deleting the student details and managing the results.

1.1 Purpose:

The system displays the list of all issues that are open, closed, in progress. If the user can get registered by clicking on the login button and provide the required information as specified. Each time the registered customer(admin) come on to the site he can makes use of the user name and the password that is allocated to him.

- User configurable grading system.
- Storing of student details
- Necessary subjects can be added
- Grace marks handling.
- Special Analysis section.
- Update the academic system.
- Individual report card can generate.
- Budget-friendly

1.2 SCOPE:

Student Result Management System is developing for:

- ❖ General purpose and used to replace old paper work system.
- ❖ This efficiently provides student information to teachers and school administration.
- ❖ SRMS also increase in efficiency of result making, provide result to parents, give feedback to students.

- ❖ It provides a mechanism to edit the student information form which makes the system flexible.

1.3 Definitions, Acronyms, and Abbreviations:

SRMS	Student Result Management System
School	A school is an educational institution designed to provide learning spaces and learning environments for the teaching of students under the direction of teachers.
Results	A result (also called upshot) is the final consequence of a sequence of actions or events expressed qualitatively or quantitatively.
Administration	A person responsible for carrying out the administration of a business or organization.
PHP	PHP is a server side scripting language
SRS	Software Requirement Specification
SQL	Security is provided using secured data base
HTML	Hyper text markup language
CSS	Cascading Style Sheets
OS	Operating system
UCD	A use case diagram is a diagram that shows a set of use cases and actors and relationships.
ERD	Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database

1.4 REFERENCE:

The references for the above software are as follows:-

- www.wikipedia.com
- IEEE 8301998 standard for writing SRS document.
- Software engineering by KK Agrawal

- iv. <https://www.edusys.co/blog/student-result-management-system>
- v. https://www.researchgate.net/publication/318215858_WebBased_Student_Result_Management_System

1.5 OVERVIEW:

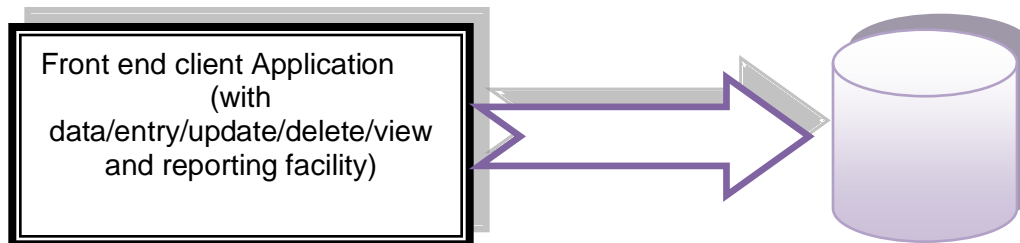
Student's information is stored in Database the authority is given to Administrator; he gives the permission to instructor to enter the department data and student information. The security is providing by giving password to each instructor. Students and parents can login their result with the help of respective roll number and section .

2 The Overall Description:

This section of the SRS should describe the general factors that affect 'the product and its requirements. It should be made clear that this section does not state specific requirements; it only makes those requirements easier to understand.

2.1 Product Perspective:

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



2.2 Product Functions:

- 1) Information about the various Users
- 2) Information about subjects offered in various classes
- 3) Marks obtain by Students in different classes
- 4) Generation of Reports as hard copy as well as softcopy

2.3 User Characteristics

Student: the students can check their respective results of their particular academic year.

Teacher: Teacher can update the results and can add on the subjects related to the particular academic year.

Administrator: Can manage the Strength of a particular class or section and login details (username ,password). Declare the results.

2.4 General Constraints

Users at School will have to implement a security policy to safeguard the marks related information being modified by unauthorized users (by means of gaining access to the backend database).

2.5 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 in English.

3 External interface requirement:

3.1 User Interfaces:

The following page will display:

1. Login page: This will be the first page that will be displayed. It allows user to access different screens based upon the user role. Various fields available on this screen will be
 - User id: admin
 - Password: admin

Role: Will have the following: Administrator, Guardian, student, teacher

2. Dashboard : This page will display Regd users, subject listed, total classes listed, result declared
3. Student classes: This page display the options of create class and manage the class
 - Create class: in student create class we have to fill class name ,class name in number and class session.
 - Manage Classes: Admin can update the student class information.
4. Subject: The subject page displays the instruction that how to create a subject, Manage subjects ,Add subject combination and manage subject combination
 - Create Subject: If admin want to create a class he should fill the for with a unique subject name and subject code.
 - Manage subject: Admin can update the subjects.
 - Add subject Combination: It consist of selection of class and subject required.
 - Manage Subject combination: Admin can deactivate a subject when it is not required.
5. Student Admission: It is maintain by the management
 - Add student: Have to fill the student information
 - Manage student: Can block the student or update the student details.
6. Result : It is maintain by the admin
 - Add result: Teacher can fill the mark.
 - Manage results: Can manage the results.
7. Change password: User can change the password

3.2 Software requirements

Operating System : Windows, XP

User interface : Python, Django.

Front-end : HTML,CSS.

3.3 Hardware requirements

Processor : Standard processor with a speed of 1.6 GHz or more

RAM : 256 MB RAM or more

Hard Disk : 20 GB or more

Monitor : Standard color monitor

Keyboard : Standard keyboard

Mouse : Standard mouse

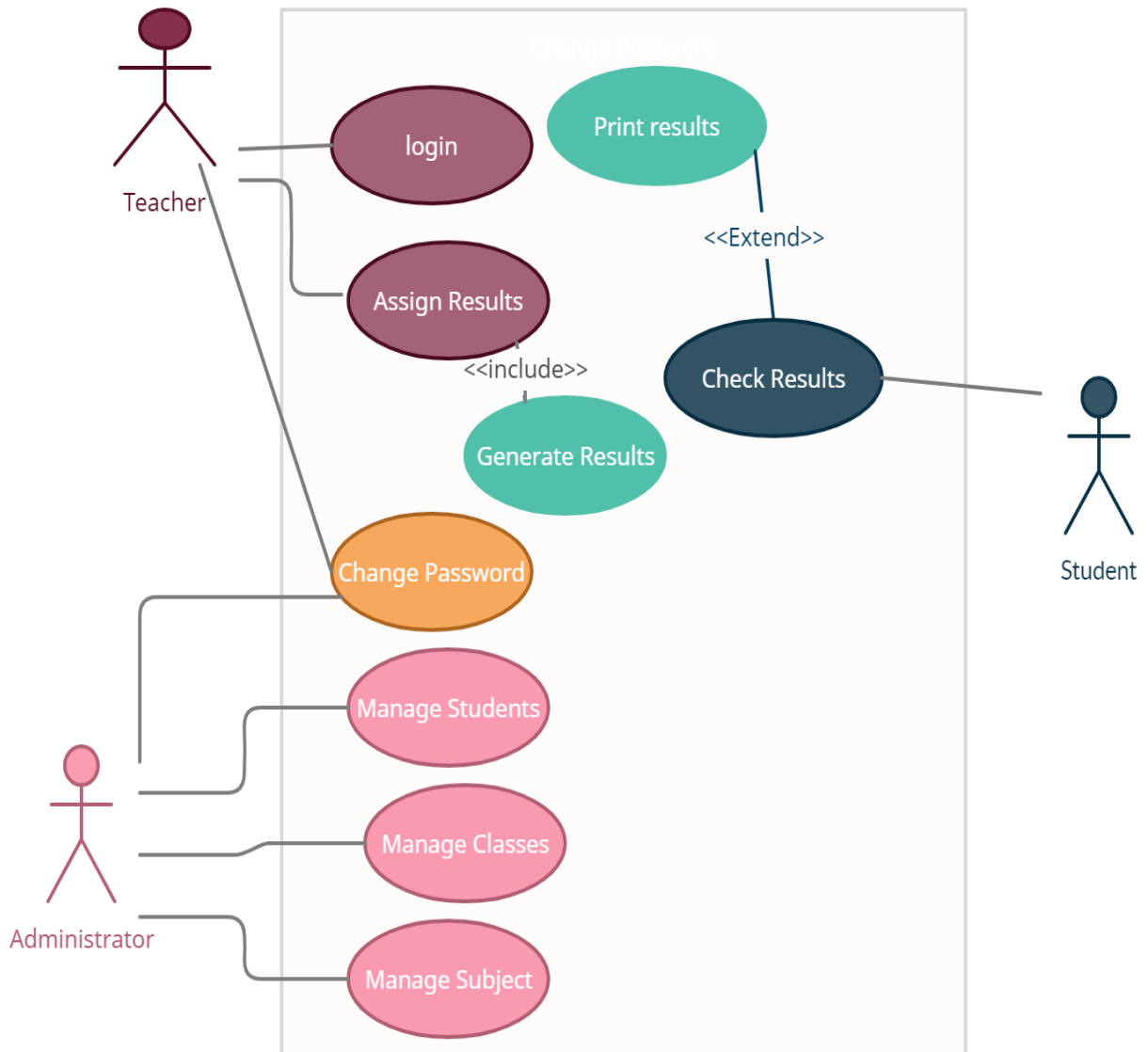
4 Functional Requirements

Depending upon the user role he/she will be able to access only the specific modules of the system.

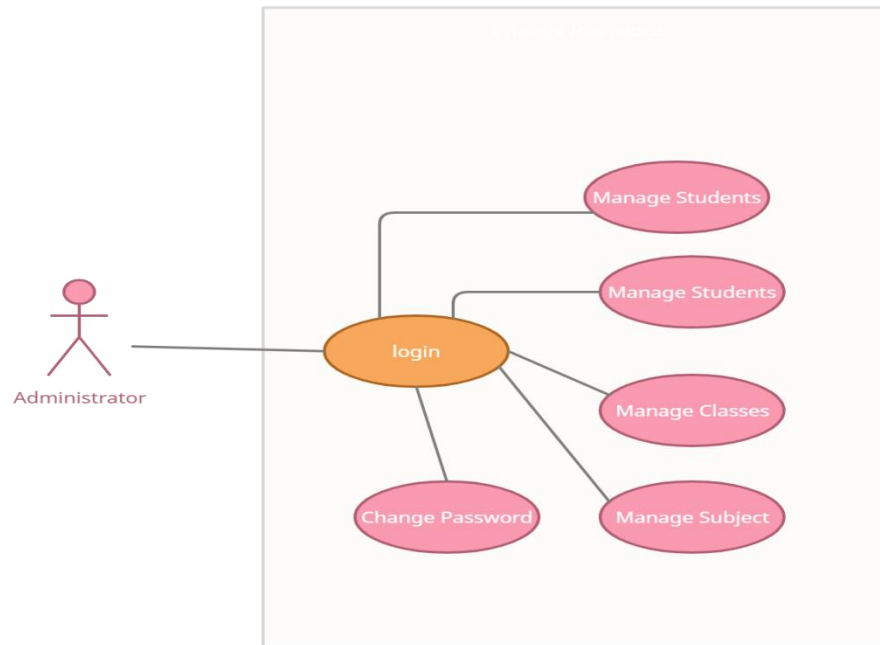
- I. Login facility for enabling only authorized access to the system
- II. User (with role Data Entry operator) will be able to modify /add/delete information about different students that are enrolled for the course in different years .

5 Use Case:

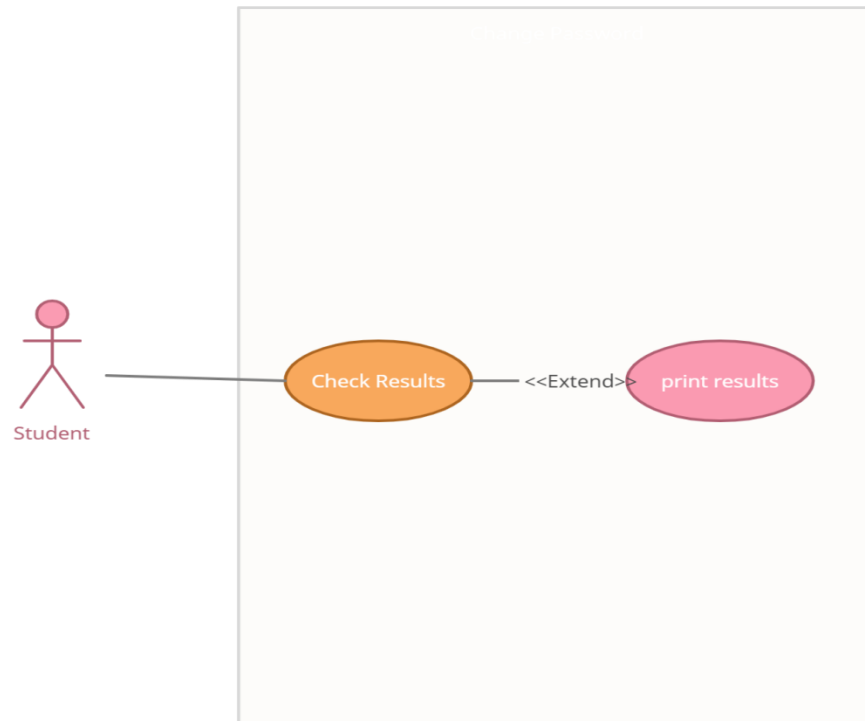
5.1 Use Case Diagram



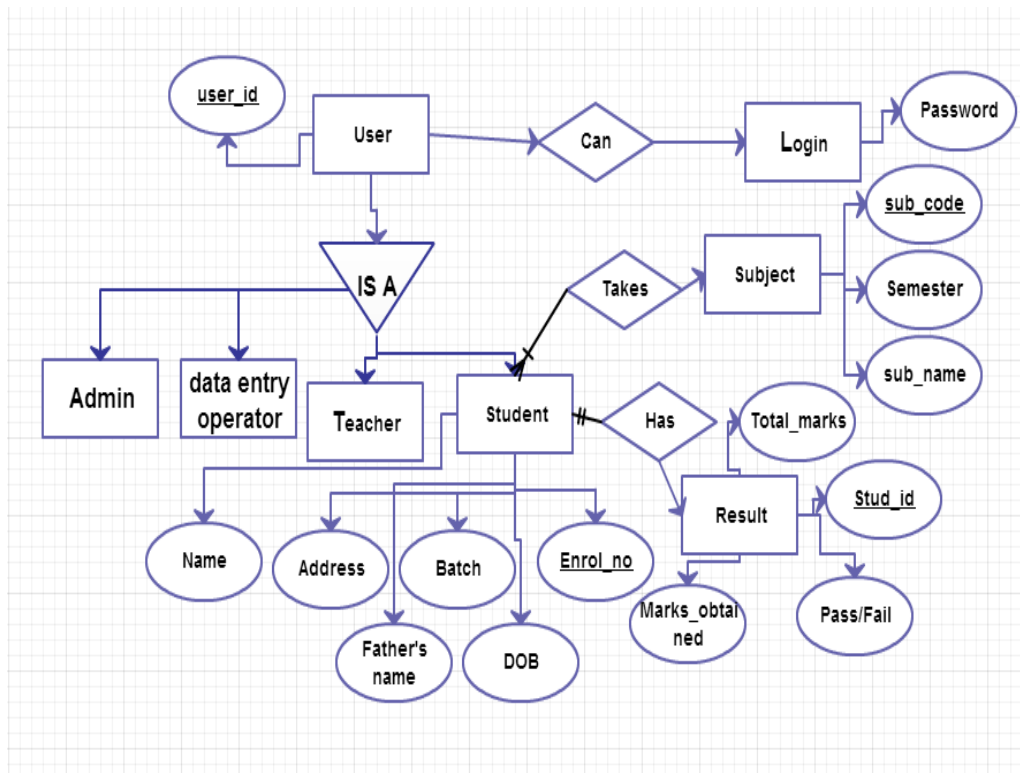
5.2 Use Case 1:



5.3 Use Case 2:



6 Entity Relationship Diagram:



7 Other Requirements:

NON FUNCTIONAL REQUIREMENT

- **Safety Requirements:** The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup
- **Security Requirements:** We are going to develop a secured database for the university. Depending upon the category of user the access rights are decided. It means if the user is an administrator then he can be able to modify the data, delete, append etc. All other users other than staff only have the rights to retrieve the information about database.
- **Hardware Constraints:** The system requires a database in order to store persistent data. The database should Software Requirements Specification