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**A PROJECT REPORT ON  
“Student Result Management System”**

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IN PARTIAL FULLFILLMENT OF DEGREE OF  
BACHORAL OF COMPUTER APPLICATION (BCA) 21-22**




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## Certificate

This is to certify that **Mis. Bhagyashri Rokde** final year student of Bachelor in Bachelor of Computer Applications (BCA) has been successfully complete these project entitled "**Student Result Management System**" as the record of the work carried out by his is accepted in partial fulfilment of the requirement for degree of Bachelor in Bachelor of Computer Applications (BCA) in the Bachelor of Computer Applications (BCA) vidhydhan Commerce & Science college Dhule under the guidance of **Prof. Mr. A.D.Umre** in the academic year 2021-2022.

Place: - Date 23/5/22

  
Prof. A.D. Umre

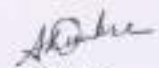
(Project Guide)  
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External

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**"Student Result Management System"**

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# Introduction

## Introduction

The main objective of developing this project is to automate student result management. This application will greatly simplify and speed up the result preparation and management process.

A Project report on Student management system. faculty, category and for examination, block allocation, subject management , scheduling exam, result. This is a computerized examinations results management system for tertiary student's examination records. The main aim of the project is to provide the examination result to the student in a simple and accurate way. Project Report On Student Result Management System: Project On Student Result Management System: Project Report On Blood Bank Management System: Project Report. The application will manage the information about various students enrolled in this course in different years, the marks obtained by the various students in various subjects in different semesters. The manual method of students' academic result processing was found to be tedious, especially when carried out for a large number of students, this makes the entire process time-consuming and error prone. Student management system full report,ask latest student management

system project report of the proposed system to generate the above results. This project is useful for students and institutions for getting the results in simple manner. The system designed is meant to register students as soon as they have paid their departmental registration and only then will they be able to view their results. Project ideas project report project screen shot subject management , scheduling exam, result and project report of student management system. The software will also generate summary report regarding student information, semester wise marks list and performance reports. The whole result analyzer will be under the control of the administrator and the admin as the full privileges to read, write and execute the result. The project student result processing system project in java now i want asp .net c# project online result system processing management system project; The system presents a single platform that will be used to manage the processing of all examination records within the institution. admin gives the privileges to the Teacher and student and the guest user to access the result. The student can share or download his/here result. Student management system project report student management system.doc abstract student management system. the main objective of developing this student management system final and management can manage all students student management system project report. Command school student management system, project on student result management system: project report on student result management system: a project report on student database management system. . Scopes and advantages of the student database management system. project overview student semester we are required to prepare a project report in the system analysis design and development project report keywords: student management.

Student report generator is a web based application designed and engineered for colleges that need to manage results across multiple branches students that need to track, manage and report results. This application can run on any kind of operating system. At a time we can see all the years result in a single sheet and we can see the individual candidate's results separately.

#### **EXISTING SYSTEML:**

In the previous system, t-sheets occupy more space and the format is not in an understandable way. It takes more time to search the student result because of filtering the rows and columns. In this, analyzing the result is also difficult.

#### **PRACTICES:**

- ❖ Storing and retrieving the unorganized data.
- ❖ Segregating the data based on a particular college ID.
- ❖ Further segregating the data subject wise.

- ❖ Providing the result in a single pattern only( standard pattern- internal marks, external marks, total marks)

**LIMITATIONS:**

- ❖ The data generated in t-sheets is not in understandable manner.
- ❖ The t-sheets occupy more space.
- ❖ When a search is made, more time is taken to filter the data and give the result.

**PROPOSED SYSTEM:**

This is a tracking application where at a time we can see all the year's result in a single sheet and a choice of viewing the candidates result separately is also possible. The proposed system t-sheets are designed in an organized manner. The t-sheets occupy comparatively lesser space, so memory can be organized in a proper way. Also, the time taken to retrieve the result is faster compared to the existing system.

# Requirement Analysis

## Requirement Analysis

✚ Project Name	Student Result Management System
✚ Language Used	PHP5.6, PHP7.x
✚ Database	MySQL 5.x
✚ User Interface Design	HTML, AJAX,JQUERY,JAVASCRIPT
✚ Web Browser	Mozilla, Google Chrome, IE8, OPERA



 Software

XAMPP / Wamp / Mamp/ Lamp (anyone)

## Hardware Requirement

### ◆ Hardware Requirement

- P-III or higher Processor.
- 40 GB HDD
- 256 SDD
- 8 GB RAM (min)
- Color VGA 800x600 resolution monitor

## XAMPP

### WHAT IS XAMPP?

XAMPP is a free and open-source cross-platform web server that lets us host our website on a local system. It is developed by Apache Friends. It consists of an Apache HTTP server, MariaDB Database, and interpreter for PHP and Perl programming languages. It is supported by Windows, Linux, and macOS.

### WHY DO WE USE XAMPP?

XAMPP is designed to use as a development tool only, to allow website designers and programmers to test their work on their own computers without accessing the internet. XAMPP creates an environment to run our PHP and Perl scripts locally. We can deploy our project developed in these languages and we will be able to see the output.

### COMPONENTS IN XAMPP

XAMPP consists of several components which help it to run and host websites locally. We will take a look at some of the major components here. So if you see XAMPP is made from core components first name only. X represents Cross-Platform, A represents

Apache HTTP server, M represents Maria DB database, last two Ps represent the languages PHP and Perl.

1. Cross Platform:- This is not component but we can say this is the feature of the XAMPP. Which tells us that XAMPP is not platform dependent, we can use XAMPP on any system like Windows, Linux or macOS.
2. Apache HTTP Server:- As we know Apache is a famous HTTP cross platform server. It is used to deliver web content worldwide. It processes the requests and serves web content via HTTP.
3. Maria DB Database:- Originally, MySQL was the part of XAMPP but after version 5.5.30, Maria DB took its place. Maria DB is relation database only developed by MySQL. We can do all the CRUD operations same as we do with MySQL.
4. PHP:- It is the backend scripting language, which is used to develop dynamic websites. We develop websites using PHP and we deploy it in XAMPP server. Apache from XAMPP processes the php requests interpreted by XAMPP interpreter.
5. Perl:- Perl is combination of two high-level dynamic language. Like PHP, Perl is also used to develop dynamic websites. Perl is written in C.
6. phpMyAdmin:- This is a dashboard to perform the operations of Maria DB. phpMyAdmin provides GUI to handle the data. We can create the Table or Databases using GUI as well as queries. Also we can do the CRUD operation using this GUI as well as queries.
7. XAMPP control panel:- XAMPP control panel provides us the option to operate the different-different components of XAMPP.
8. Filezilla:- Filezilla is a File Transfer Protocol Server, which let us to handle operation performed on the file.

These are some of the core components of XAMPP. In the next post, we will see how to install XAMPP on our systems.

## Google Chrome

Google Chrome is an open-source and the most popular internet browser that is used for accessing the information available on the World Wide Web. It was developed by **Google** on **11 December 2008** for Windows, Linux, Mac OS X, Android, and iOS operating systems. It uses sandboxing-based approach to provide Web security. Furthermore, it also supports web standards like .

Google Chrome was the first web browser that has a feature to combine the search box and address bar, that was adopted by most competitors. In 2010, Google introduced the **Chrome Web Store**, where users can buy and install Web-based applications.

[How to install or uninstall the Google Chrome browser](#)

Google Chrome is commonly used as an alternative to the default browsers which come with your computers such as Internet Explorer and Microsoft Edge.

### Advantages of Google Chrome

There are so many advantages of Google Chrome that make it easier to use, which are as follows:

1. **Modern Layout:** The Chrome browser has a simple user-interface that includes frequently-used buttons such as forward, backward, refresh, etc. It also has a search bar or an Omnibox; that allows users to input the web address for searching anything.
2. **Speedy Performance:** There are many websites (like news and online commerce sites) that are developed by using sophisticated programming that can be a cause for the slow browsing. Chrome deals with this programming efficiently and displays complex pages quickly. Thus, it helps to save your time and hold your internet session snappy responsive in many situations.
3. **Safe and Secure:** The Chrome browser is updated regularly by Google to keep it safe and secure. It has the ability to get updated automatically when you connect the internet. Furthermore, Chrome provides the following protection:
  - It can block harmful and malicious websites.
  - It helps to identify and remove the malware that affects the browser with the help of the Chrome cleanup tool.
  - Additionally, it has the ability to identify the secure connection of a website. It will show a lock pad icon in the address bar to disclose a secure connection. If any site does not use HTTPs encryption, it will show a site as 'Not Secure.'
4. **Integration with Google Apps:** Chrome has become a popular browser in the world as it can be integrated with other Google products like Gmail. When you login the Chrome, the other Google applications such as Gmail, AdSense, Analytics, Search Console, Google Ads, and more will also be logged in automatically.
5. **Cross-Platform Browser:** Google provides a cross-platform browser. As Edge and Safari browsers cannot run on all operating systems, but Chrome can be used on Windows, Linux, and Mac platforms. Although Mac is different from Windows in terms of certain functionalities, like changing language and most features will remain the same. It will help to maintain your experience across all desktop devices. For example, most of the people use the Ctrl+Enter to add .com

within web address in windows. Chrome allows users to use the same shortcut key to add .com in the web address on Mac.

## **HTML**

**HTML tutorial** or HTML 5 tutorial provides basic and advanced concepts of HTML. Our HTML tutorial is developed for beginners and professionals. In our tutorial, every topic is given step-by-step so that you can learn it in a very easy way. If you are new in learning HTML, then you can learn HTML from basic to a professional level and after learning HTML with CSS and JavaScript you will be able to create your own interactive and dynamic website. But Now We will focus on HTML only in this tutorial.

The major points of HTML are given below:

- HTML stands for HyperText Markup Language.
- HTML is used to create web pages and web applications.
- HTML is widely used language on the web.
- We can create a static website by HTML only.
- Technically, HTML is a Markup language rather than a programming language.

HTML is an acronym which stands for **Hyper Text Markup Language** which is used for creating web pages and web applications. Let's see what is meant by Hypertext Markup Language, and Web page.

**Hyper Text:** HyperText simply means "Text within Text." A text has a link within it, is a hypertext. Whenever you click on a link which brings you to a new webpage, you have clicked on a hypertext. HyperText is a way to link two or more web pages (HTML documents) with each other.

**Markup language:** A markup language is a computer language that is used to apply layout and formatting conventions to a text document. Markup language makes text more interactive and dynamic. It can turn text into images, tables, links, etc.

**Web Page:** A web page is a document which is commonly written in HTML and translated by a web browser. A web page can be identified by entering an URL. A Web page can be of the static or dynamic type. **With the help of HTML only, we can create static web pages.**

## **JavaScript**

JavaScript (js) is a light-weight object-oriented programming language which is used by several websites for scripting the webpages. It is an interpreted, full-fledged programming language that enables dynamic interactivity on websites when applied to an HTML document. It was introduced in the year 1995 for adding programs to the

webpages in the Netscape Navigator browser. Since then, it has been adopted by all other graphical web browsers. With JavaScript, users can build modern web applications to interact directly without reloading the page every time. The traditional website uses js to provide several forms of interactivity and simplicity. Although, JavaScript has no connectivity with Java programming language. The name was suggested and provided in the times when Java was gaining popularity in the market. In addition to web browsers, databases such as CouchDB and MongoDB uses JavaScript as their scripting and query language.

### Features of JavaScript

There are following features of JavaScript:

1. All popular web browsers support JavaScript as they provide built-in execution environments.
2. JavaScript follows the syntax and structure of the C programming language. Thus, it is a structured programming language.
3. JavaScript is a weakly typed language, where certain types are implicitly cast (depending on the operation).
4. JavaScript is an object-oriented programming language that uses prototypes rather than using classes for inheritance.
5. It is a light-weighted and interpreted language.
6. It is a case-sensitive language.
7. JavaScript is supportable in several operating systems including, Windows, macOS, etc.
8. It provides good control to the users over the web browsers.

## **jQuery**

jQuery is a small and lightweight JavaScript library.

jQuery is cross-platform.

jQuery means "write less do more".

jQuery simplifies AJAX call and DOM manipulation.

### jQuery Example

jQuery is a small, light-weight and fast JavaScript library. It is cross-platform and supports different types of browsers. It is also referred as "write less do more" because it takes a lot of common tasks that requires many lines of JavaScript code to accomplish,

and binds them into methods that can be called with a single line of code whenever needed. It is also very useful to simplify a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

- jQuery is a small, fast and lightweight JavaScript library.
- jQuery is platform-independent.
- jQuery means "write less do more".
- jQuery simplifies AJAX call and DOM manipulation.

### jQuery Features

Following are the important features of jQuery.

- HTML manipulation
- DOM manipulation
- DOM element selection
- CSS manipulation
- Effects and Animations
- Utilities
- AJAX
- HTML event methods
- JSON Parsing
- Extensibility through plug-ins

### Why jQuery is required

Sometimes, a question can arise that what is the need of jQuery or what difference it makes on bringing jQuery instead of AJAX/ JavaScript? If jQuery is the replacement of AJAX and JavaScript? For all these questions, you can state the following answers.

- It is very fast and extensible.
- It facilitates the users to write UI related function codes in minimum possible lines.
- It improves the performance of an application.
- Browser's compatible web applications can be developed.
- It uses mostly new features of new browsers.

So, you can say that out of the lot of JavaScript frameworks, jQuery is the most popular and the most extendable. Many of the biggest companies on the web use jQuery.

Some of these companies are:

- Microsoft
- Google
- IBM
- Netflix

## **MYSQL**

MySQL is a relational database management system based on the Structured Query Language, which is the popular language for accessing and managing the records in the database. MySQL is open-source and free software under the GNU license. It is supported by **Oracle Company**.

Our MySQL tutorial includes all topics of MySQL database that provides for how to manage database and to manipulate data with the help of various SQL queries. These queries are: insert records, update records, delete records, select records, create tables, drop tables, etc. There are also given MySQL interview questions to help you better understand the MySQL database.

What is Database?

It is very important to understand the database before learning MySQL. A database is an application that stores the organized collection of records. It can be accessed and managed by the user very easily. It allows us to organize data into tables, rows, columns, and indexes to find the relevant information very quickly. Each database contains distinct [API](#) for performing database operations such as creating, managing, accessing, and searching the data it stores. Today, many databases are available like MySQL, Sybase, [Oracle](#), [MongoDB](#), [PostgreSQL](#), [SQL Server](#), etc. In this section, we are going to focus on MySQL mainly.

### **What is MySQL?**

MySQL is currently the most popular database management system software used for managing the relational database. It is open-source database software, which is supported by Oracle Company. It is fast, scalable, and easy to use database management system in comparison with Microsoft SQL Server and Oracle Database. It is commonly used in conjunction with [PHP](#) scripts for creating powerful and dynamic server-side or web-based enterprise applications.

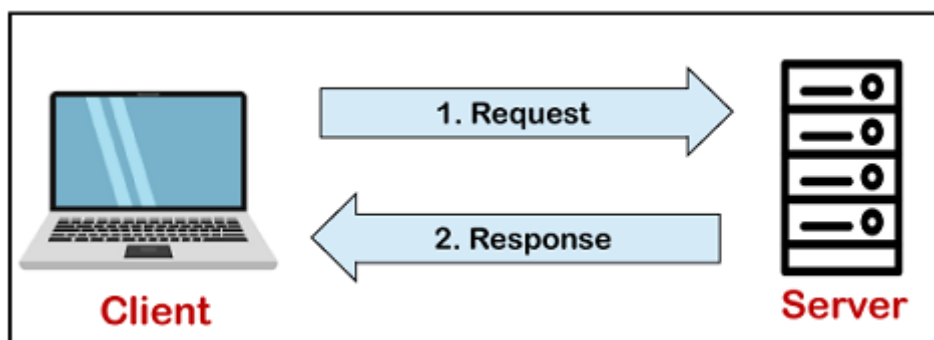
It is developed, marketed, and supported by **MySQL AB, a Swedish company**, and written in [C programming language](#) and [C++ programming language](#). The official pronunciation of MySQL is not the My Sequel; it is **My Ess Que Ell**. However, you can pronounce it in your way. Many small and big companies use MySQL. MySQL supports many Operating Systems like [Windows](#), [Linux](#), MacOS, etc. with C, C++, and [Java languages](#).

MySQL is a [Relational Database Management System](#) (RDBMS) software that provides many things, which are as follows:

- It allows us to implement database operations on tables, rows, columns, and indexes.
- It defines the database relationship in the form of tables (collection of rows and columns), also known as relations.
- It provides the Referential Integrity between rows or columns of various tables.
- It allows us to update the table indexes automatically.
- It uses many SQL queries and combines useful information from multiple tables for the end-users.

### How MySQL Works?

MySQL follows the working of Client-Server Architecture. This model is designed for the end-users called clients to access the resources from a central computer known as a server using network services. Here, the clients make requests through a graphical user interface (GUI), and the server will give the desired output as soon as the instructions are matched. The process of MySQL environment is the same as the client-server model.



The core of the MySQL database is the MySQL Server. This server is available as a separate program and responsible for handling all the database instructions, statements, or commands. The working of MySQL database with MySQL Server are as follows:

1. MySQL creates a database that allows you to build many tables to store and manipulate data and defining the relationship between each table.



2. Clients make requests through the GUI screen or command prompt by using specific SQL expressions on MySQL.
3. Finally, the server application will respond with the requested expressions and produce the desired result on the client-side.

A client can use any MySQL [GUI](#). But, it is making sure that your GUI should be lighter and user-friendly to make your data management activities faster and easier. Some of the most widely used MySQL GUIs are MySQL Workbench, SequelPro, DBVisualizer, and the Navicat DB Admin Tool. Some GUIs are commercial, while some are free with limited functionality, and some are only compatible with MacOS. Thus, you can choose the GUI according to your needs.

Reasons for popularity

MySQL is becoming so popular because of these following reasons:

- MySQL is an open-source database, so you don't have to pay a single penny to use it.
- MySQL is a very powerful program that can handle a large set of functionality of the most expensive and powerful database packages.
- MySQL is customizable because it is an open-source database, and the open-source GPL license facilitates programmers to modify the SQL software according to their own specific environment.
- MySQL is quicker than other databases, so it can work well even with the large data set.
- MySQL supports many operating systems with many languages like PHP, PERL, C, C++, JAVA, etc.
- MySQL uses a standard form of the well-known SQL data language.
- MySQL is very friendly with PHP, the most popular language for web development.
- MySQL supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).

## **PHP**

### **What is PHP**

PHP is an open-source, interpreted, and object-oriented scripting language that can be executed at the server-side. PHP is well suited for web development. Therefore, it is

used to develop web applications (an application that executes on the server and generates the dynamic page.).

PHP was created by **Rasmus Lerdorf in 1994** but appeared in the market in 1995. **PHP 7.4.0** is the latest version of PHP, which was released on **28 November**. Some important points need to be noticed about PHP are as followed:

- PHP stands for Hypertext Preprocessor.
- PHP is an interpreted language, i.e., there is no need for compilation.
- PHP is faster than other scripting languages, for example, ASP and JSP.
- PHP is a server-side scripting language, which is used to manage the dynamic content of the website.
- PHP can be embedded into HTML.
- PHP is an object-oriented language.
- PHP is an open-source scripting language.
- PHP is simple and easy to learn language.

### **Why use PHP**

PHP is a server-side scripting language, which is used to design the dynamic web applications with MySQL database.

- It handles dynamic content, database as well as session tracking for the website.
- You can create sessions in PHP.
- It can access cookies variable and also set cookies.
- It helps to encrypt the data and apply validation.
- PHP supports several protocols such as HTTP, POP3, SNMP, LDAP, IMAP, and many more.
- Using PHP language, you can control the user to access some pages of your website.
- As PHP is easy to install and set up, this is the main reason why PHP is the best language to learn.

- PHP can handle the forms, such as - collect the data from users using forms, save it into the database, and return useful information to the user. **For example** - Registration form.

### **PHP Features**

PHP is very popular language because of its simplicity and open source. There are some important features of PHP given below:

#### **Performance:**

PHP script is executed much faster than those scripts which are written in other languages such as JSP and ASP. PHP uses its own memory, so the server workload and loading time is automatically reduced, which results in faster processing speed and better performance.

#### **Open Source:**

PHP source code and software are freely available on the web. You can develop all the versions of PHP according to your requirement without paying any cost. All its components are free to download and use.

#### **Familiarity with syntax:**

PHP has easily understandable syntax. Programmers are comfortable coding with it.

#### **Embedded:**

PHP code can be easily embedded within HTML tags and script.

# Module Description

## Module description

### MODULE DESCRIPTION:

- 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 new student and also edit info of the student
- admin can declare/ edit result of a student.
- Admin can add/ delete the notice.
- Admin can change own password

Students-

- Student can search their result using valid rollid.
- Student can also View the notices.

**ADMIN:**

The admin is responsible for uploading the tsheets generated. He can add the subject marks and make any kind of modifications like storing, updating, deleting. Apart from the regular results, the supplementary results can also be uploaded by the admin.

· **STUDENT:**

Student must be an authenticated user of the college to access this application. The student can view the semester marks, individual subject marks and aggregate till the current semester. The student can also make a comparative analysis with the results generated.

# Design

## **Design**

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It can be manual, automated, or a combination of both.

It shows how data enters and leaves the system, what changes the information, and where data is stored.





The objective of a DFD is to show the scope and boundaries of a system as a whole. It may be used as a communication tool between a system analyst and any person who plays a part in the order that acts as a starting point for redesigning a system. The DFD is also called as a data flow graph or bubble chart.

### **The following observations about DFDs are essential:**

1. All names should be unique. This makes it easier to refer to elements in the DFD.
2. Remember that DFD is not a flow chart. Arrows in a flow chart that represents the order of events; arrows in DFD represents flowing data. A DFD does not involve any order of events.

3. Suppress logical decisions. If we ever have the urge to draw a diamond-shaped box in a DFD, suppress that urge! A diamond-shaped box is used in flow charts to represent decision points with multiple exits paths of which the only one is taken. This implies an ordering of events, which makes no sense in a DFD.
4. Do not become bogged down with details. Defer error conditions and error handling until the end of the analysis.

Standard symbols for DFDs are derived from the electric circuit diagram analysis and are shown in fig:

Symbol	Name	Function
	Data flow	Used to Connect Processes to each other, to sources or Sinks; to arrow head indicates direction of data flow.
	Process	Performs Some transformation of input data to yield output data.
	Source of Sink (External Entity)	A Source of System Inputs or Sink of System outputs.
	Data Store	A repository of data; the arrow heads indicate net inputs and net outputs to store.

Symbols for Data Flow Diagrams

**Circle:** A circle (bubble) shows a process that transforms data inputs into data outputs.

**Data Flow:** A curved line shows the flow of data into or out of a process or data store.

**Data Store:** A set of parallel lines shows a place for the collection of data items. A data store indicates that the data is stored which can be used at a later stage or by the other processes in a different order. The data store can have an element or group of elements.

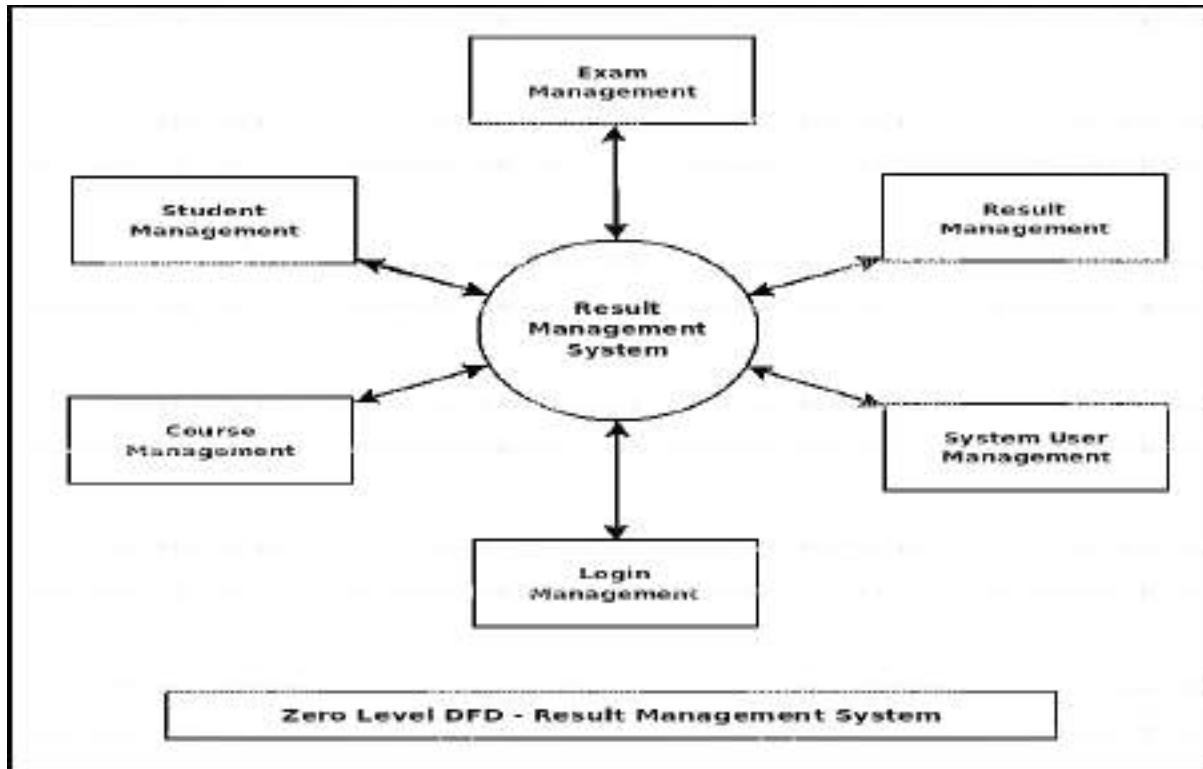
**Source or Sink:** Source or Sink is an external entity and acts as a source of system inputs or sink of system outputs.

### Levels in Data Flow Diagrams (DFD)

The DFD may be used to perform a system or software at any level of abstraction. Infact, DFDs may be partitioned into levels that represent increasing information flow and functional detail. Levels in DFD are numbered 0, 1, 2 or beyond. Here, we will see primarily three levels in the data flow diagram, which are: 0-level DFD, 1-level DFD, and 2-level DFD.

### Student Management System DFD Level 0

The Student Management System DFD Level 0 also known as context diagram shows the main concept in a single process. It consist of the projects entities (users) and the general process and data flow. This context is explaining how the project work in just one look. The users feeds data into the system and then receives the output from it.

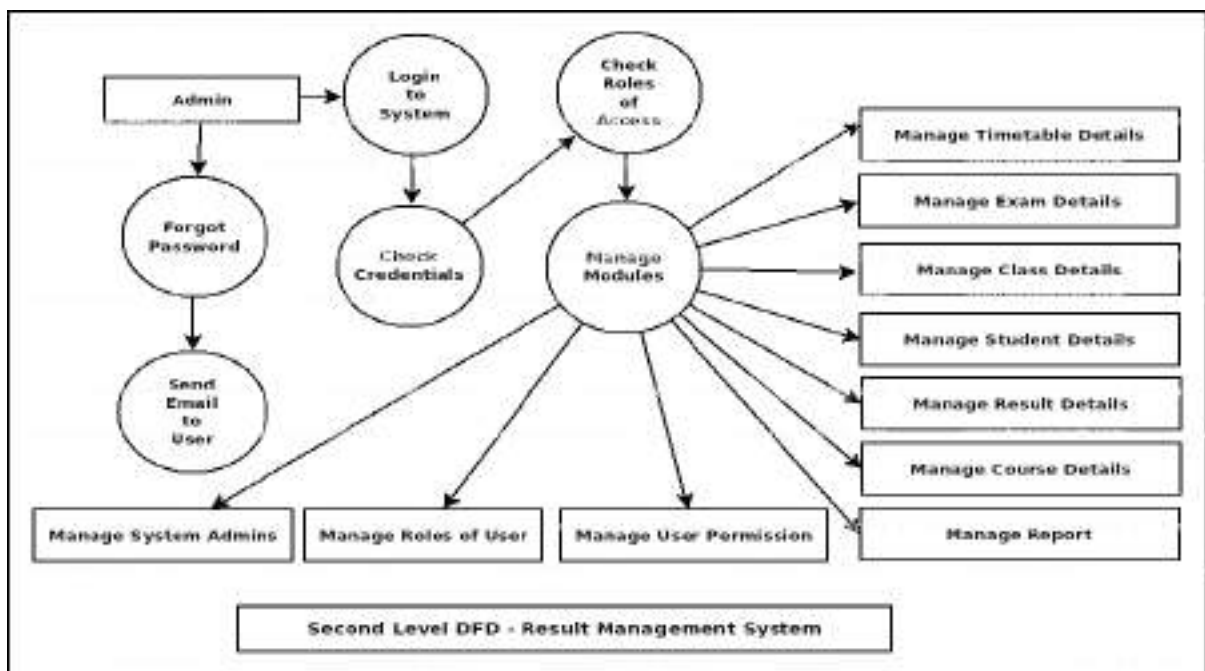
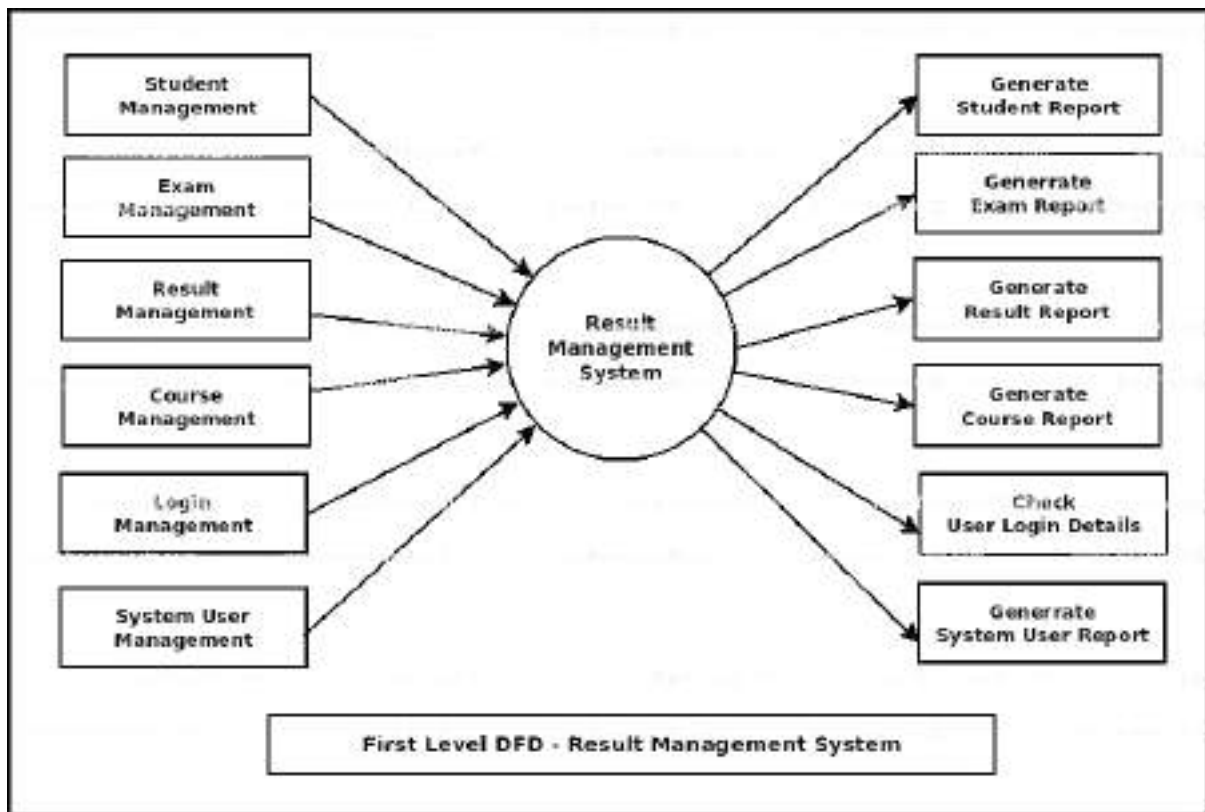


### DFD for Hostel Management System Level 1

The presented level not only shows you the detailed processes of system, but also gives you precise destination of the data that flows in the system. This DFD diagrams will also



be your references as you make your own DFD levels 0, 1 and 2.



## ER-Diagram

ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.

ER Diagrams contain different symbols that use rectangles to represent entities, ovals to define attributes and diamond shapes to represent relationships.

At first look, an ER diagram looks very similar to the flowchart. However, ER Diagram includes many specialized symbols, and its meanings make this model unique. The purpose of ER Diagram is to represent the entity framework infrastructure.

Entity Relationship Diagram Symbols & Notations mainly contains three basic symbols which are rectangle, oval and diamond to represent relationships between elements, entities and attributes. There are some sub-elements which are based on main elements in ERD Diagram. ER Diagram is a visual representation of data that describes how data is related to each other using different ERD Symbols and Notations.

Following are the main components and its symbols in ER Diagrams:

- Rectangles: This Entity Relationship Diagram symbol represents entity types
- Ellipses : Symbol represent attributes
- Diamonds: This symbol represents relationship types
- Lines: It links attributes to entity types and entity types with other relationship types
- Primary key: attributes are underlined
- Double Ellipses: Represent multi-valued attributes



ER Diagram Symbols

Components of the ER Diagram

This model is based on three basic concepts:

- Entities

- Attributes
- Relationships

### **ER Diagram Examples**

For example, in a University database, we might have entities for Students, Courses, and Lecturers. Students entity can have attributes like Rollno, Name, and DeptID. They might have relationships with Courses and Lecturers.

### **WHAT IS ENTITY?**

A real-world thing either living or non-living that is easily recognizable and nonrecognizable. It is anything in the enterprise that is to be represented in our database. It may be a physical thing or simply a fact about the enterprise or an event that happens in the real world.

An entity can be place, person, object, event or a concept, which stores data in the database. The characteristics of entities are must have an attribute, and a unique key. Every entity is made up of some 'attributes' which represent that entity.

Examples of entities:

- Person: Employee, Student, Patient
- Place: Store, Building
- Object: Machine, product, and Car
- Event: Sale, Registration, Renewal
- Concept: Account, Course

Notation of an Entity

Entity set:

An entity set is a group of similar kind of entities. It may contain entities with attribute sharing similar values. Entities are represented by their properties, which also called attributes. All attributes have their separate values. For example, a student entity may have a name, age, class, as attributes.

### **Example of Entities:**

A university may have some departments. All these departments employ various lecturers and offer several programs.

Some courses make up each program. Students register in a particular program and enroll in various courses. A lecturer from the specific department takes each course, and each lecturer teaches a various group of students.

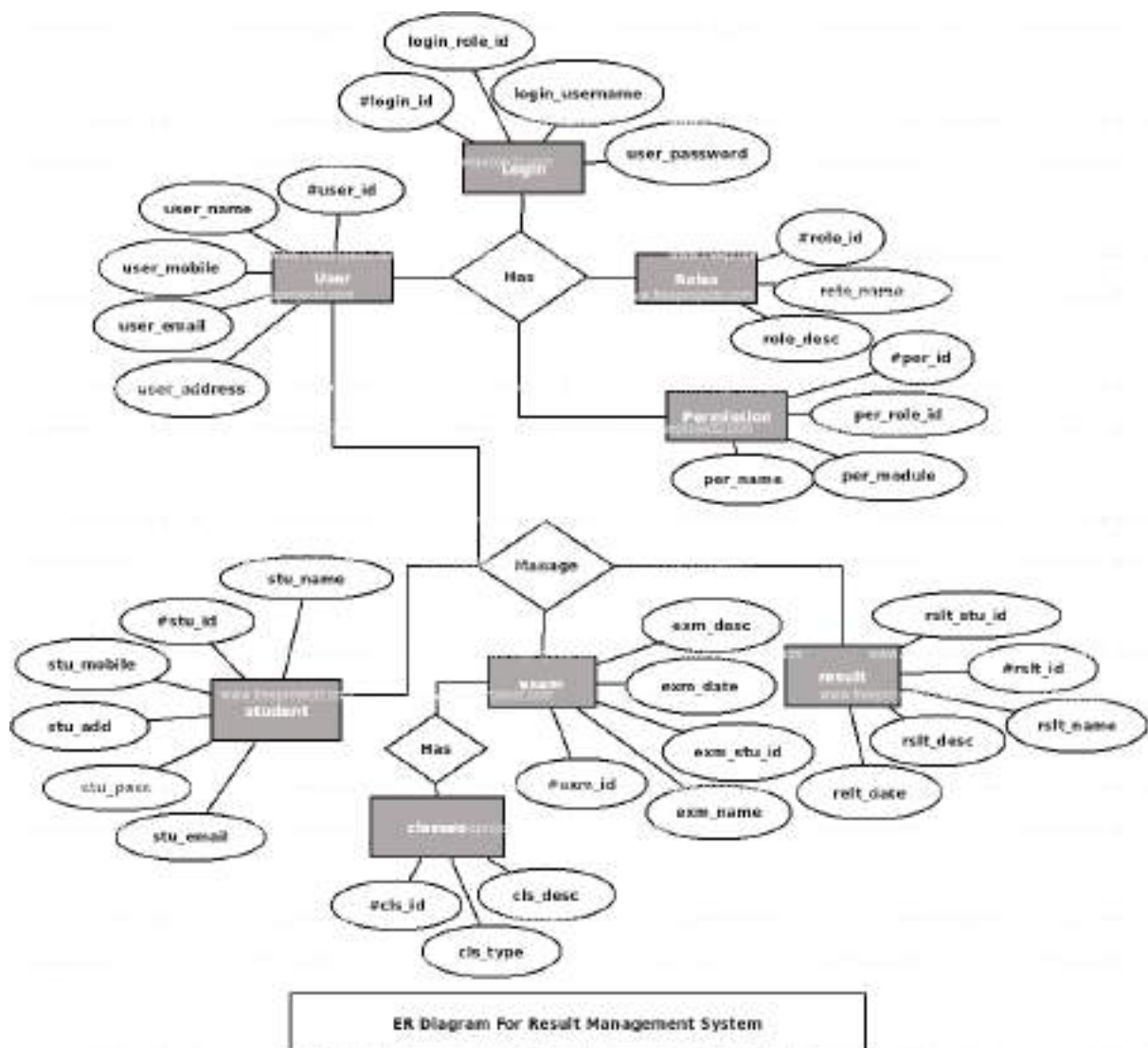
## Relationship

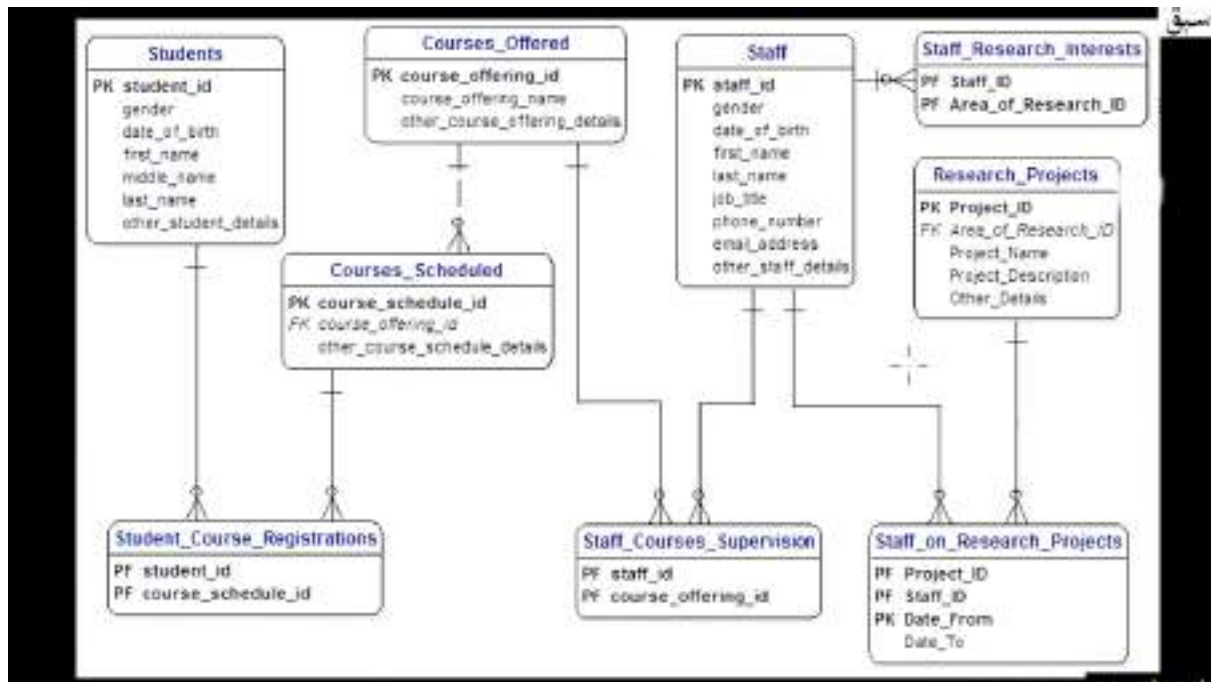
Relationship is nothing but an association among two or more entities. E.g., Tom works in the Chemistry department.

Entities take part in relationships. We can often identify relationships with verbs or verb

## Weak Entities

A weak entity is a type of entity which doesn't have its key attribute. It can be identified uniquely by considering the primary key of another entity. For that, weak entity sets need to have participation.





# Database

## **Database**

Collected information which is in an organized form for easier access, management, and various updating is known as a database.

Before going into a further discussion of databases, we must have a prior knowledge of

exactly what is a DATA? Data can be defined as a collection of facts and records on which we can apply reasoning or can-do discussion or some calculation. The data is always easily available and is in plenty. It can be used for processing some useful information from it. Also, it can be in redundant, can be irrelevant. Data can exist in form of graphics, reports, tables, text, etc. that represents every kind of information, that allows easy retrieval, updating, analysis, and output of data by systematically organized or structured repository of indexed information.

**Containers having a huge amount of data are known as databases,** for example, a public library stores books. Databases are computer structures that save, organize, protect, and deliver data. Any system that manages databases is called a **database management system**, or DBM. The typical diagram representation for a database is a cylinder. Inside a database, the data is recorded in a table which is a collection of rows, columns, and it is indexed so that to find relevant information becomes an easier task. As new information is added, data gets updated, expanded and deleted. The various processes of databases create and update themselves, querying the data they contain and running applications against it.

There are several different types of database models have been developed so far, for example, *flat*, *hierarchical*, *network* and *relational*. These models describe the operations that can be performed on them as well as the structure of the conforming databases. Normally there is a database schema which describes the exact model, entity types, and relationships among those entities.

**Flat Databases** have the following characteristics –

- simple
- long and dominant
- useful for very small scale and simple applications.

A **Relational Database** has the following characteristics –

- organizes data such that it appears to the user to be stored in a series of interrelated tables
- used for high-performance applications
- efficient

### **Types of Databases**

Here are some popular types of databases.

#### **Distributed databases:**

A distributed database is a type of database that has contributions from the common

database and information captured by local computers. In this type of database system, the data is not in one place and is distributed at various organizations.

**Relational databases:**

This type of database defines database relationships in the form of tables. It is also called Relational DBMS, which is the most popular DBMS type in the market. Database example of the RDBMS system include MySQL, Oracle, and Microsoft SQL Server database.

**Object-oriented databases:**

This type of computers database supports the storage of all data types. The data is stored in the form of objects. The objects to be held in the database have attributes and methods that define what to do with the data. PostgreSQL is an example of an object-oriented relational DBMS.

**Centralized database:**

It is a centralized location, and users from different backgrounds can access this data. This type of computers databases store application procedures that help users access the data even from a remote location.

**Open-source databases:**

This kind of database stored information related to operations. It is mainly used in the field of marketing, employee relations, customer service, of databases.

**Cloud databases:**

A cloud database is a database which is optimized or built for such a virtualized environment. There are so many advantages of a cloud database, some of which can pay for storage capacity and bandwidth. It also offers scalability on-demand, along with high availability.

**Data warehouses:**

Data Warehouse is to facilitate a single version of truth for a company for decision making and forecasting. A Data warehouse is an information system that contains historical and commutative data from single or multiple sources. Data Warehouse concept simplifies the reporting and analysis process of the organization.

**Table admin**



#	Name	Type	Collation	Attributes	Null	Default	Comments	Index	Actions
1	class	TEXT			No	None		AUTO_INCREMENT	Change Drop Move
2	classname	varchar(255)	Latin1_General_CI		Yes	None			Change Drop Move
3	password	varchar(255)	Latin1_General_CI		Yes	None			Change Drop Move
4	updateDate	datetime			No	None			Change Drop Move

**Table class**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Index	Actions
1	course	TEXT			No	None		AUTO_INCREMENT	Change Drop Move
2	classname	varchar(255)	Latin1_General_CI		Yes	None			Change Drop Move
3	classnamefunction	varchar			Yes	None			Change Drop Move
4	section	varchar(255)	Latin1_General_CI		Yes	None			Change Drop Move
5	creationDate	datetime			Yes	current_timestamp()			Change Drop Move
6	updateDate	datetime			Yes	None			Change Drop Move

**Table course**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Index	Actions
1	notice	TEXT			No	None		AUTO_INCREMENT	Change Drop Move
2	notice_date	datetime	Latin1_General_CI		No	None			Change Drop Move
3	notice_text	varchar(255)	Latin1_General_CI		Yes	None			Change Drop Move
4	notice_title	varchar(255)	Latin1_General_CI		No	None			Change Drop Move
5	posting_date	datetime			No	current_timestamp()			Change Drop Move

**Table notice**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Index	Actions
1	result	TEXT			No	None		AUTO_INCREMENT	Change Drop Move
2	resultFile	varchar(255)	Latin1_General_CI		No	None			Change Drop Move
3	resultDate	datetime	Latin1_General_CI		No	None			Change Drop Move
4	postingDate	datetime			No	current_timestamp()			Change Drop Move

**Table result**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Index	Actions
1	ID	int(4)			No	None	AUTO_INCREMENT		Change Drop Move
2	Student	varchar(50)			No	None			Change Drop Move
3	Classid	int(4)			No	None			Change Drop Move
4	Sectionid	int(4)			No	None			Change Drop Move
5	Section	int(4)			No	None			Change Drop Move
6	PrimaryKey	int(4)			No	None			Change Drop Move
7	UpdateDate	datetime			No	None			Change Drop Move

**Table student**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Index	Actions
1	ID	int(4)			No	None	AUTO_INCREMENT		Change Drop Move
2	Student	varchar(50)			No	None			Change Drop Move
3	Classid	int(4)			No	None			Change Drop Move
4	Sectionid	int(4)			No	None			Change Drop Move
5	Section	int(4)			No	None			Change Drop Move
6	PrimaryKey	int(4)			No	None			Change Drop Move
7	UpdateDate	datetime			No	None			Change Drop Move

**Table subjectcombination**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Index	Actions
1	ID	int(4)			No	None	AUTO_INCREMENT		Change Drop Move
2	Classid	int(4)			No	None			Change Drop Move
3	Subjectid	int(4)			No	None			Change Drop Move
4	Screen	int(4)			No	None			Change Drop Move
5	UpdateDate	datetime			No	None			Change Drop Move
6	UpdateDate	datetime			No	None			Change Drop Move

**Table screen**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Index	Actions
1	ID	int(4)			No	None	AUTO_INCREMENT		Change Drop Move
2	SubjectName	varchar(50)			No	None			Change Drop Move
3	ScreenCode	varchar(50)			No	None			Change Drop Move
4	UpdateDate	datetime			No	None			Change Drop Move
5	UpdateDate	datetime			No	None			Change Drop Move

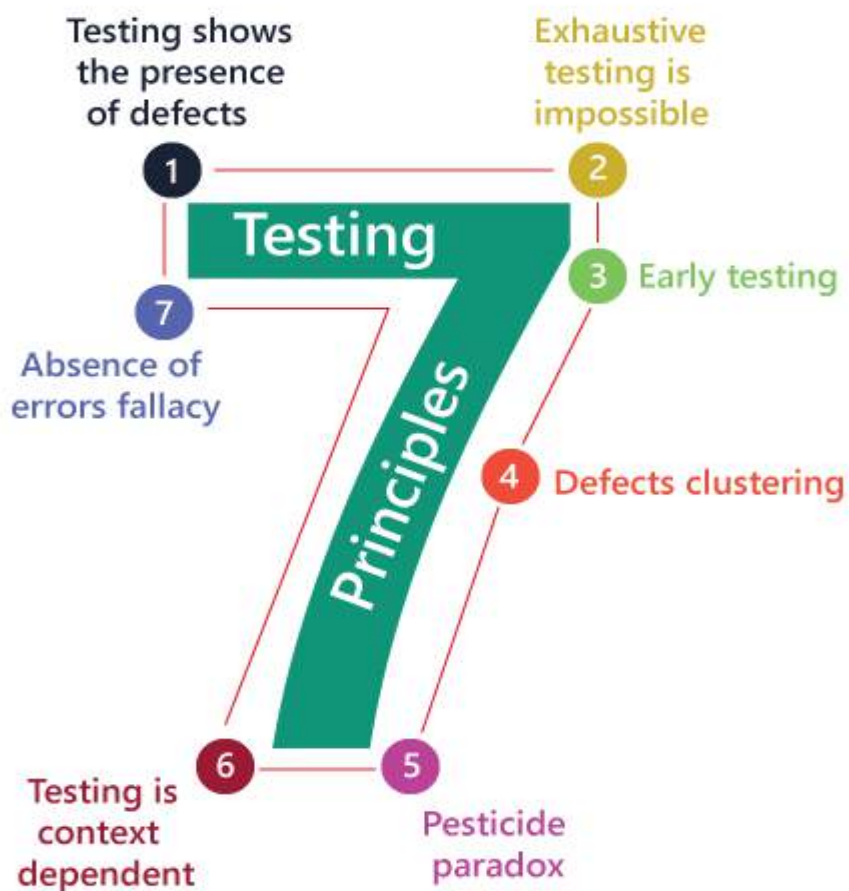
# Testing

Testing

Software testing is a procedure of implementing software or the application to identify the defects or bugs. For testing an application or software, we need to follow some principles to make our product defects free, and that also helps the test engineers to test the software with their effort and time. Here, in this section, we are going to learn about the seven essential principles of software testing.

Let us see the seven different testing principles, one by one:

- Testing shows the presence of defects
- Exhaustive Testing is not possible
- Early Testing
- Defect Clustering
- Pesticide Paradox
- Testing is context-dependent
- Absence of errors fallacy



**Testing shows the presence of defects**

The test engineer will test the application to make sure that the application is bug or defects free. While doing testing, we can only identify that the application or software has any errors. The primary purpose of doing testing is to identify the numbers of unknown bugs with the help of various methods and testing techniques because the entire test should be traceable to the customer requirement, which means that to find any defects that might cause the product failure to meet the client's needs.

By doing testing on any application, we can decrease the number of bugs, which does not mean that the application is defect-free because sometimes the software seems to be bug-free while performing multiple types of testing on it. But at the time of deployment in the production server, if the end-user encounters those bugs which are not found in the testing process.

### **Exhaustive Testing is not possible**

Sometimes it seems to be very hard to test all the modules and their features with effective and non-effective combinations of the inputs data throughout the actual testing process.

Hence, instead of performing the exhaustive testing as it takes boundless determinations and most of the hard work is unsuccessful. So we can complete this type of variations according to the importance of the modules because the product timelines will not permit us to perform such type of testing scenarios.

### **Early Testing**

Here early testing means that all the testing activities should start in the early stages of the software development life cycle's **requirement analysis stage** to identify the defects because if we find the bugs at an early stage, it will be fixed in the initial stage itself, which may cost us very less as compared to those which are identified in the future phase of the testing process.

To perform testing, we will require the requirement specification documents; therefore, if the requirements are defined incorrectly, then it can be fixed directly rather than fixing them in another stage, which could be the development phase.

### **Defect clustering**

The defect clustering defined that throughout the testing process, we can detect the numbers of bugs which are correlated to a small number of modules. We have various reasons for this, such as the modules could be complicated; the coding part may be complex, and so on.

These types of software or the application will follow the **Pareto Principle**, which states that we can identify that approx. Eighty percent of the complication is present in 20 percent of the modules. With the help of this, we can find the uncertain modules, but this method has its difficulties if the same tests are performing regularly, hence the same test will not be able to identify the new defects.

### **Pesticide paradox**

This principle defined that if we are executing the same set of test cases again and again over a particular time, then these kinds of the test will not be able to find the new bugs in the software or the application. To get over these pesticide paradoxes, it is very significant to review all the test cases frequently. And the new and different tests are necessary to be written for the implementation of multiple parts of the application or the software, which helps us to find more bugs.

### **Testing is context-dependent**

Testing is a context-dependent principle states that we have multiple fields such as e-commerce websites, commercial websites, and so on are available in the market. There is a definite way to test the commercial site as well as the e-commerce websites because every application has its own needs, features, and functionality. To check this type of application, we will take the help of various kinds of testing, different technique, approaches, and multiple methods. Therefore, the testing depends on the context of the application.

### **Absence of errors fallacy**

Once the application is completely tested and there are no bugs identified before the release, so we can say that the application is 99 percent bug-free. But there is the chance when the application is tested beside the incorrect requirements, identified the flaws, and fixed them on a given period would not help as testing is done on the wrong specification, which does not apply to the client's requirements. The absence of error fallacy means identifying and fixing the bugs would not help if the application is impractical and not able to accomplish the client's requirements and needs.

### **Software Development Life Cycle (SDLC)**

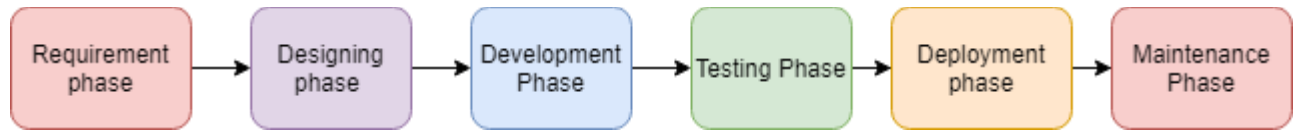
SDLC is a process that creates a structure of development of software. There are different phases within SDLC, and each phase has its various activities. It makes the development team able to design, create, and deliver a high-quality product.

SDLC describes various phases of software development and the order of execution of phases. Each phase requires deliverable from the previous phase in a life cycle of software development. Requirements are translated into design, design into

development and development into testing; after testing, it is given to the client.

### Let's see all the phases in detail:

Different phases of the software development cycle



- Requirement Phase
- Design Phase
- Build /Development Phase
- Testing Phase
- Deployment/ Deliver Phase
- Maintenance

#### 1. Requirement Phase

This is the most crucial phase of the software development life cycle for the developing team as well as for the project manager. During this phase, the client states requirements, specifications, expectations, and any other special requirement related to the product or software. All these are gathered by the business manager or project manager or analyst of the service providing company.

The requirement includes how the product will be used and who will use the product to determine the load of operations. All information gathered from this phase is critical to developing the product as per the customer requirements.

#### 2. Design Phase

The design phase includes a detailed analysis of new software according to the requirement phase. This is the high priority phase in the development life cycle of a system because the logical designing of the system is converted into physical designing. The output of the requirement phase is a collection of things that are required, and the design phase gives the way to accomplish these requirements. The decision of all required essential tools such as programming language like Java, .NET, PHP, a database like Oracle, MySQL, a combination of hardware and software to provide a platform on which software can run without any problem is taken in this phase.

There are several techniques and tools, such as data flow diagrams, flowcharts, decision tables, and decision trees, Data dictionary, and the structured dictionary are used for

#### 3. Build /Development Phase

After the successful completion of the requirement and design phase, the next step is to implement the design into the development of a software system. In this phase, work is divided into small units, and coding starts by the team of developers according to the design discussed in the previous phase and according to the requirements of the client discussed in requirement phase to produce the desired result.

Front-end developers develop easy and attractive GUI and necessary interfaces to interact with back-end operations and back-end developers do back-end coding according to the required operations. All is done according to the procedure and guidelines demonstrated by the project manager. Since this is the coding phase, it takes the longest time and more focused approach for the developer in the software development life cycle.

#### **4. Testing Phase**

Testing is the last step of completing a software system. In this phase, after getting the developed GUI and back-end combination, it is tested against the requirements stated in the requirement phase. Testing determines whether the software is actually giving the result as per the requirements addressed in the requirement phase or not. The Development team makes a test plan to start the test. This test plan includes all types of essential testing such as integration testing, unit testing, acceptance testing, and system testing. Non-functional testing is also done in this phase.

If there are any defects in the software or it is not working as per expectations, then the testing team gives information to the development team in detail about the issue. If it is a valid defect or worth to sort out, it will be fixed, and the development team replaces it with the new one, and it also needs to be verified.

#### **5. Deployment/ Deliver Phase**

When software testing is completed with a satisfying result, and there are no remaining issues in the working of the software, it is delivered to the customer for their use. As soon as customers receive the product, they are recommended first to do the beta testing. In beta testing, customer can require any changes which are not present in the software but mentioned in the requirement document or any other GUI changes to make it more user-friendly. Besides this, if any type of defect is encountered while a customer using the software; it will be informed to the development team of that particular software to sort out the problem. If it is a severe issue, then the development team solves it in a short time; otherwise, if it is less severe, then it will wait for the next version. After the solution of all types of bugs and changes, the software finally deployed to the end-user.

#### **6. Maintenance**



The maintenance phase is the last and long-lasting phase of SDLC because it is the process which continues until the software's life cycle comes to an end. When a customer starts using software, then actual problems start to occur, and at that time there's a need to solve these problems. This phase also includes making changes in hardware and software to maintain its operational effectiveness like to improve its performance, enhance security features and according to customer's requirements with upcoming time. This process to take care of product time to time is called maintenance.

### **White Box Testing**

The box testing approach of software testing consists of black box testing and white box testing. We are discussing here white box testing which also known as glass box is **testing, structural testing, clear box testing, open box testing and transparent box testing**. It tests internal coding and infrastructure of a software focus on checking of predefined inputs against expected and desired outputs. It is based on inner workings of an application and revolves around internal structure testing. In this type of testing programming skills are required to design test cases. The primary goal of white box testing is to focus on the flow of inputs and outputs through the software and strengthening the security of the software.

The term 'white box' is used because of the internal perspective of the system. The clear box or white box or transparent box name denote the ability to see through the software's outer shell into its inner workings.

Developers do white box testing. In this, the developer will test every line of the code of the program. The developers perform the White-box testing and then send the application or the software to the testing team, where they will perform the black box testing and verify the application along with the requirements and identify the bugs and sends it to the developer.

The developer fixes the bugs and does one round of white box testing and sends it to the testing team. Here, fixing the bugs implies that the bug is deleted, and the particular feature is working fine on the application.

### **Black box testing**

Black box testing is a technique of software testing which examines the functionality of software without peering into its internal structure or coding. The primary source of black box testing is a specification of requirements that is stated by the customer.

In this method, tester selects a function and gives input value to examine its functionality, and checks whether the function is giving expected output or not. If the function produces correct output, then it is passed in testing, otherwise failed. The test

team reports the result to the development team and then tests the next function. After completing testing of all functions if there are severe problems, then it is given back to the development team for correction.

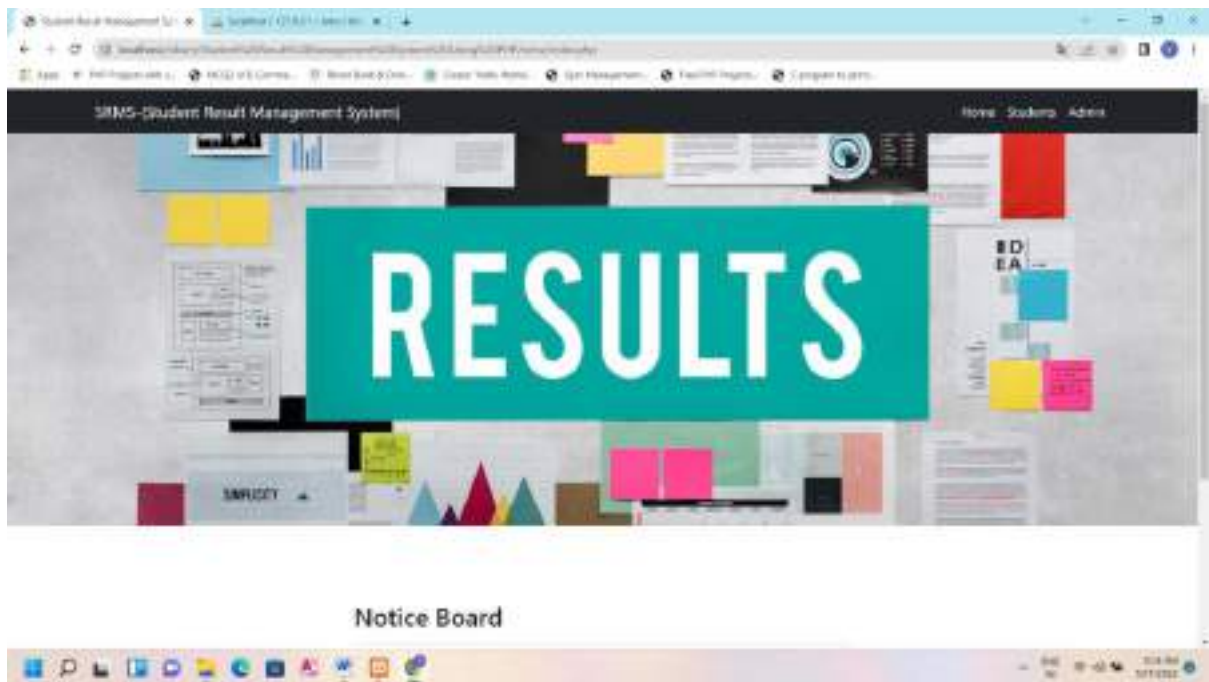


### **Generic steps of black box testing**

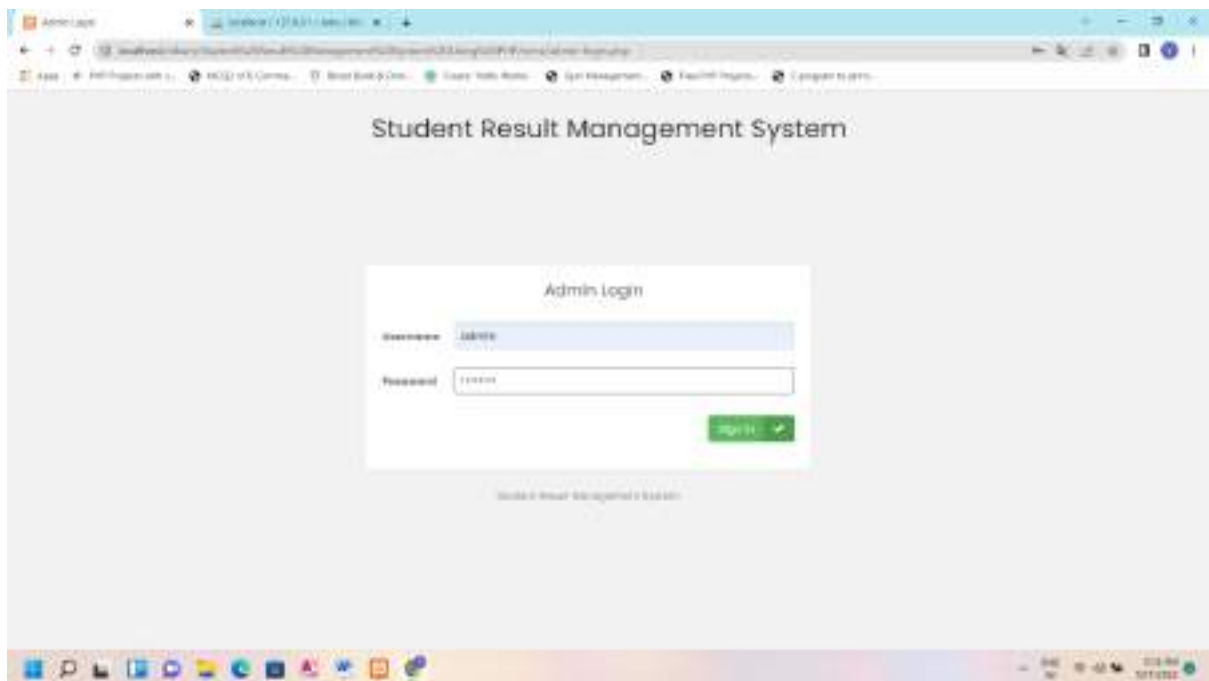
- The black box test is based on the specification of requirements, so it is examined in the beginning.
- In the second step, the tester creates a positive test scenario and an adverse test scenario by selecting valid and invalid input values to check that the software is processing them correctly or incorrectly.
- In the third step, the tester develops various test cases such as decision table, all pairs test, equivalent division, error estimation, cause-effect graph, etc.
- The fourth phase includes the execution of all test cases.
- In the fifth step, the tester compares the expected output against the actual output.
- In the sixth and final step, if there is any flaw in the software, then it is cured and tested again.

# INPUT SCREEN

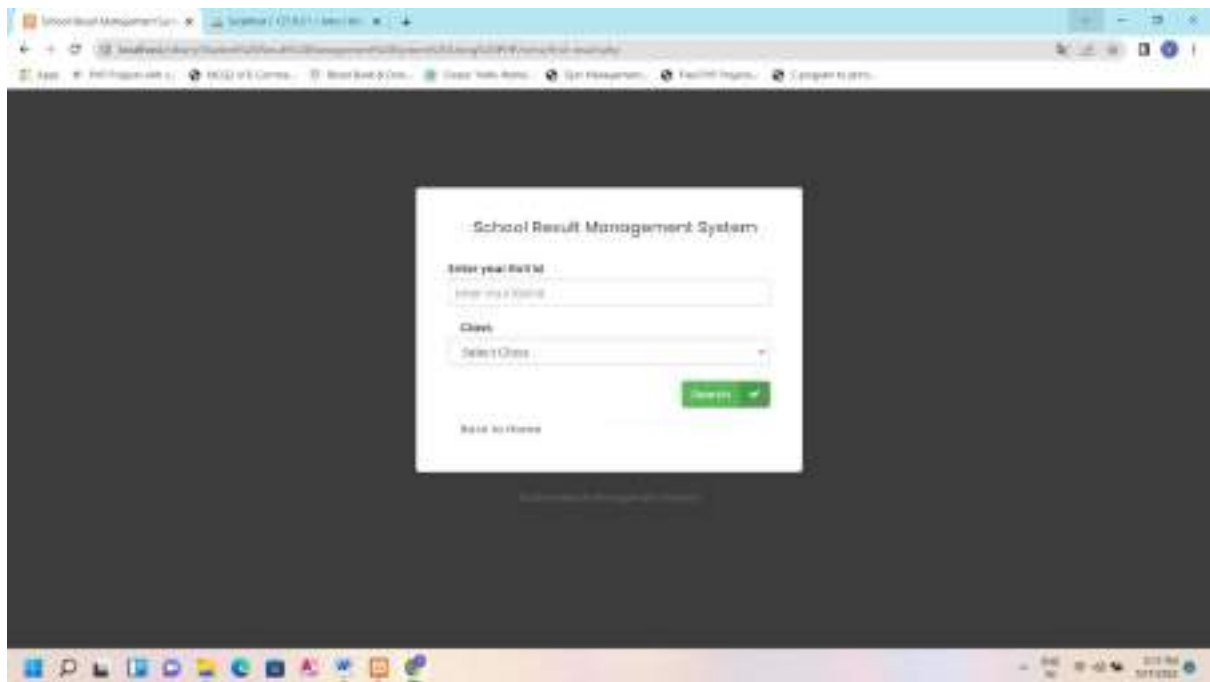
## Font Page



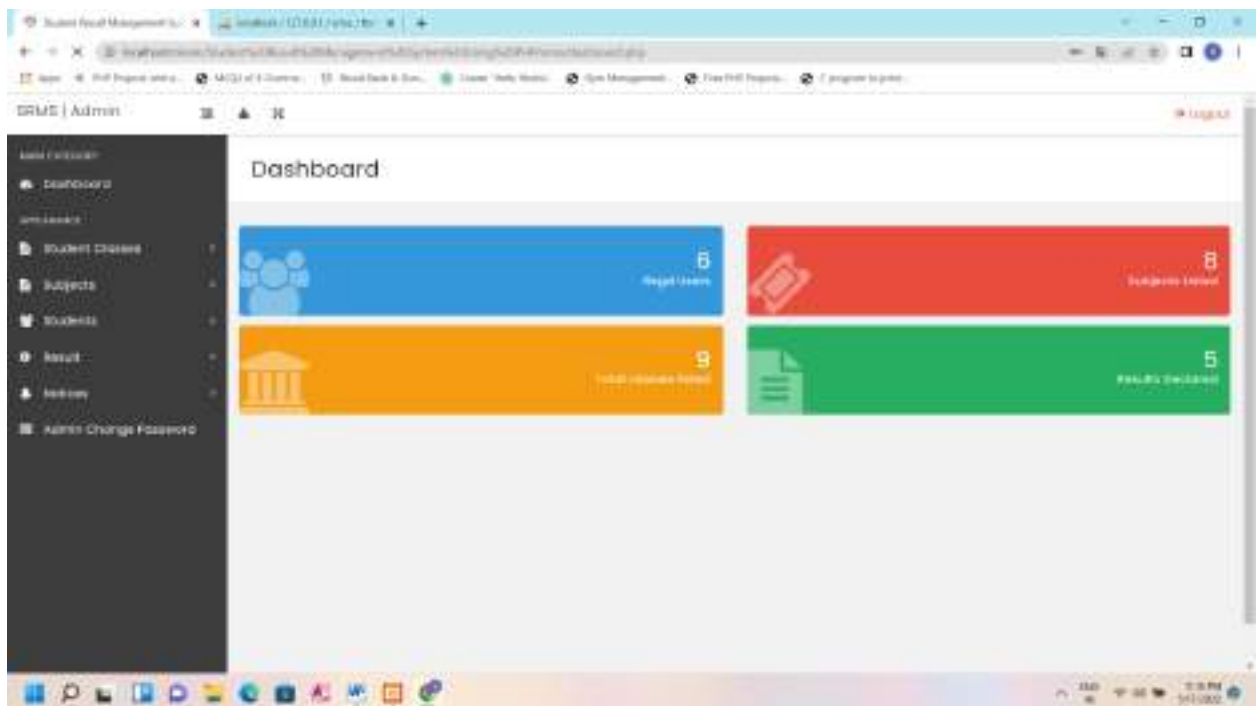
## Admin Page



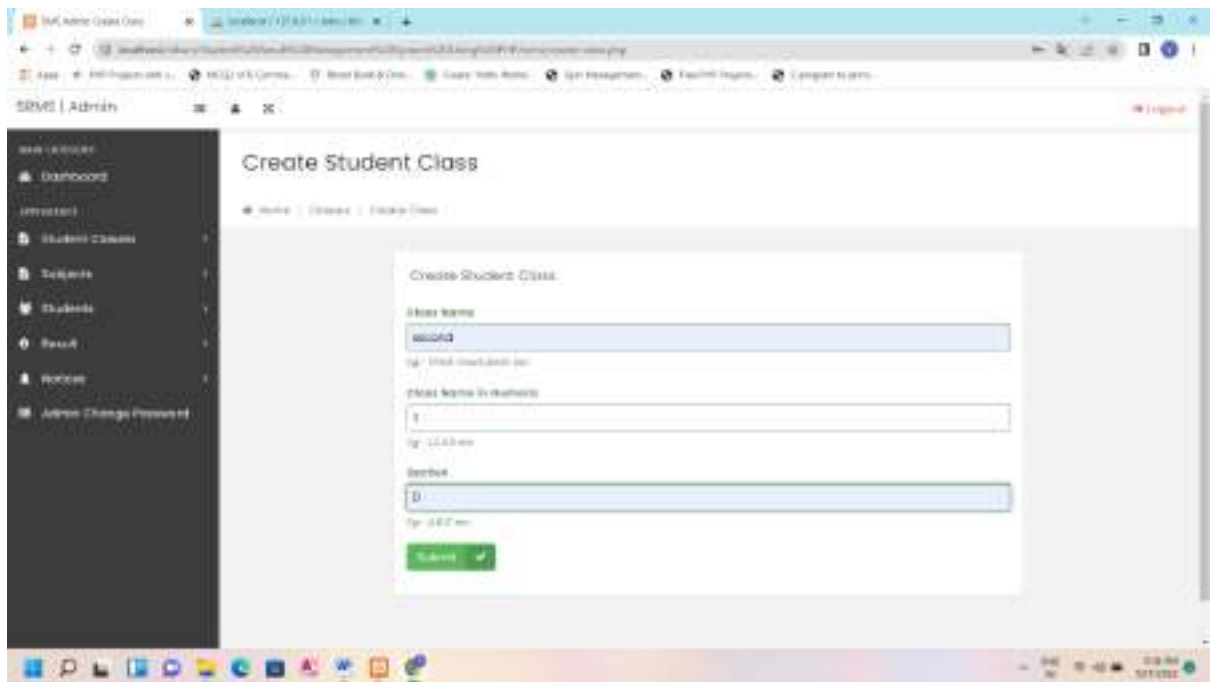
## Student Login



## Dashboard



## Create student class

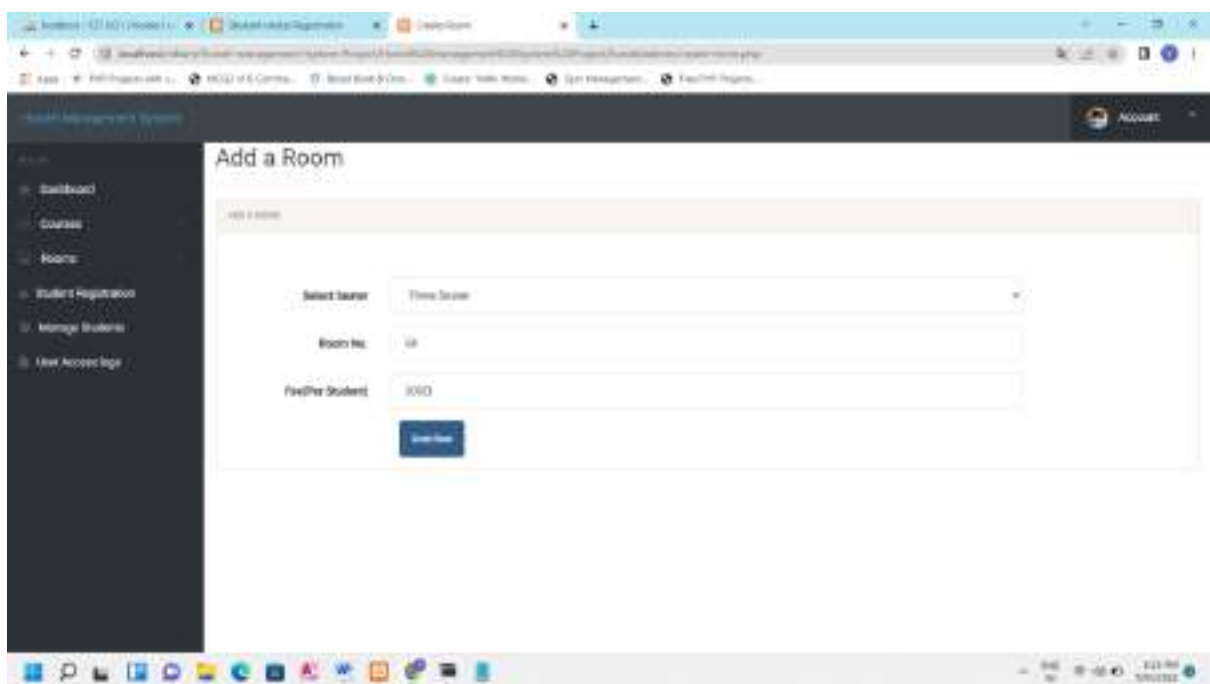


The screenshot shows a web browser window with the URL <http://localhost:3000/rooms/create>. The page title is "Create Student Class". On the left, there is a dark sidebar menu with the following items: Dashboard, Student Classes, Subjects, Students, Fees, Rooms, and Admin Change Password. The main content area contains a form titled "Create Student Class" with the following fields:

- Class Name:** A text input field containing the value "second".
- Class Name in database:** A text input field containing the value "1".
- Section:** A text input field containing the value "D".

At the bottom of the form is a green "Submit" button. The browser's taskbar at the bottom shows the time as 12:58 on 10/1/2022.

## Add room



The screenshot shows a web browser window with the URL <http://localhost:3000/rooms/add>. The page title is "Add a Room". On the left, there is a dark sidebar menu with the following items: Dashboard, Courses, Rooms, Student Registration, Manage Students, and User Access Page. The main content area contains a form titled "Add a Room" with the following fields:

- Select Server:** A dropdown menu with the selected value "Time Server".
- Room No.:** A text input field containing the value "01".
- Fee/Per Student:** A text input field containing the value "100".

At the bottom of the form is a blue "Add Room" button. The browser's taskbar at the bottom shows the time as 12:59 on 10/1/2022.

## Subject creation

The screenshot shows the 'Subject Creation' page in the SRMS Admin interface. The page title is 'Subject Creation' and the breadcrumb is 'Home > Subjects > Create Subject'. The main content area is titled 'Create Subject' and contains two input fields: 'Subject Name' with the value 'PHP' and 'Subject Code' with the value '001'. A blue 'Submit' button is located below the input fields. The left sidebar contains a navigation menu with items: Dashboard, Student Course, Subjects, Students, Result, Notice, and Admin Change Password. The top navigation bar includes 'SRMS | Admin' and a 'Logout' link. The browser's address bar shows the URL 'http://localhost:8080/srms-admin/subjects/createSubject'. The Windows taskbar at the bottom shows the system tray with the date '22 Jul 2022' and time '10:11:02'.

## Declare result

The screenshot shows the 'Declare Result' page in the SRMS Admin interface. The page title is 'Declare Result' and the breadcrumb is 'Home > Student Result'. The main content area contains several input fields: 'Class' with a dropdown menu showing 'First Section (1)', 'Student Name' with a dropdown menu showing 'Sande', and 'Subject' with a dropdown menu showing 'English'. Below these are three text input fields for 'Marks' with values '10', '10', and '10'. A blue 'Declare Result' button is located at the bottom of the form. The left sidebar contains a navigation menu with items: Dashboard, Student Course, Subjects, Students, Result, Notice, and Admin Change Password. The top navigation bar includes 'SRMS | Admin' and a 'Logout' link. The browser's address bar shows the URL 'http://localhost:8080/srms-admin/studentResult'. The Windows taskbar at the bottom shows the system tray with the date '22 Jul 2022' and time '10:11:02'.

OUTPUT SCREEN



## Manage class

The screenshot shows the 'Manage Classes' page in an administration system. The page has a dark sidebar on the left with navigation options: Dashboard, Student Classes, Subjects, Students, Result, Notice, and Admin Change Password. The main content area is titled 'Manage Classes' and includes a breadcrumb trail: Home > Classes > Manage Classes. Below the title is a 'View Classes Info' section with a dropdown menu set to 'all classes' and a search box. A table lists the classes with columns for ID, Class Name, Class Name Number, Section, Creation Date, and Action. The table contains 9 rows of data.

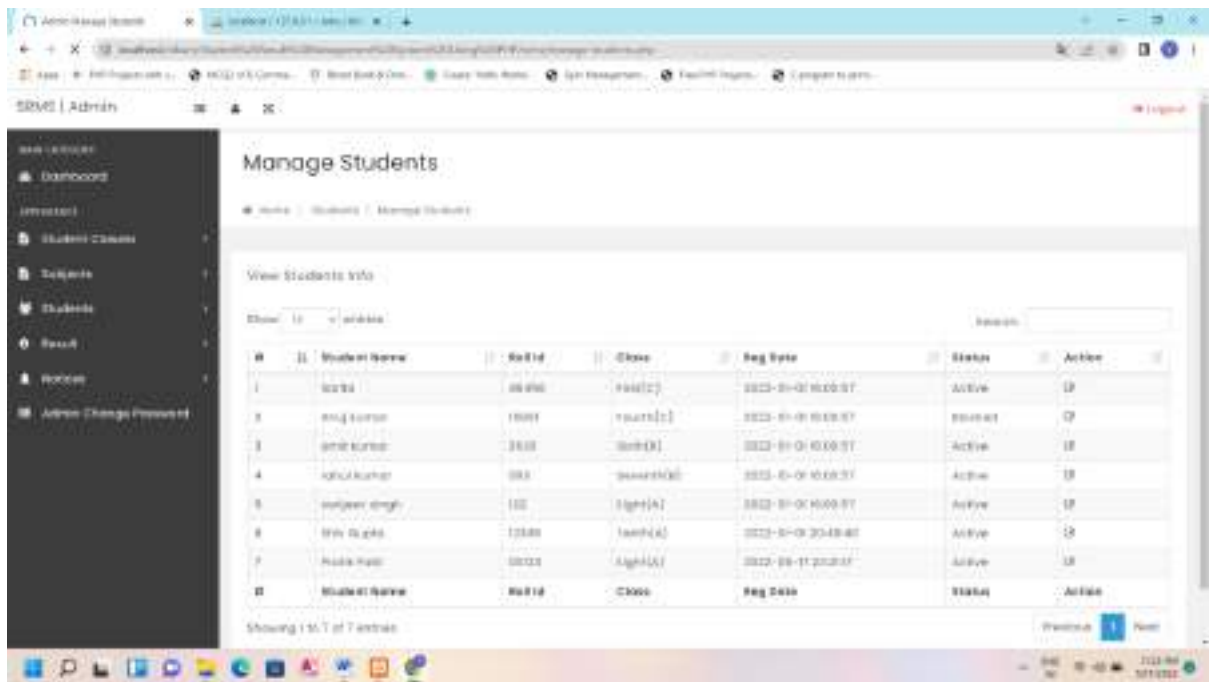
ID	Class Name	Class Name Number	Section	Creation Date	Action
1	1001	1	A	2022-01-01 08:00:00	✎
2	1002	2	A	2022-01-01 08:00:00	✎
3	1003	3	A	2022-01-01 08:00:00	✎
4	1004	4	A	2022-01-01 08:00:00	✎
5	1005	5	A	2022-01-01 08:00:00	✎
6	1006	6	A	2022-01-01 08:00:00	✎
7	1007	7	A	2022-01-01 08:00:00	✎
8	1008	8	A	2022-01-01 08:00:00	✎
9	1009	9	A	2022-01-01 08:00:00	✎

## Manage subject

The screenshot shows the 'Manage Subjects' page in an administration system. The page has a dark sidebar on the left with navigation options: Dashboard, Student Classes, Subjects, Students, Result, Notice, and Admin Change Password. The main content area is titled 'Manage Subjects' and includes a breadcrumb trail: Home > Subjects > Manage Subjects. Below the title is a 'View Subjects Info' section with a dropdown menu set to 'all subjects' and a search box. A table lists the subjects with columns for ID, Subject Name, Subject Code, Creation Date, Updated on Date, and Action. The table contains 9 rows of data.

ID	Subject Name	Subject Code	Creation Date	Updated on Date	Action
1	Maths	MTHS	2022-01-01 08:00:00		✎
2	English	ENGL	2022-01-01 08:00:00		✎
3	Science	SCI	2022-01-01 08:00:00		✎
4	Music	MU	2022-01-01 08:00:00		✎
5	Social Studies	SSS	2022-01-01 08:00:00		✎
6	Physical	PHYS	2022-01-01 08:00:00		✎
7	Chemistry	CHEM	2022-01-01 08:00:00		✎
8	PPE	PPE	2022-01-01 08:00:00		✎
9	PPE	PPE	2022-01-01 08:00:00		✎

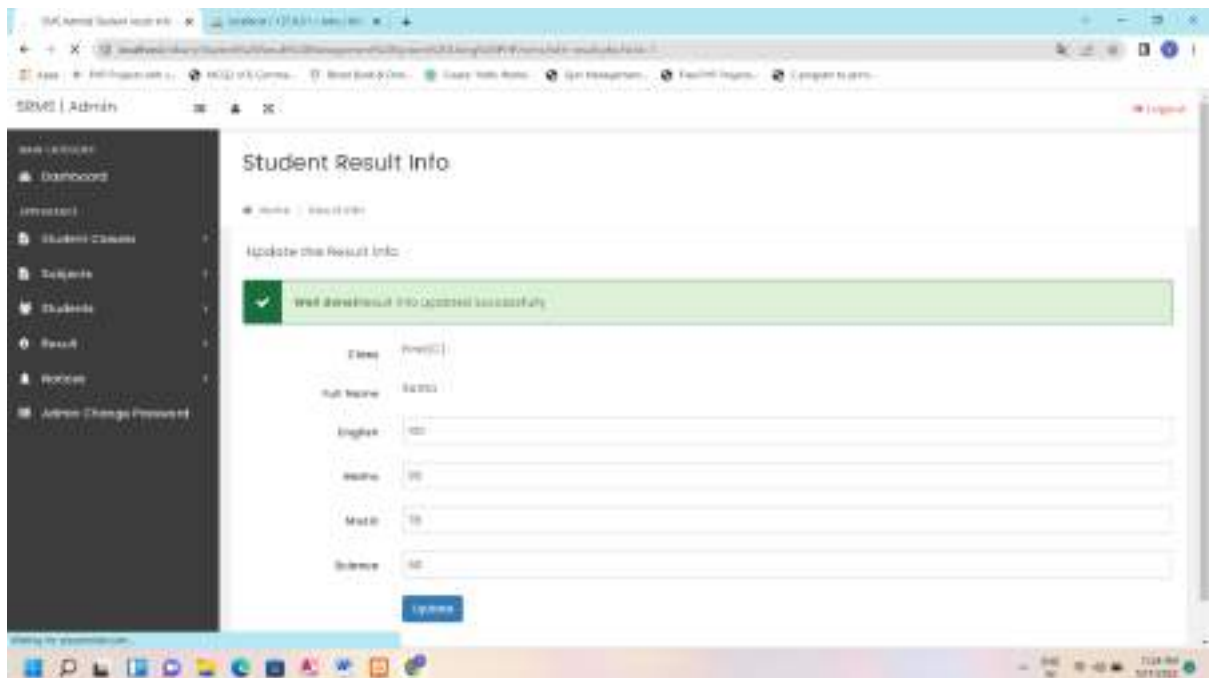
## Mange student



The screenshot shows the 'Manage Students' page in a web application. The page has a dark sidebar on the left with navigation options: Dashboard, Student Classes, Subjects, Students, Result, Notice, and Admin Change Password. The main content area is titled 'Manage Students' and contains a 'View Students Info' section. Below this, there is a search bar and a table of student records. The table has the following columns: #, Student Name, RollId, Class, Reg Date, Status, and Action. The table contains 7 rows of data.

#	Student Name	RollId	Class	Reg Date	Status	Action
1	Arshi	0001	Year(2)	2023-01-01 00:00:00	Active	IP
2	Arshi Kaur	0002	Year(2)	2023-01-01 00:00:00	Active	IP
3	Arshi Kaur	0003	Year(2)	2023-01-01 00:00:00	Active	IP
4	Arshi Kaur	0004	Year(2)	2023-01-01 00:00:00	Active	IP
5	Arshi Kaur	0005	Year(2)	2023-01-01 00:00:00	Active	IP
6	Arshi Kaur	0006	Year(2)	2023-01-01 00:00:00	Active	IP
7	Arshi Kaur	0007	Year(2)	2023-01-01 00:00:00	Active	IP

## Student result



The screenshot shows the 'Student Result Info' page in a web application. The page has a dark sidebar on the left with navigation options: Dashboard, Student Classes, Subjects, Students, Result, Notice, and Admin Change Password. The main content area is titled 'Student Result Info' and contains a 'Update the Result Info' section. Below this, there is a green success message: 'Well done! Result info updated successfully.' The form includes fields for Class, Roll Name, English, Maths, and Science, each with a corresponding input field and a 'Submit' button.

# CONCLUSION

## Conclusion

If you (end user) want to enter into the form, then if you are existing user then you should enter through login form which checks for authorized users. If you are new user then you have to register your details through registration form with your own identification name and password, which gives you a unique identification to you.

The Java is a new rapidly using platform that specifies application developed in the highly distributed environment of the Internet. The java is design to fulfill the following objectives.

- To provide a consistent object-oriented programming software whether object code is stored and executed locally, executed locally but internet distributed or executed remotely.
- To provide a code-execution environment that minimizes software deployment and versioning conflicts.
- To provide a code-execution environment that guarantees safe execution of code, including code created by an unknown or semi-trusted third party.
- To provide a code-execution environment that eliminates the performance problems of scripted or interpreted environment.
- To make developer experience consistent across widely varying types of applications, such as windows-based applications and web based applications.
- To build all communications on industry standards to ensure that code based on the java can integrate with any other code.

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