A Project on

Student Result Management System

Prepared For

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A report submitted in partial fulfillment of the requirements for the award of the degree of Bachelor of Business Administration.

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LETTER OF TRANSMITTAL

September 06, 2020

Ahmed Imran Kabir

Adjunct Lecturer

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United International University.

Subject- A Project on Student Result Management System.

Dear Sir,

I would like to submit my Project titled “Student Result Management System”, which has been prepared as a requirement for the completion of the BBA Program of United International University. While working on the project, I have tried to follow each and every guideline that you have advised and it has been a very enlightening experience to work in this new venture and I have thoroughly enjoyed my Project about result management system.

Sincerely, _____

Md. Ariful Islam

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Acknowledgement

I would like to thank the internship Supervisor Ahmed Imran Kabir, United International University for helping to fruitful end of the project since he has provided me significant guidance throughout the entire journey of making this project.

His guidance has been of extreme help to me. I am also thankful for all the times, I consulted him and he answered with the utmost patience and perseverance. Practical knowledge is fundamental for the application of theoretical intelligence. So, his guidelines for the report made it mandatory for me to seek learning from accompany, which proved to be very gratifying.

I also want to thank Tanvir Anzum (CSE, HSTU) for him support that I have been provided for preparing my project. Then at last I shall be grateful to those people who read this project and who shall get benefit from this project at present and in future.

Declaration

I am Md. Ariful Islam, student of School of Business and Economic (Management Information Systems) of United International University, Bangladesh, do hereby declare that the Project on "A Project on Student Result Management System" is real work and has not previously been submitted for a degree or accreditation.

_____

Md. Ariful Islam

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Abstract

This project focuses not only on the beneficial part of an organization but also on the development of technology.

Although universities already use this platform, most of the schools and colleges in our country do not follow this platform yet. There are many problems with conventional paper-based results that are not yet comprehensible to our institutional authorities. This paper describes the design and development of a web a platform that can bridge the gap between teachers and students and give an idea about the online result system.

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Chapter-1

Introduction

Background of the study

"Student Result Management System" is a technological opportunity for School, College and University to saving exam result data and publish their student's result with a secure and easy way. It is an alternative solution to conventional paper exam based results evaluation and distribution. This management system is also a collection of related data and information which is allowed to accessible to the people. Other side, it is a process where data will be secured.

The objective of the Student Result Management system, is allow to administrator of any organization to edit and find out students information (ID, Name, Email). This is also included students image which makes the administrator more sure for recognize this student.

Not only those information has shown or saved in Result management system but also it saved the main purpose of this system that is save the all Grades of all student which means students all result data.

Overall, it's makes any organization easier to getting full result information by this management system. And it's a believable process.

The main purpose of this Student Result Management System is to illustrate the requirements of the project is intended to help any organization to maintain and manage its student's result data and some other information about student.

Aim and Objectives

The aim of the project is to develop an easy and efficient system which can handle and manage the activities involved in an efficient result management system in an easy way:

1. Designing a computerized result management system which makes easy and would be help evacuate the conventional paper based exam result.
2. Implementing the system.
3. Evaluating the performance of the system.
4. Finding out the problems which I have been face and make sure it would be corrected.

Chapter-2
Literature review

Introduction

Computerization is a social procedure for giving access to and backing to PC gear to be utilized in exercises, for example, educating, bookkeeping, composing, structuring, circuits, record handling and so forth. Computerization involves social decisions about the degrees of suitable speculation and authority over gear and skill, just as decisions of hardware.

The Management Information System (MIS) are data frameworks, regularly PC based, that are utilized inside an association. The idea of the Management Information System is a mind boggling variable in spite of the fact that Murdick (1971), improved it when he said "there is presumably not any more testing and differentiated subject than the board hypothesis, framework hypothesis and software engineering".

Admission preparing system, result preparing system, course enlistment system is normal data handling framework or hierarchical data system on applicants' affirmation and exhibitions. It might likewise be characterized as "a system that gathers and procedures information (data) and gives it to troughs at all levels that utilization it for dynamic, arranging, program usage and control."

History of local network and internet

The Internet is the worldwide arrangement of interconnected PC organizes that utilizes the Internet convention suite (TCP/IP) to convey among systems and gadgets. It is a system of systems that comprises of private, open, scholastic, business, and government systems of neighborhood to worldwide extension, connected by a wide cluster of electronic, remote, and optical systems administration advances.

The field of PC systems administration and the present Internet follow their beginnings back to the mid-1960s, a period at which the phone organize was the world's prevailing correspondence arrange. The phone arrange utilizes circuit changing to communicate data from a sender to collector – a proper decision given that voice is sent at a steady rate among sender and recipient.

The dream behind the web is of a typical data space in which we impart by sharing data. Its all-inclusiveness is fundamental, neighborhood or worldwide, be it draft or exceptionally cleaned. There was a second piece of the fantasy as well, subject to the web being commonly utilized, that it turned into a practical reflection of the manners by which we work and play and mingle. That was before the condition of our communications of on-line, we could then utilize PCs to assist us

with breaking down it, understand what we are doing, where separately fit, and by the way we better work together.

A key idea of the web is that it was not intended for only one application, however as an overall foundation on which new applications could be imagined, as the development of the World Wide Web.

The aim of these applications is to plan an on-line enlistment of courses and affirmation of results. Castro (1997), Html for the World Wide Web. The approach of World Wide Web anyway brought about a methods for crossing over those holes, bringing about an intense rebuilding of the field of separation training into two circles, simultaneous and offbeat instruction.

Computer Data processing

Data processing is any procedure that utilizes a computer program to enter information and sum up, break down or in any case convert information into usable data. The procedure might be mechanized and run on a PC. It includes recording, breaking down, arranging, summing up, figuring, dispersing and putting away information. Since information is most valuable when first rate and really enlightening, information handling frameworks are regularly alluded to as data system.

Other word, Data processing, Manipulation of data by a computer. It includes the conversion of raw data to machine-readable form, flow of data through the CPU and memory to output devices, and formatting or transformation of output.

The United States Census Bureau divide computer data processing into three parts:

1. **Manual data processing:** Although far reaching utilization of the term information preparing dates just from the nineteen-fifties, information handling capacities have been performed physically for centuries. For instance, accounting includes capacities, for example, posting exchanges and creating reports like the monetary record and the income articulation. Totally manual techniques were enlarged by the utilization of mechanical or electronic adding machines. An individual whose activity was to perform counts physically or utilizing an adding machine was known as a "Computer."

2. **Automatic data processing:** The term programmed information handling was applied to activities performed by methods for unit record hardware, for example, Herman Hollerith's use of punched card gear.
3. **Electronic data processing:** Modernized information handling, or Electronic information preparing speaks to a later turn of events, with a PC utilized rather than a few autonomous bits of gear.

Data Analysis

When the space from which the information are collected is a science or a designing field, information handling and data frameworks are viewed as terms that are excessively wide and the more specific term information investigation is normally utilized. This is an emphasis on the profoundly particular and exceptionally exact algorithmic inferences and factual estimations that are less regularly seen in the run of the mill general business condition.

Processing

Practically all normally happening procedures can be seen as instances of information handling frameworks where "noticeable" data as weight, light, and so on are changed over by human eyewitnesses into electrical signs in the sensory system as the faculties we perceive as contact, sound, and vision. Indeed, even the communication of non-living frameworks might be seen along these lines as simple data preparing frameworks. Traditional use of the terms information handling and data frameworks confines their utilization to allude to the algorithmic inferences, coherent conclusions, and factual counts.

Problem Associated with Data Processing

There are issues with information preparing concerning Computer. The issues are equivalent to those issues experienced when utilizing Computer.

The serious issue is equipment disappointment which might be brought about by power flexibly.

Format of Result

Result must be imparted to the individual who wishes to utilize it. It tends to be conveyed in various manners for instance:

a) By informal (for example phone) by sight (for example seeing or watching something) even by contact, smell or taste.
b) On paper

- as a report
- as a lot of figures
- as an outline or graph
- as a photography or picture

The Features of Result Processing

Preparing business information can be said to have the accompanying highlights for manual just as electronic.

i. **Gathering Data in the First Place:** There must be information to process and this may emerge over the span of tasks. There must be a framework or method for guaranteeing that all the information required for preparing is gathered and made accessible for handling.

ii. **Up-Dating Files to Incorporate the Processed Data:** Refreshing the individual record and the indebted individuals control account are the refreshing exercises to keep the record records forward-thinking. Refreshing records implies bringing them modern.

iii. **The Routine Dissemination of Information to Users:** This incorporates routine administration control of data and looking at the real outcomes and planned for the month. Giving non-routine data to clients on demand.

Computer System and Result Processing

PCs are a key highlights of the electronic office, and it is significant mindful of the reasons why they process data superior to a manual framework. The elements of PCs in data or information or result handling include:

1. To process data or result all the more rapidly.
2. To deal with greater volumes of handling.
3. To attempt complex preparing.
4. To process data all the more dependably for example with less possibility of blunder botches.
5. To process data at less expense than a manual framework.
6. To improve the degree and nature of the executives data.

Types of Result Processing

Fundamentally there are two sorts of result preparing: the regular outcome Manual Method, Electronic Method and Mechanical method for result handling.

By and large the outcome handling techniques are:

- **Manual Method:** This includes activities performed by a representative helped whenever wanted by explicit guides, for example, a pocket number cruncher or calculator and so on this strategy preparing is just reasonable in situations where the volume of result to be handled little and there isn't a lot of accentuation on the particular timeframe the work must be finished. The handling is straightforward and by and large, the work of more hands will take care of the issue of time requirement. Model is the refreshing of written by hand result records.
- **Mechanical Method:** This includes activities that are performed by machine comprising of a console however which are incited by discouraging suitable key by an administrator. Model is the posting of lodgments and withdrawal on the individual clients' record utilizing a bookkeeping machine.
- **Electronic Method:** This is pretty much like the mechanical technique with the exception of that for this situation the machine being utilized is electronic. It tends to be can be utilized for some bookkeeping strategies including finance, stock calendars and record refreshing. Nowadays' PCs are being utilized. Result for input are entered through the console, system user, optical character/mark peruse, while handled outcome are printed or put away on assistant stockpiling. Its preparing speed is high and can accordingly deal with a serious huge measure of result.

The Basics Features of Result Processing

Result preparing is the term for the way toward delivering significant data by gathering all things of result together and performing procedure on them to remove the necessary outcome from them.

Factors deciding the Methods of Result Processing

Basic variables deciding the strategies for result preparing can be under the accompanying headings:

- **Size and Type of Results:** with every one of the models given, the strategy for creating the outcome will generally rely upon the size and kind of result. In a little school a solitary individual might have the option to have the opportunity to create all the outcome required, yet as the volume of result expands, more individuals and helps, in type of adding machines and little PCs, might be utilized. Huge volumes of result will require the utilization of huge

PCs. In little schools the finance will involve essentially paying an individual from staff a similar sum every month.

- **Timing Aspects:** Some outcomes necessities are less time basic than others. For instance, the outcomes for a trimester may just be delivered once in a quarter of a year. The planning prerequisite for data will have impressive bearing on the techniques and gear expected to give it.

Result Processing Stages

Whatever strategy, or mix of techniques, is utilized it will be seen that outcome will go through a similar essential stages in the preparing cycles.

The outcome preparing stages are:

i. Input (demonstration of getting result for preparing)
ii. Sorting (masterminding bring about an ideal request to make preparing faster and simpler)
iii. Processing (working on bring about request to get wanted outcome)
iv. Storage (filling endlessly of result for some time in the future).
v. Output consequence of preparing)
vi. Control (directing the diverse outcome preparing capacities to guarantee that the outcome is being handled successfully).

Modes of Result Processing

- **Bunch Processing:** It is a strategy by which things to be handled must be coded and gathered into gatherings or clusters preceding preparing. A cluster comprises of either an advantageous number of records or an assortment of records identifying with a given period, for example day by day, week by week, month to month, and so forth amassed until an adequate number are available to legitimize mass refreshing of ace document.
- **Continuous Processing:** Real-time = Right away. The preparing of result in an adequately quick way so the aftereffects of the handling are accessible so as to impact the current action or procedure being observed or controlled. The preparing is applied to the ace document as they occur and result is acquired from the framework on request.
- **Time-sharing Processing:** The framework connects with numerous clients, giving every one of them quick individual consideration on a period cut premise. Multiprogramming is vital in a period sharing framework.

Chapter-3
Proposed System

Purpose of the project

The main purpose of this project to develop an institutional activities by computerized system that will manage the activities in student result system thereby providing easy access to students result data for administration, faculty/teacher and student. It will also help to keep data secured and reduce time to find out student data which may be occurred into conventional exam result paper.

Scope of the project

There are three end users for the Result management system.

1. Administration
2. Faculty/Teacher
3. Student

The whole system is controlled by institutional administration. Administration section will be edit and update this database management system. And they have the permit to view whole system.

Other side, institutional faculty members are only for update their class results. Where they update/edit all students result (which section have they taken in this time period) with a specific time period.

And the last end users are students. They login by their id, password and check their result by this system. They could not update/edit something. But they can contact with faculty/administration through this system if they face any problem.

Statement of the problem

Although most of the institute (University) now follow to computerized result management system but most of the other institutes have follow conventional paper based result still now. That is not an easy way. May be the paper will be lost or damaged by another way. And when need a student record, it is not an easy way to find out this.

So, to develop a management system will be managed different things in a single way.

- It could be manage information about many users.

- It could be manage information about subjects offered in different trimesters/ year based exam.
- Here, Marks will be obtain by students in trimesters.
- Not only it will record a student result for a time but also it could be update/delete when need.
- And more important thing is, Whole system is secured and little bit chance to lost information.

Capter-4

System analysis and Design

Introduction

Framework is an efficient gathering of related segments connected together as indicated by an arrangement to accomplish a particular goal. System analysis is a critical thinking strategy that includes taking a gander at the more extensive framework, breaking separated the parts, and making sense of how it functions so as to accomplish a specific objective.

And System Design is the way toward characterizing the engineering, segments, and information of a system to fulfill indicated necessities. In this section, Data flow diagram, Use case diagram, ER diagram and different parts are portrayed extensively.

Requirement analysis

Student result management system is a web platform for students, where they can easily find out their whole result history. It is a platform for performing different activities such as result history, student information, and student contact with administrator/ data entry operator via this platform.

In this platform there are three actors:

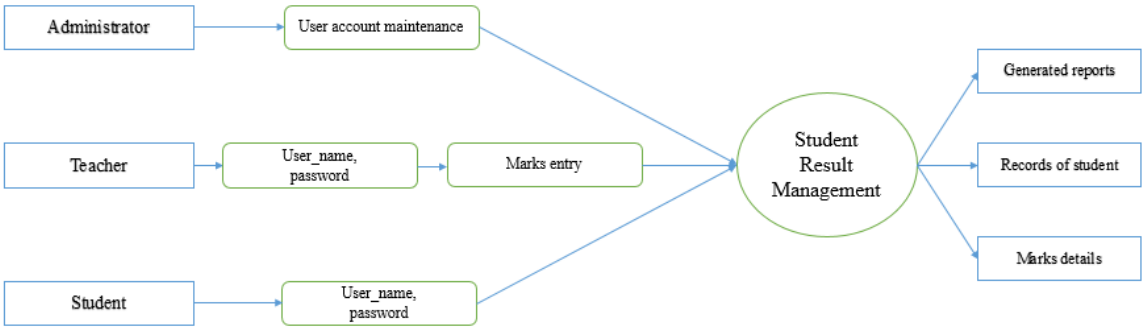
1. Administrator
2. Teacher
3. Student

Process requirement

The following process requirement system have been recognized for the system.

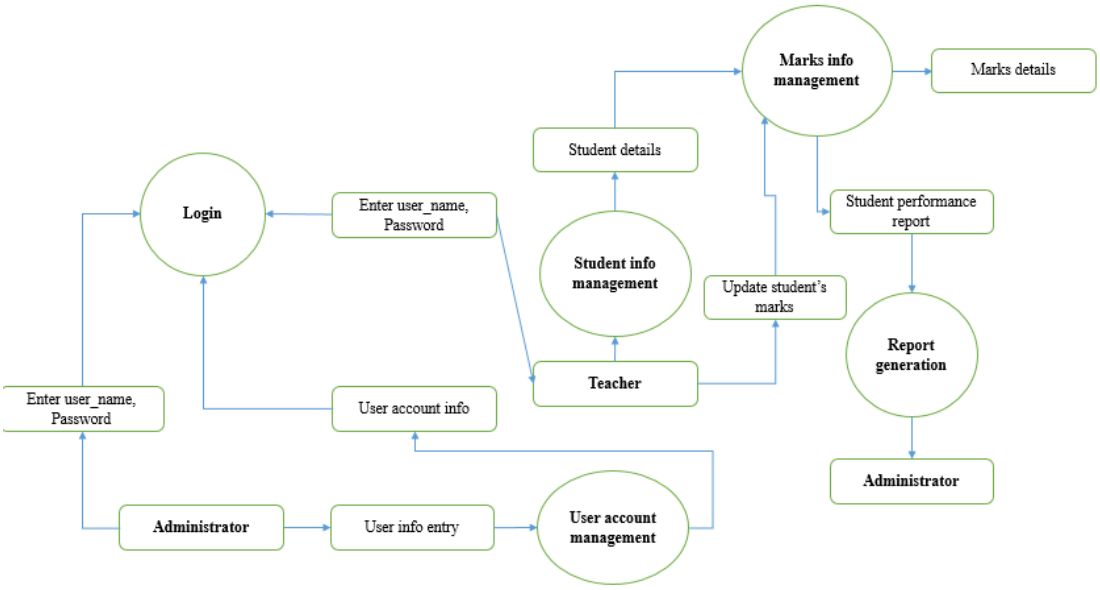
- A valid login is required for playing out the entirety of the features.
- A teacher can Enter/Update/Delete the results only.
- Teacher have their own limitations. They can work process requirement with their own limitations.
- A valid login for a student can giving their valid information.
- Administrator can edit student information to the database.
- Administrator can make search for a specific student.

Context Diagram and Data Flow Diagram (DFD): A system context diagram in building is a chart that characterizes the limit between the system, or part of a system, and its condition, indicating the substances that cooperate with it. A Data Flow Diagram is a method of speaking to a progression of information through a cycle or a system. The DFD also provides information about the outputs and inputs of each entity and the process itself. A context diagram is a top level Data flow diagram.

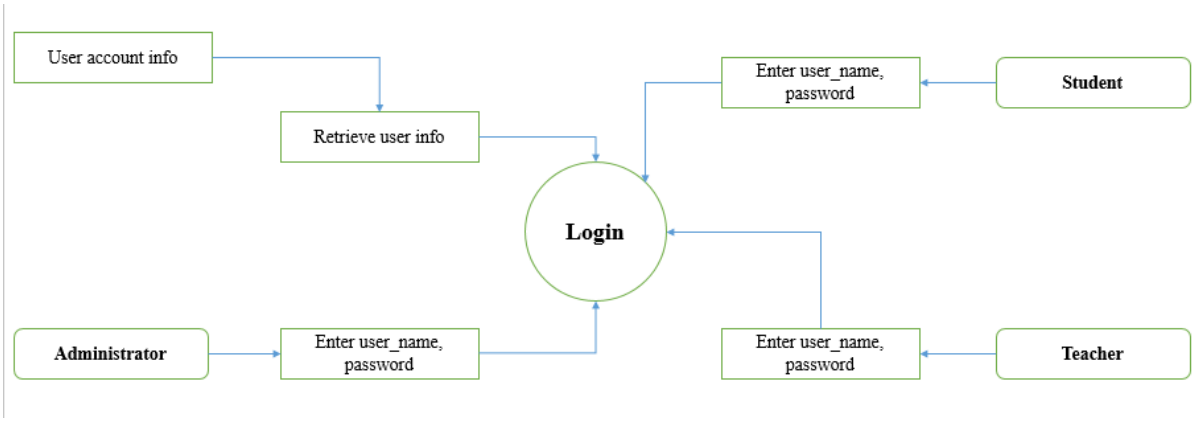


Level-1.1 DFD

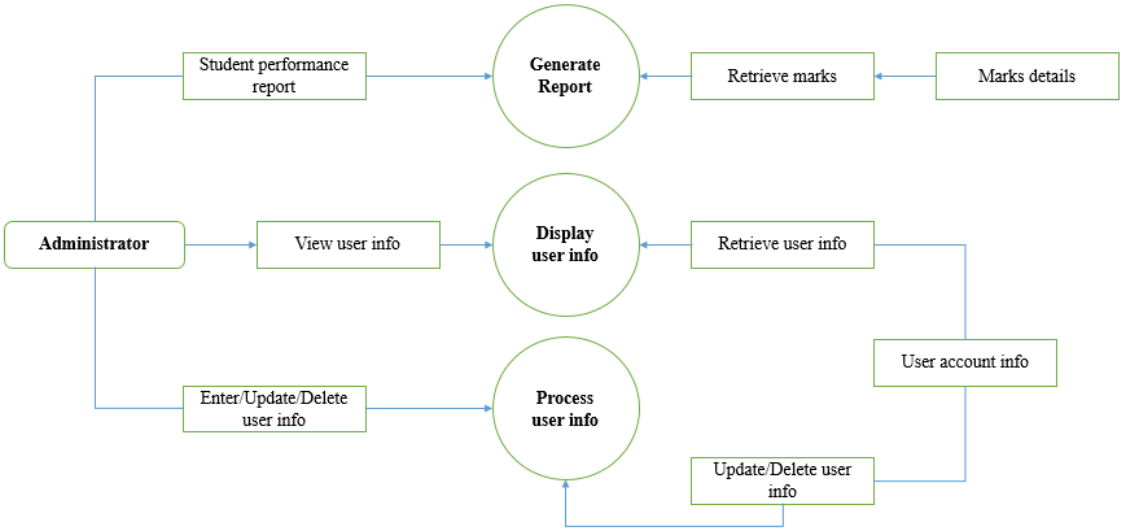
External Features: This will be the first screen that will be displayed. It allows user to access different screens based upon the user role. Like, User ID, Password, Role.



Level-1.2: DFD of Login



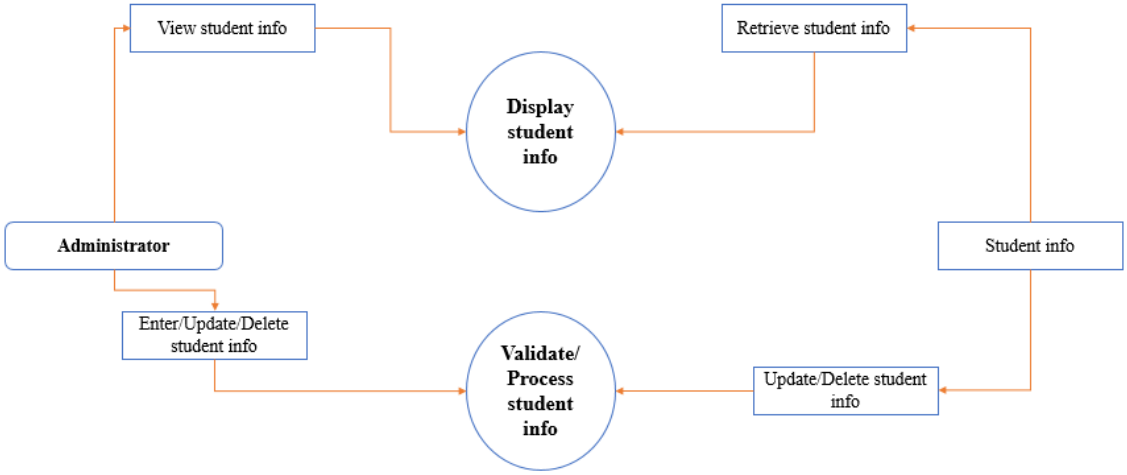
Level-1.3: DFD of User account maintenance



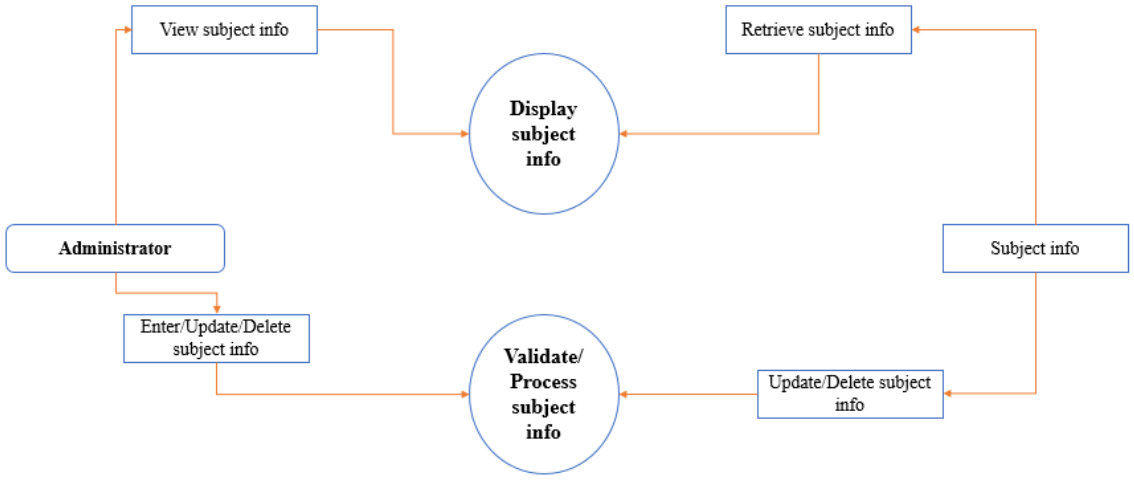
Level-2 System Features

- The system will maintain various student information.
- The system will maintain information about various subjects being offered during different semesters of the course.
- The system will maintain information about the marks obtained by various students of different enrollment year in different trimesters.

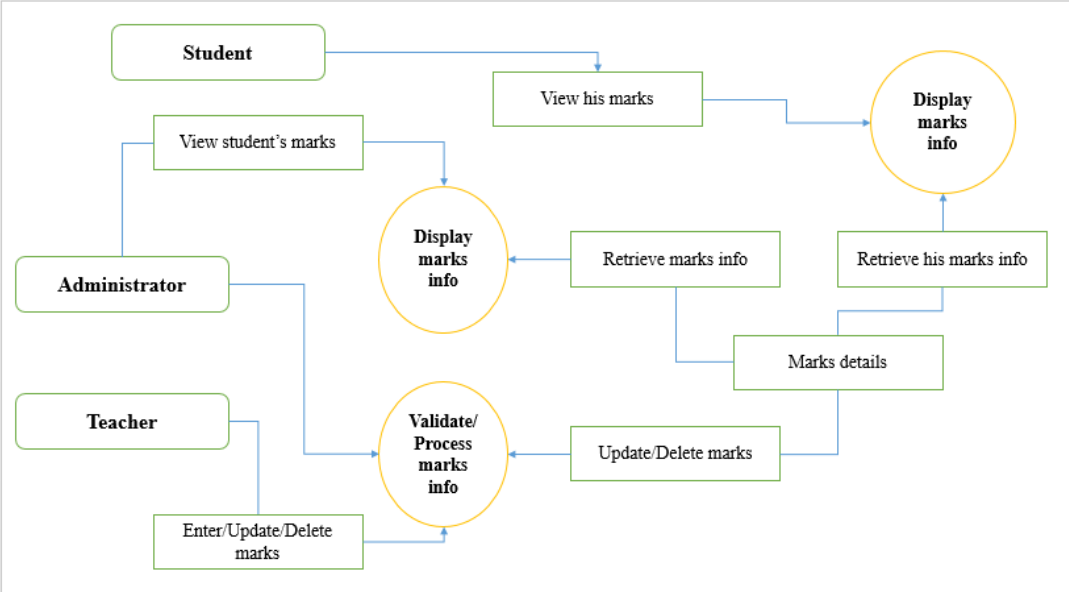
Level-2.1: DFD of Student information management



Level-2.2: DFD of Subject information management

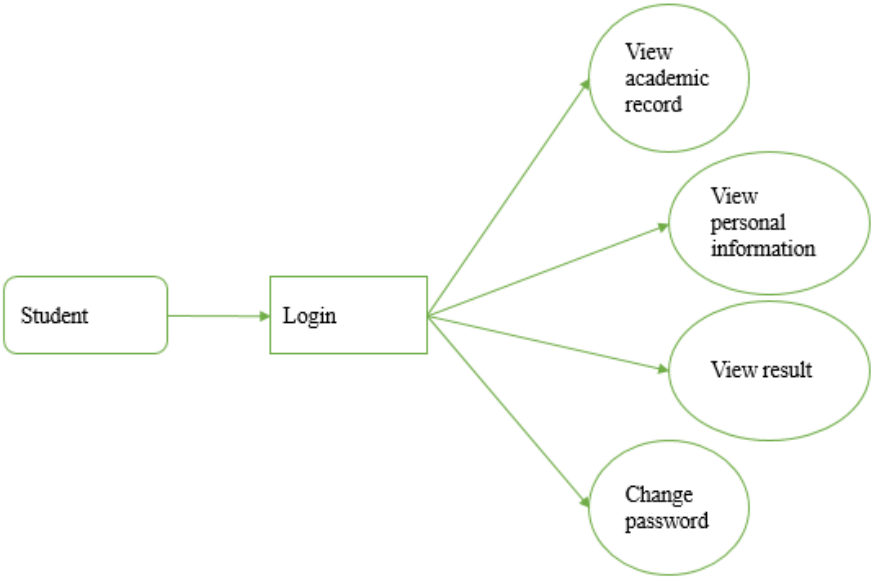


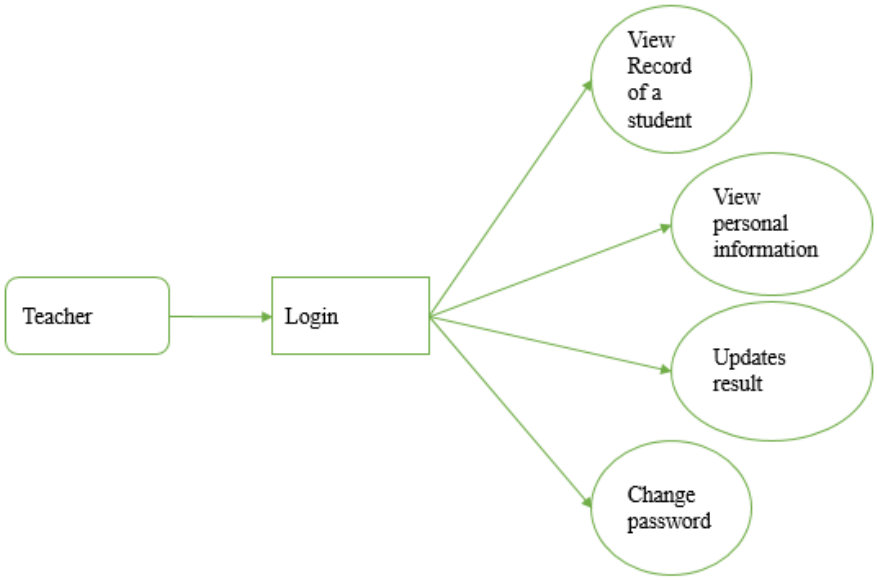
Level-2.3: DFD of Marks information management

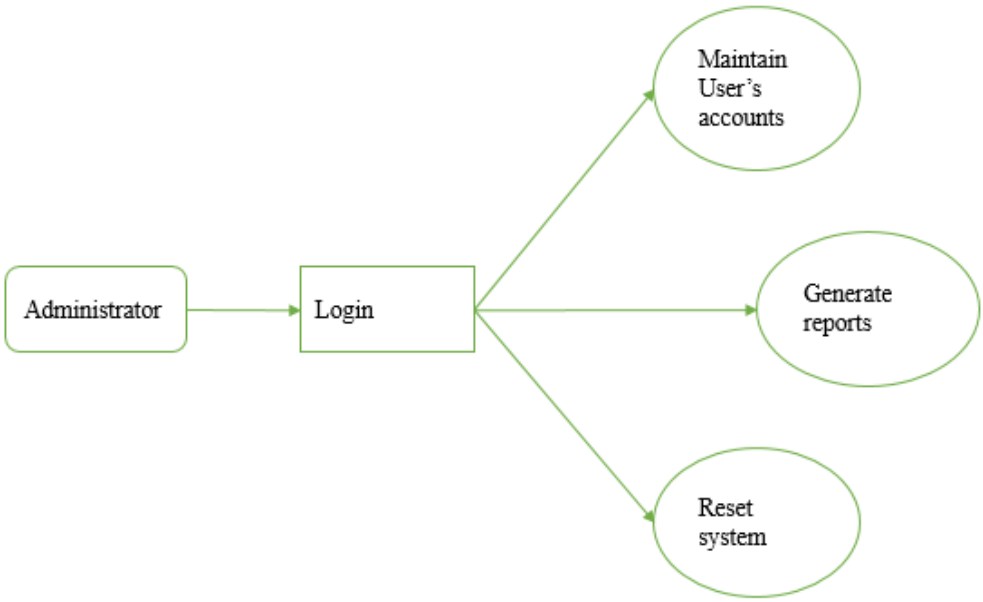


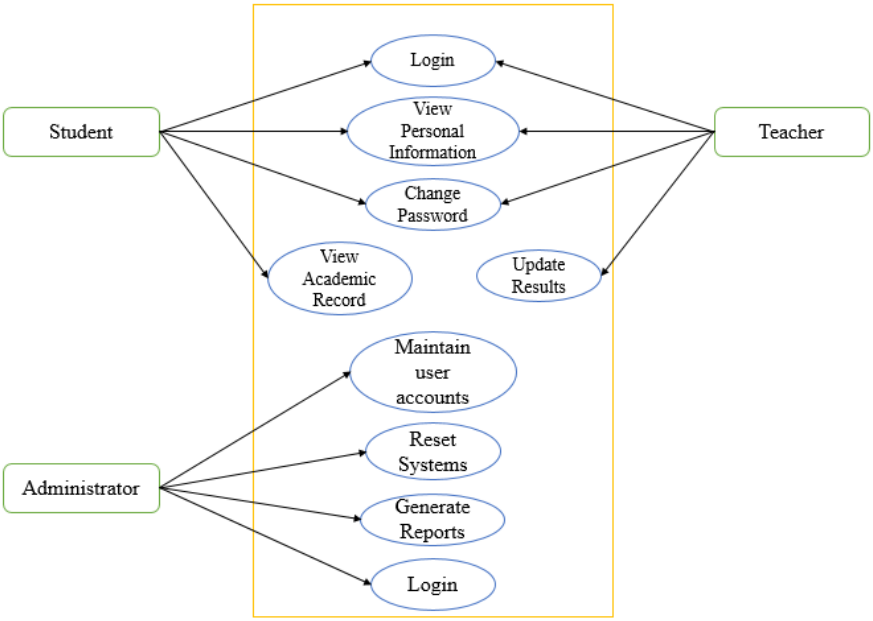
Use Case Diagram

Use case diagram is used in presenting the system requirements of any proposed system. A Use Case Diagram is a graphical delineation of the cooperation's among the components of a system that shows the connection between the user and diverse use cases in which the user is included. Use case charts are important for picturing the functional prerequisites of a system that will convert into structure decisions and improvement needs. Here several Use Case Diagram are shown with their activities and actions toward their system.



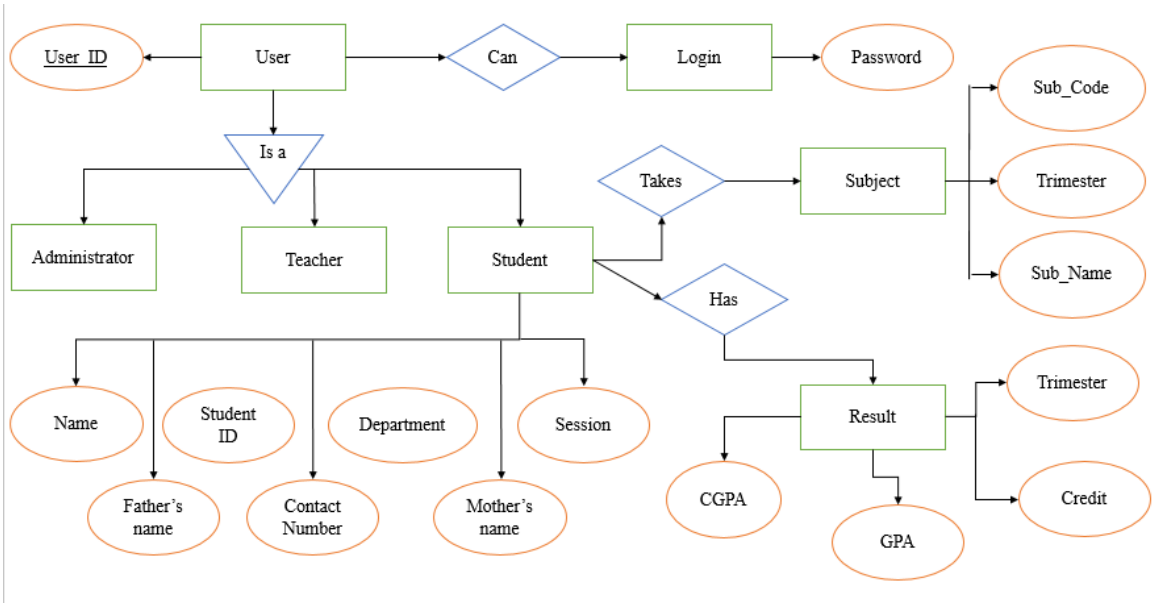

Teacher
Login
View Record of a student
View personal information
Updates result
Change password

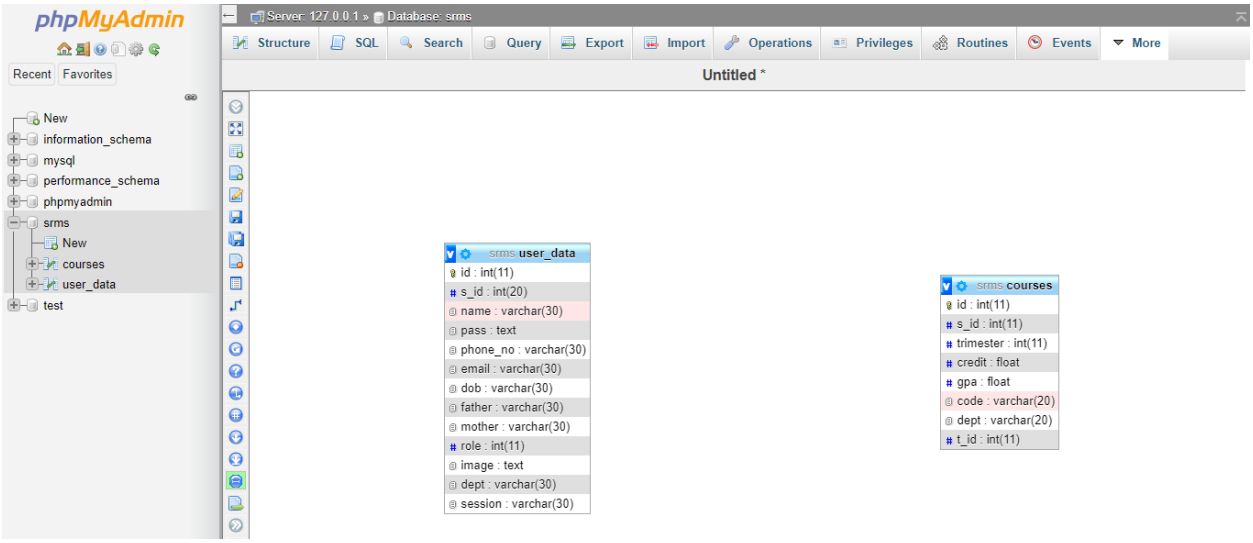

Administrator
Login
Maintain User's accounts
Generate reports
Reset system


Login
Student
View Personal Information
Teacher
Change Password
View Academic Record
Update Results
Maintain user accounts
Reset Systems
Administrator
Generate Reports
Login

Entity Relationship(ER) Diagram

An Entity Relationship Diagram (ERD) shows the relationship of element sets put away in an information base. ER Diagram in database engineering guarantees to produce high-quality database design to use in database creation, management, and maintenance. An element in this setting is an item, a part of information. An element set is an assortment of comparable elements. These elements can have characteristics that characterize its properties. Here is the ER Diagram of this proposed system.





Chapter-4
Implementation

Introduction

Several open source tools, Programming Languages and Database have been used here to complement and improve this system.

1. Atom, text and source code editor
2. XAMPP, cross-platform web server
3. Apache, as web server

Database

1. MySQL, is an open-source relational database management system used for storing data.

Programming Language

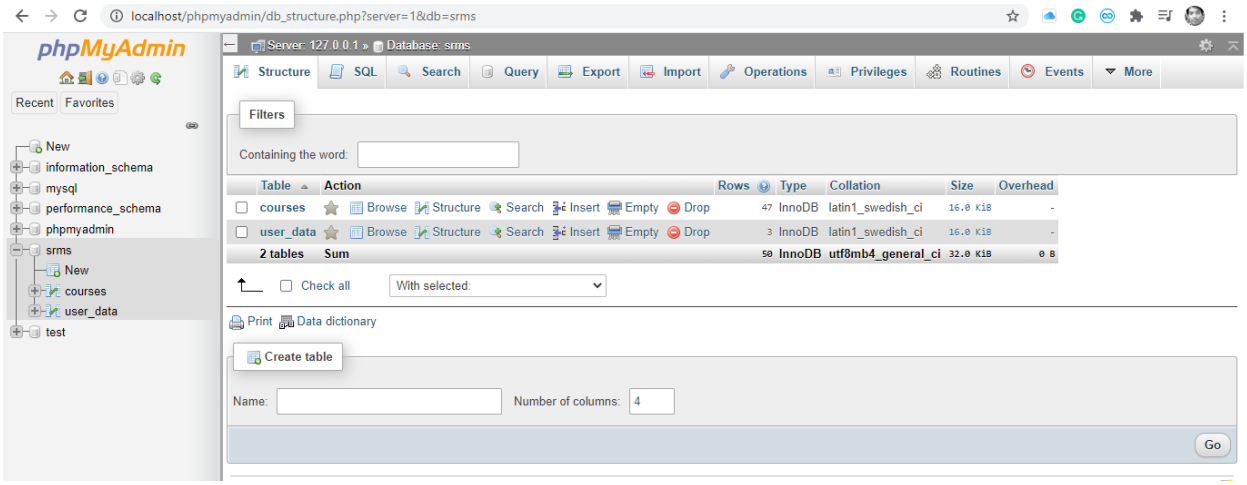
1. CSS, Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language like HTML.
2. HTML, Hypertext Markup Language is the standard markup language for documents designed to be displayed in a web browser.
3. Bootstrap, contains CSS- and JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.
4. PHP, hypertext preprocessor is used for backend development.

Database Implementation

A database is a systematic collection of data.

Information base is required for precisely recording information, updating and following them on a productive and standard premise. In this system, there are an information base called 'srms' comprise of 2 tables of information.

- Courses: Some information of the student. Which is related to its result. All information about student outcomes is entered/updated by the teacher and other information is handled by the administrator.
- User_data: Storing and manipulating data from registered users.



User Interface:

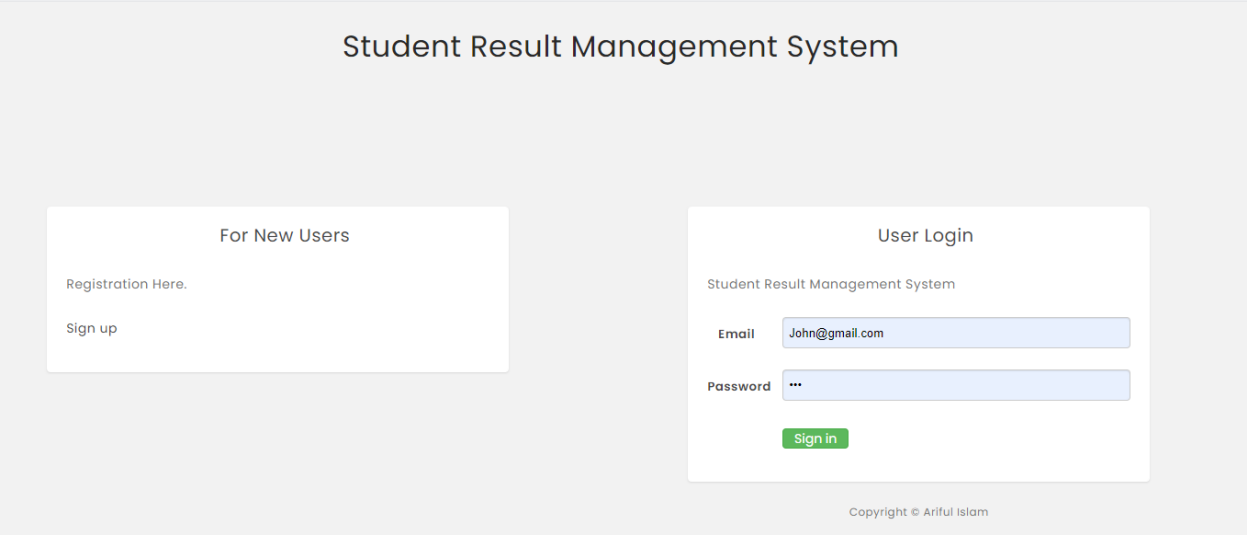
In data innovation, the user interface is everything into a data information with which an individual may cooperate. This can incorporate presentation screens, peripherals gadgets and appearance of a work area. It is likewise a path through which a client cooperates with an application or site.

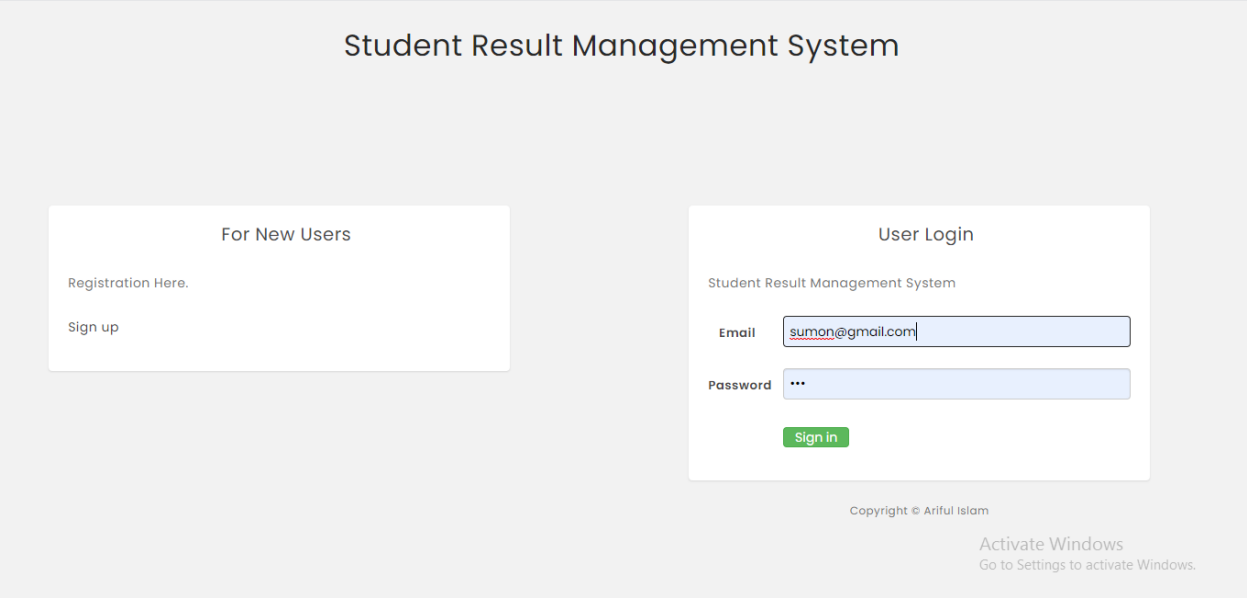
Result and Discussion

All the data relating to the “srms” are put away in the system information base. The example results are appeared in the different screen shots introduced in this area.

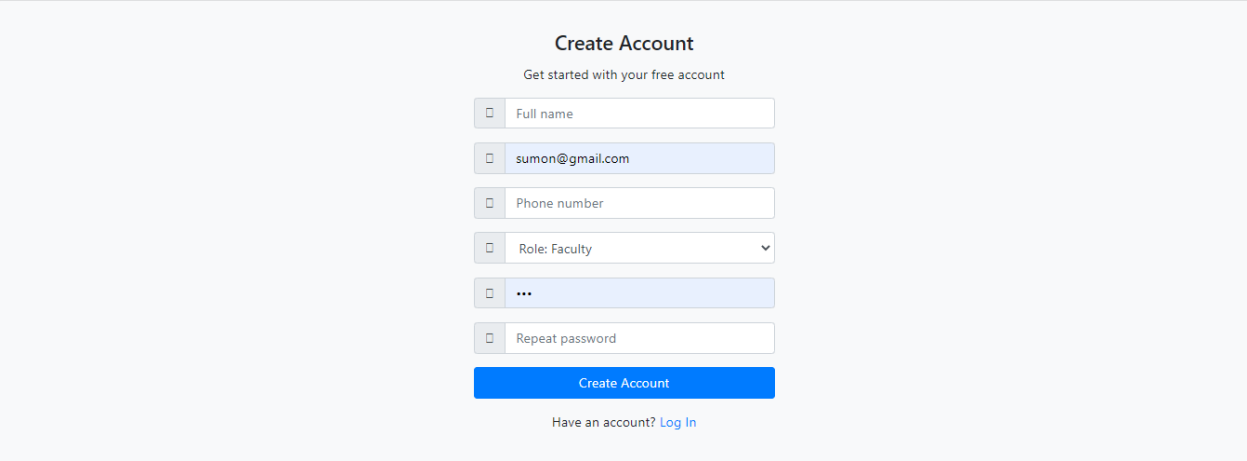
Homepage:

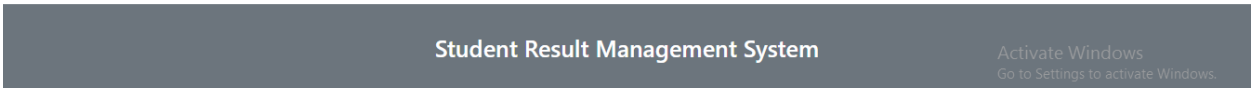
The upper part of the proposed system is here. Which contains the features of the login system. Where students and teachers can access by logging in. Also includes a registration form for new users.





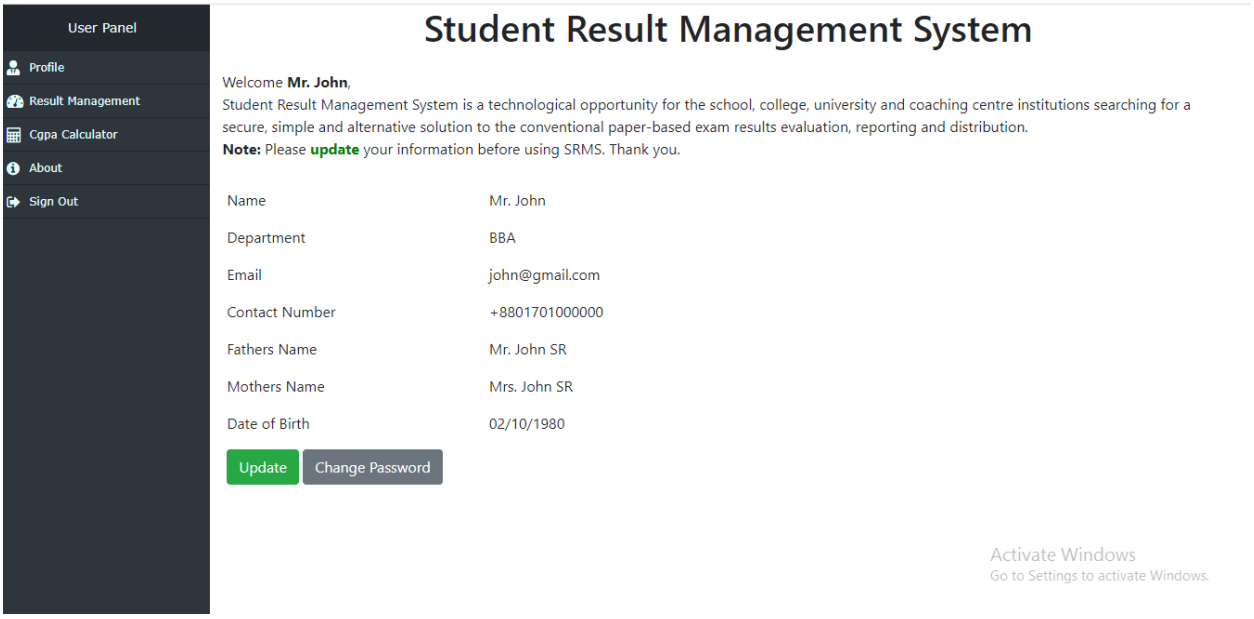
This is a registration form for new users. A newcomer can easily create their account using some of their information (Name, Gmail, Phone number, Role and Password). And all its access to the administrator.





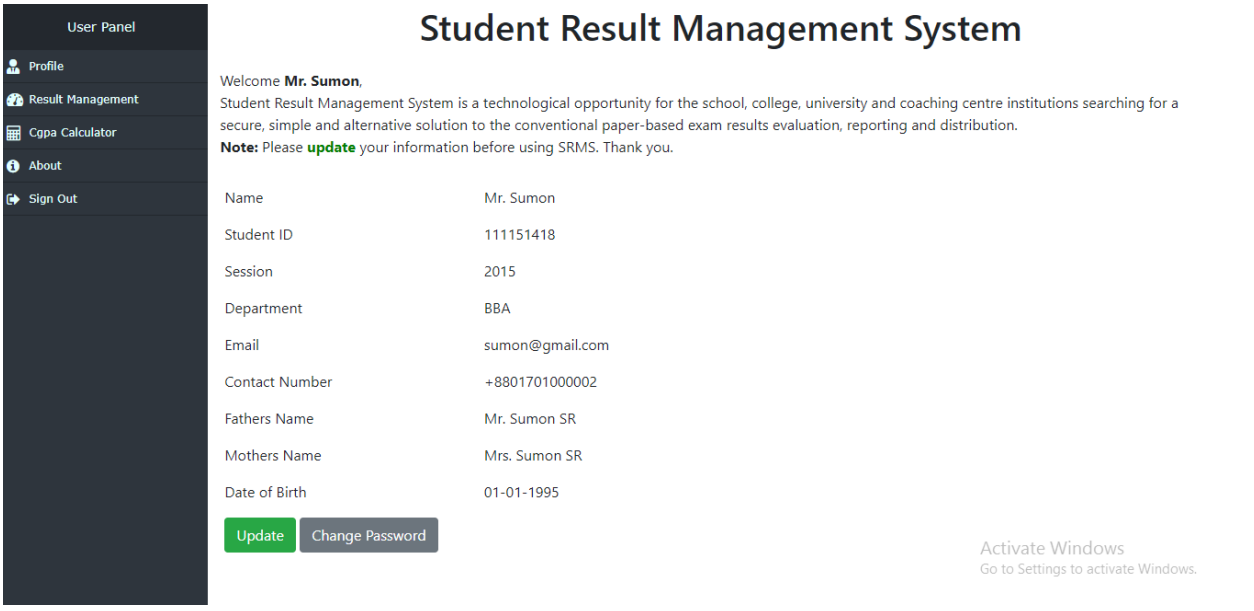
This is the profile of a teacher and a student. Here is some information about them. To the left of this dashboard is a panel which is the user panel. From here the user can go to his own profile, view the results and exit this dashboard if want.

Firstly, in the case of a teacher user panel his Name, Department, Email address and his phone number are given in his/her profile as a means of communication with him.

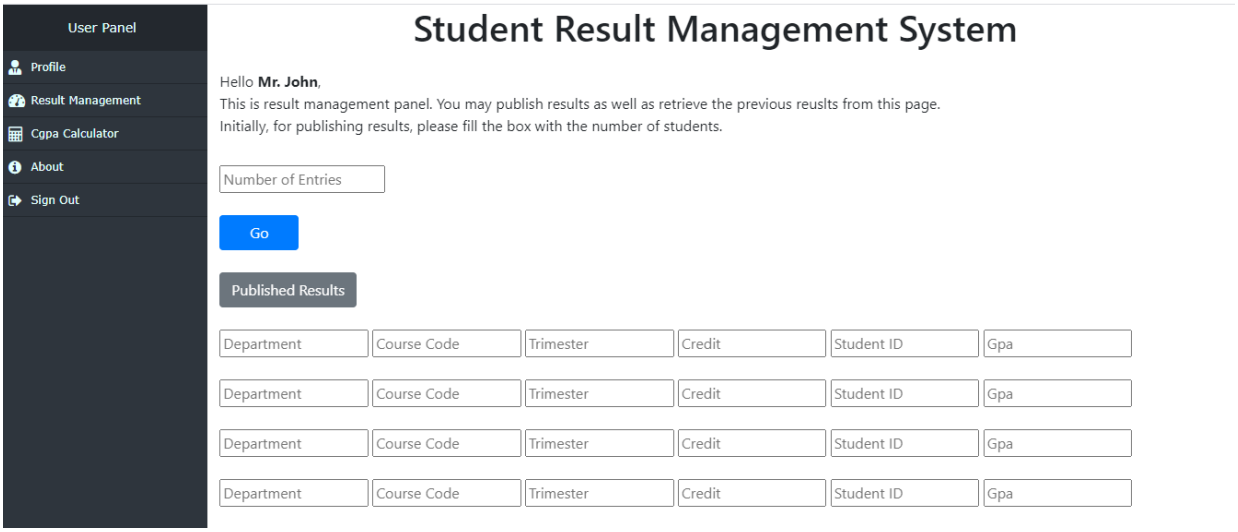


On the other hand, a student's profile includes his Name, Department, Session and his phone number so that he can be contacted easily. He also has an e-mail address provided by the varsity so that he does not miss important messages from the varsity.

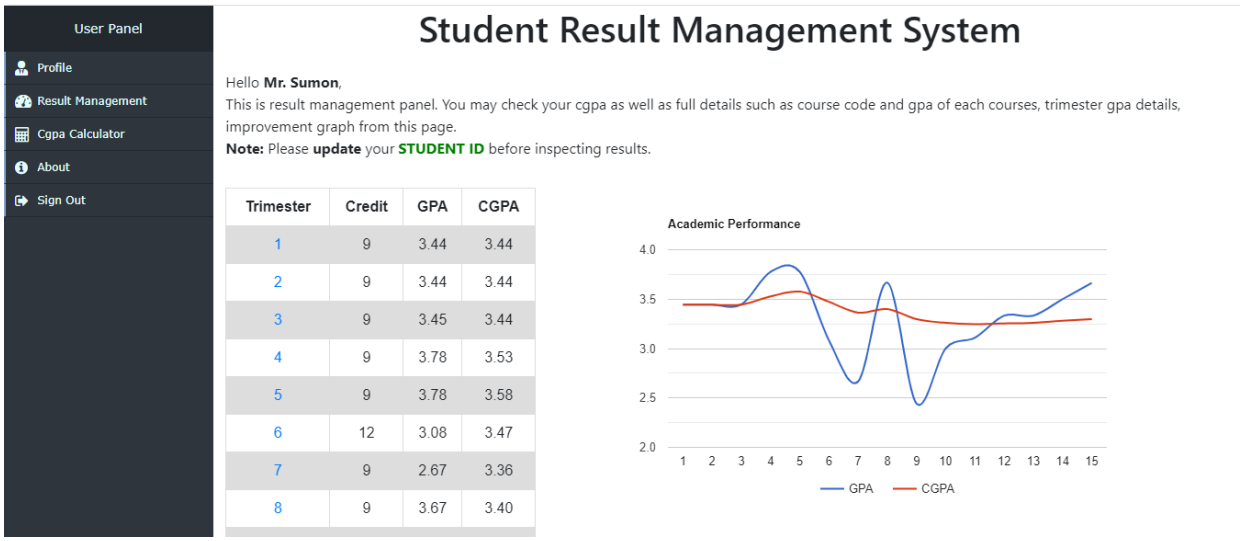
Teachers and students can also update their information if they wish. And can change the password if desired.



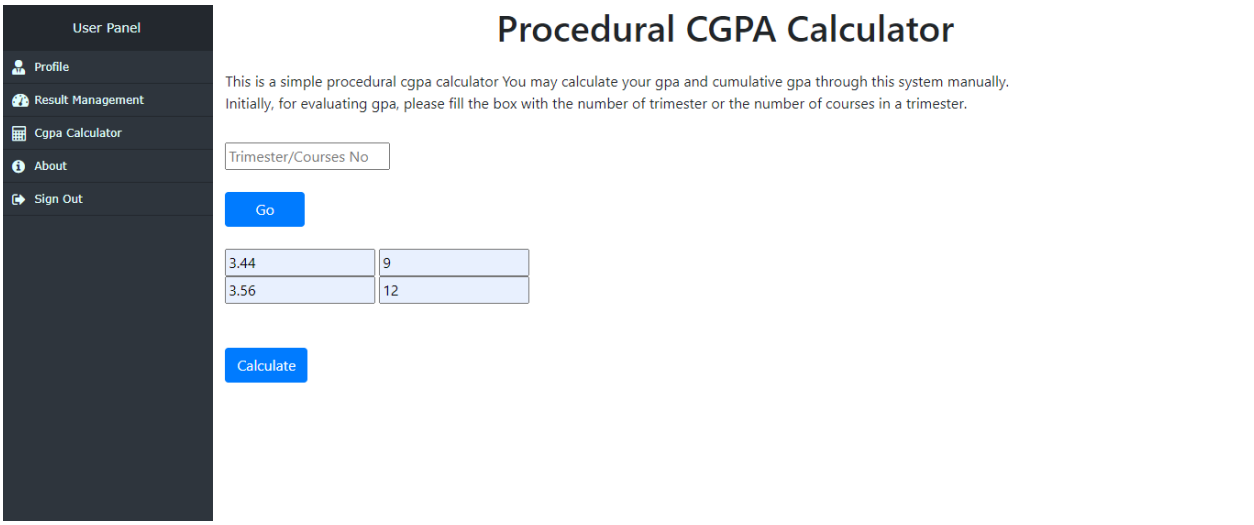
This is the form for the teacher. Teachers are able to enter and update results. Only teachers can access this form. Here the teacher can update the information of the students individually (Department, Student ID, Course Code, Trimester, GPA).

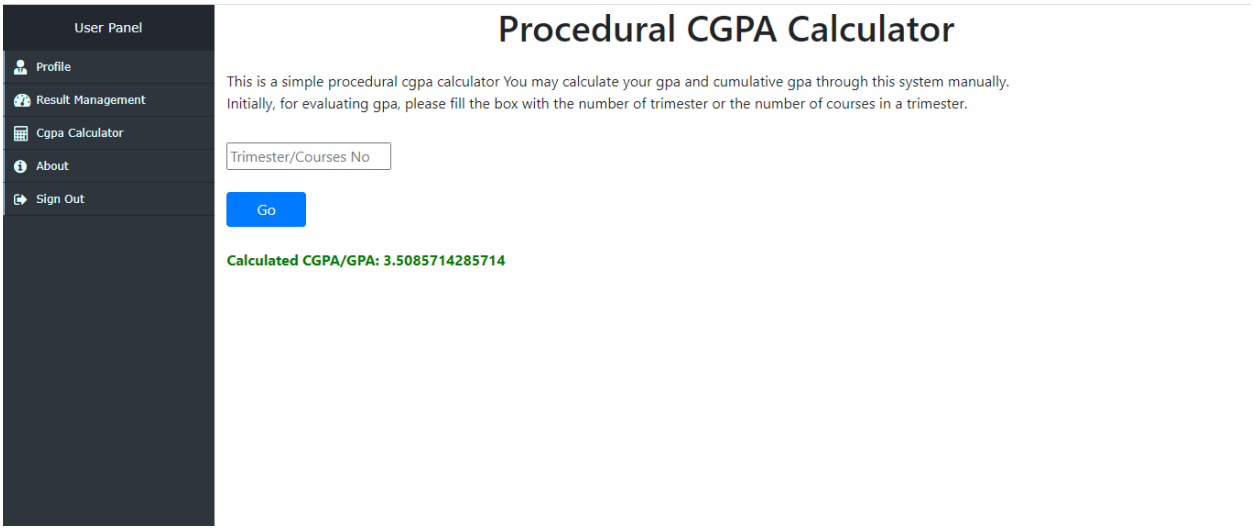


Here is the result history of the students. As well as a graph of academic performance is given. Which indicates the result of each trimester as well as a ratio of his total result.



This is a result calculator. Through which teachers and students can easily calculate the result.


User Panel
Profile
Result Management
Cgpa Calculator
About
Sign Out
Procedural CGPA Calculator
This is a simple procedural cgpa calculator You may calculate your gpa and cumulative gpa through this system manually.
Initially, for evaluating gpa, please fill the box with the number of trimester or the number of courses in a trimester.
Trimester/Courses No
Go
3.44
9
3.56
12
Calculate


User Panel
Profile
Result Management
Cgpa Calculator
About
Sign Out
Procedural CGPA Calculator
This is a simple procedural cgpa calculator You may calculate your gpa and cumulative gpa through this system manually.
Initially, for evaluating gpa, please fill the box with the number of trimester or the number of courses in a trimester.
Trimester/Courses No
Go
Calculated CGPA/GPA: 3.5085714285714

Chapter-6
Conclusion

Student information management system lead to a better organization structure since the information management of the students is well structured and also lead to better as well as efficient utilization of resources.

The system is designed to achieve maximum user satisfaction. The goal of this system is to make it easier for teachers and students to keep up with the times. This will definitely make the institute authorities more comfortable as they do not have to think of keeping the results of their students on a conventional paper.

Student Information Management System can be utilized by training foundations to keep up the records of understudies without any problem. Accomplishing this goal is troublesome utilizing a manual framework as the data is dissipated, can be repetitive and gathering significant data might be very tedious. Every one of these issues are understood utilizing this venture.

The project will be upgraded and extended in the following features:

- Improving the design, implementation, and documentation in such a way that anyone can use this project for better performance.
- Anyone can give more data input to the data server if they want. This will make the database stronger.
- The web here is very commonly displayed. It can be further equipped.
- The web page can be made lighter so that with low internet speed that page can be browsed.

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