ASSIGNMENT - 07

Shri G.S. Institute of Technology and Science
Dept of Information Technology

Report Submission
On

SCHOOL MANAGEMENT SYSTEM PROJECT

Submitted by-

AKSHAT JAIN 0801IT191004
AMAN KRISHNA DWIWEDI 0801IT191005

Submitted to-

Dr. LALIT PUROHIT
Mr. UPENDRA SINGH

CERTIFICATE

Certified that this is a bona fide record of the project work titled
School Management
Done By
Akshat Jain

Aman Krishna Dwiwedi
of VI semester B. Tech in the year 2022 in
partial fulfilment of the requirements for the award of Degree of
Bachelor of Technology

Mr.Upendra Singh
Project Guide

Objective –

A web application to digitally manage school record where administrator can store complete information about Teachers, Students, Staff. The project is totally built at administrative end and thus, only the administrator is guaranteed the access.
The purpose of the project is to build an application program to reduce the manual work for managing information of Teachers, Students, Staff. It tracks all the details about the Teachers, Students, Staff.

The application contains -
1. Admin Login
2. Student Information
3. Employee Information
4. Teachers Information

Modules of the Project –

1. Admin Login –
Admin can login the application using the credentials.
2. Add Student –
Admin can add new student in the database by inserting student details like name, mobile number, gender, class, etc.
3. Add Teachers –
Admin can add new teacher in the database by inserting teacher details like name, mobile number, gender, etc.
4. Add Staff –
Admin can add new staff in the database by inserting staff details like name, mobile number, gender, position, etc.

7. Edit, Delete and List of student, teacher, staff –
Admin gets the list of all the student, teacher, staff and can edit the details of any student, teacher, staff or can delete any student, teacher, staff details.

SOFTWARE TOOLS USED-

The whole Project is divided in two parts the front end and the back end.

Frontend: The front end is designed using of html , CSS, JSP.

• **HTML**: HTML or Hyper Text Markup Language is the main markup language for creating web pages and other information that can be displayed in a web browser.HTML is written in the form of HTML elements consisting of tags enclosed in angle brackets (like <html>), within the web page content. HTML tags most commonly come in pairs like <h1> and </h1> , although some tags represent empty elements and so are unpaired, , for example <img>. The first tag in a pair is the start tag, and the second tag is the end tag (they are also called opening tags and closing tags). In between these tags web designers can add text, further tags, comments and other types of text-based content. The purpose of a web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page.HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as JavaScript which affect the behaviour of HTML web pages.

- **CSS**: Cascading Style Sheets(CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language. While most often used to style web pages and interfaces written in HTML , the language can be applied to any kind of XML document, including plain XML, SVG and XUL. CSS is a cornerstone specification of the web and almost all web pages use CSS style sheets to describe their presentation.CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colours, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple pages to share formatting, and reduce complexity and repetition in the structural content (such as by allowing for table less web design).CSS can also allow the same markup page to be presented in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braille-based, tactile devices. 10 It can also be used to allow the web page to display differently depending on the screen size or device on which it is being viewed. While the author of a document typically links that document to a CSS file, readers can use a different style sheet, perhaps one on their own computer, to override the one the author has specified. However if the author or the reader did not link the document to a specific style sheet the default style of the browser will be applied.CSS specifies a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities or

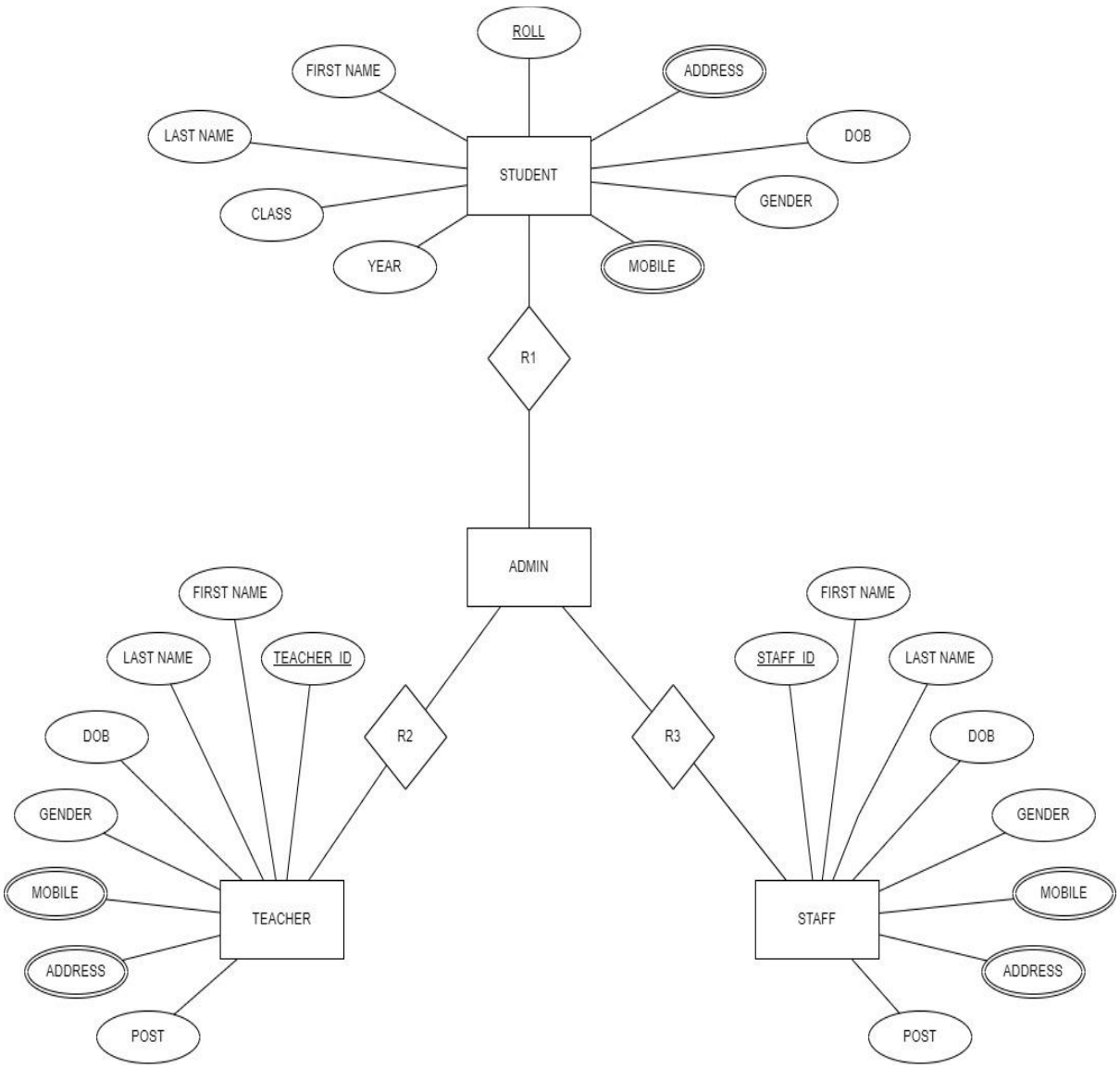
weights are calculated and assigned to rules, so that the results are predictable.

Backend:

• **Servlet**: Servlet is a technology which is used to create a web application. It is an API that provides many interfaces and classes including documentation. It is an interface that must be implemented for creating any Servlet. It is a class that extends the capabilities of the servers and responds to the incoming requests. It can respond to any requests. It is a web component that is deployed on the server to create a dynamic web page.

• **MYSQL**: MYSQL, the most popular Open Source SQL database management system, is developed, distributed, and supported by Oracle Corporation. A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or the vast amounts of information in a corporate network. To add, access, and process data stored in a computer database, you need a database management system such as MYSQL Server. Since computers are very good at handling large amounts of data, database management systems play a central role in computing, as standalone utilities, or as parts of other applications.

E-R Diagram –


ROLL
FIRST NAME
ADDRESS
LAST NAME
DOB
STUDENT
CLASS
GENDER
YEAR
MOBILE
R1
ADMIN
FIRST NAME
LAST NAME
TEACHER ID
R2
R3
FIRST NAME
STAFF ID
LAST NAME
DOB
DOB
GENDER
GENDER
MOBILE
TEACHER
STAFF
MOBILE
ADDRESS
ADDRESS
POST
POST

Tables Used-

Student :-

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Roll	int(10)			No	None			Change Drop More
2	First_name	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
3	Last_name	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
4	Class	int(20)			No	None			Change Drop More
5	Year	int(10)			No	None			Change Drop More
6	Birth_date	date			No	None			Change Drop More
7	Mobile_no	bigint(15)			No	None			Change Drop More
8	Sex	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
9	permanent	varchar(50)	latin1_swedish_ci		No	None			Change Drop More
10	Present	varchar(50)	latin1_swedish_ci		No	None			Change Drop More

Teacher :-

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Teachers_id	int(10)			No	None			Change Drop More
2	First_name	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
3	Last_name	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
4	Position	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
5	Birth_day	date			No	None			Change Drop More
6	Mobile_no	bigint(20)			No	None			Change Drop More
7	Sex	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
8	Permanent	varchar(50)	latin1_swedish_ci		No	None			Change Drop More
9	Present	varchar(50)	latin1_swedish_ci		No	None			Change Drop More

Staff :-

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Employee_id	int(6)			No	None			Change Drop More
2	First_name	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
3	Last_name	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
4	Position	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
5	Birth_day	date			No	None			Change Drop More
6	Mobile_no	bigint(20)			No	None			Change Drop More
7	Sex	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
8	Permanent	varchar(50)	latin1_swedish_ci		No	None			Change Drop More
9	Present	varchar(50)	latin1_swedish_ci		No	None			Change Drop More

Admin :-

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Username	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
2	Password	varchar(20)	latin1_swedish_ci		No	None			Change Drop More

MVC Architecture-

Model –

1. STUDENT

This table has entities – Roll(Primary key), fname, lname, mobilenumber(multi-valued), address(multi-valued), class, DOB, Gender.

2. TEACHER

This table has entities – id(primary key), fname, lname, mobilenumber(multi-valued), address(multi-valued), gender, DOB, post.

3. STAFF

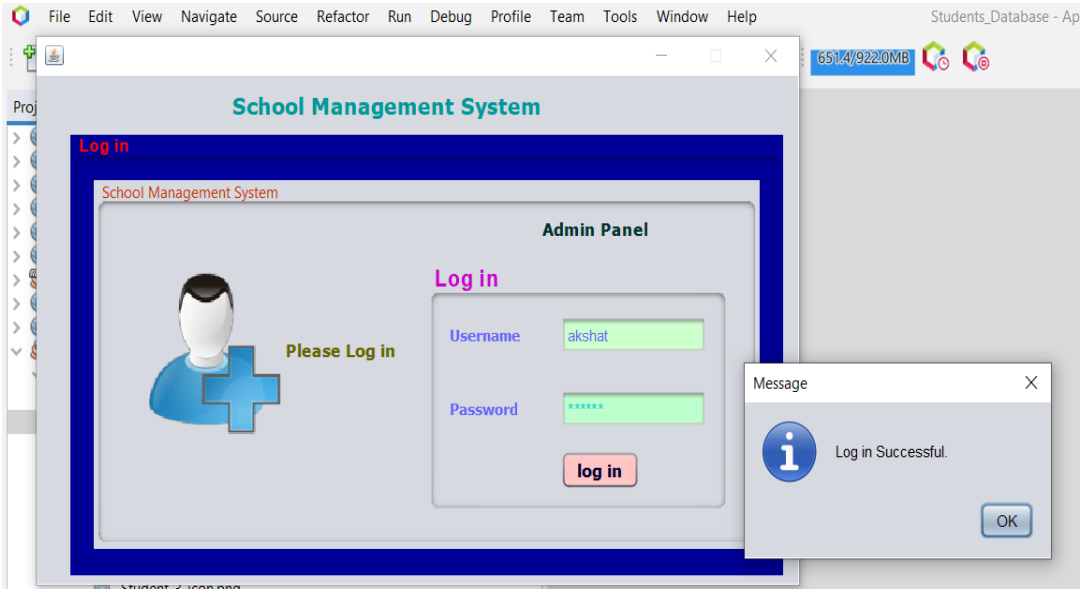
This table has entities – id(primary key), fname, lname, mobilenumber(multi-valued), address(multi-valued), gender, DOB, post.

Views –

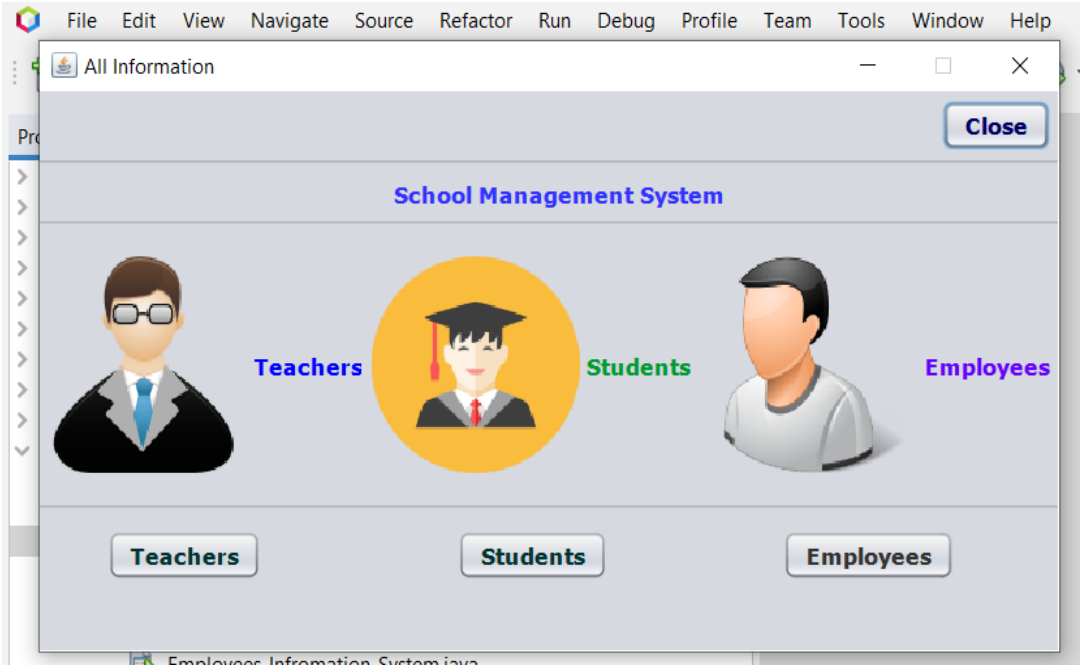
1. Login_frame.java – UI for admin login
2. All_Students_Data_Details.java– UI to view students data.
3. All_Teachers_Data_Details.java– UI to view teachers data.
4. All_Employees_Data_Details.java– UI to view staff's data.
5. Students_Information_System.java- UI for students data insertion.
6. Teachers_Information_System.java- UI for teachers data insertion.
7. Employees_Information_System.java- UI for staff's data insertion.
8. Students_And_Teachers_Management.java – UI for home page of web app.

System Implementation of Project

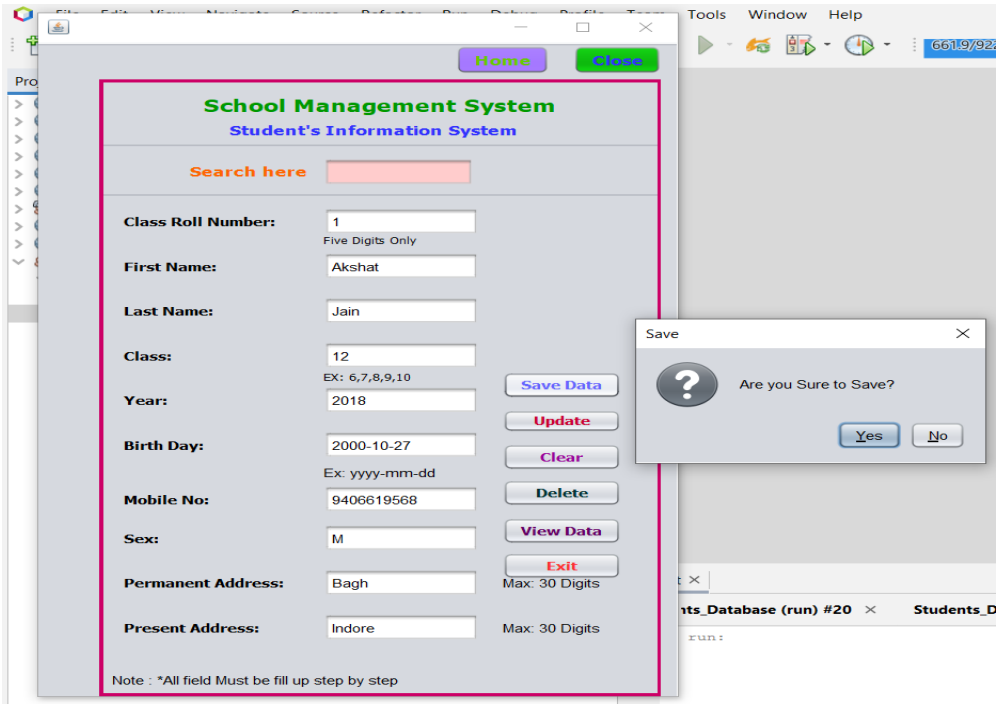
Admin login :-

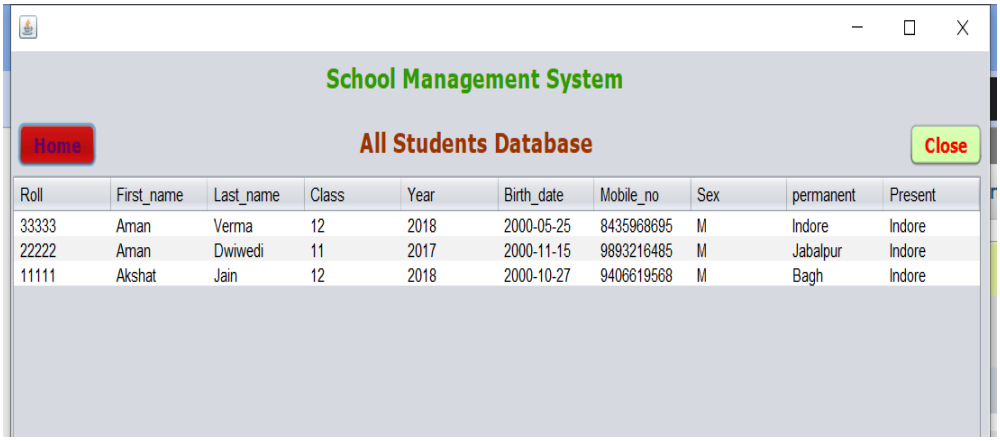


Home page :-

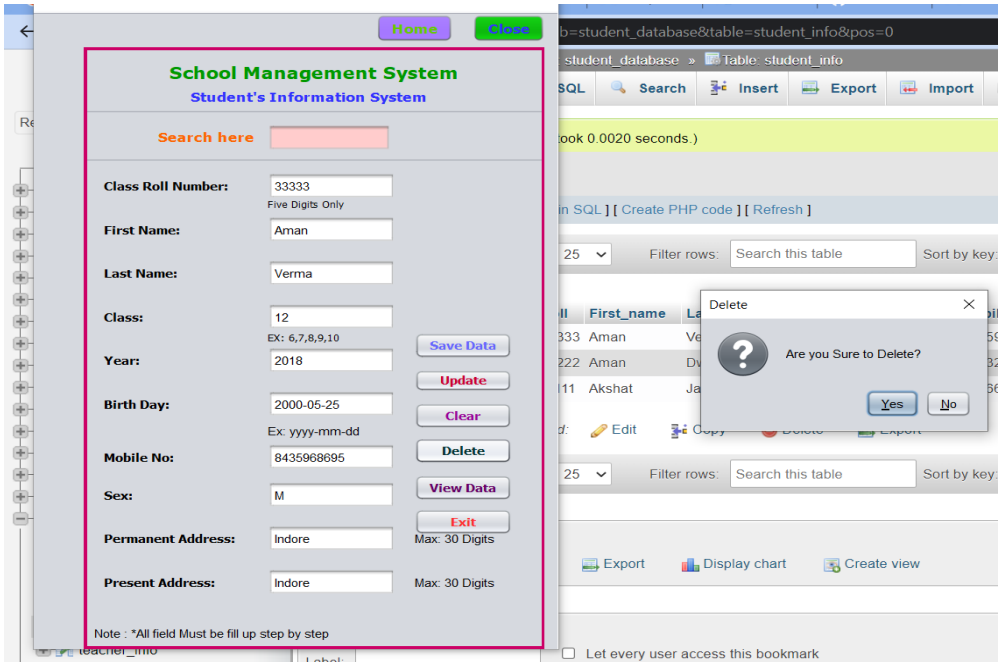


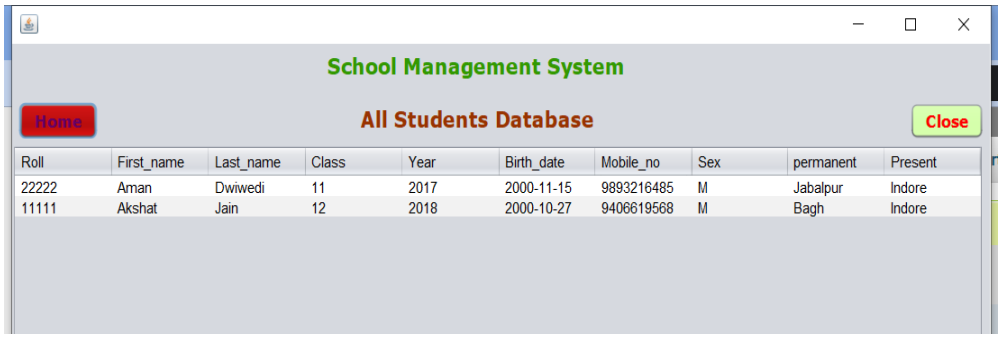
Students page for insertion, updation, deletion, viewing :-



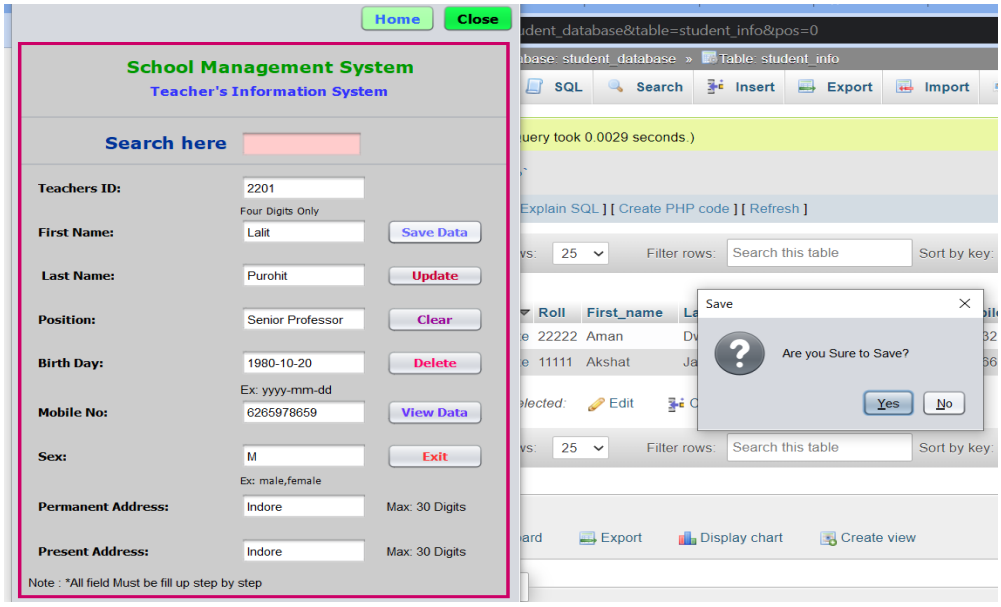


When we delete any entry :-

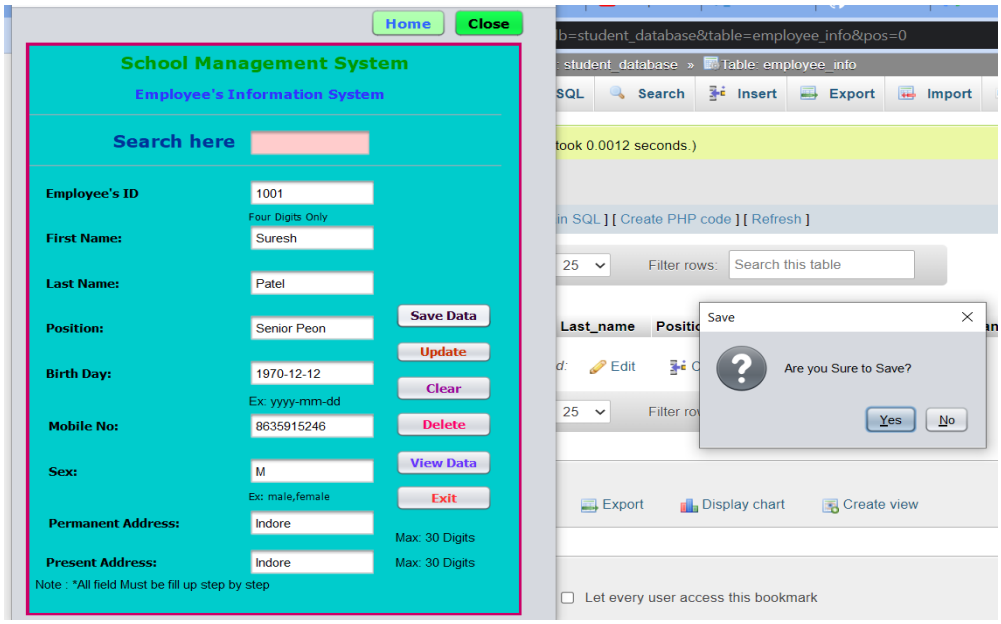




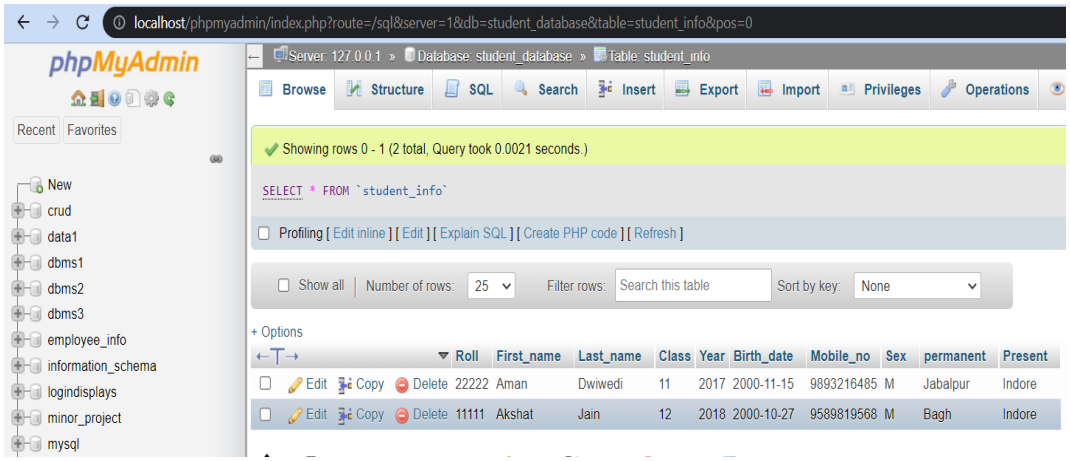
Teachers page for insertion, updation, deletion, viewing :-

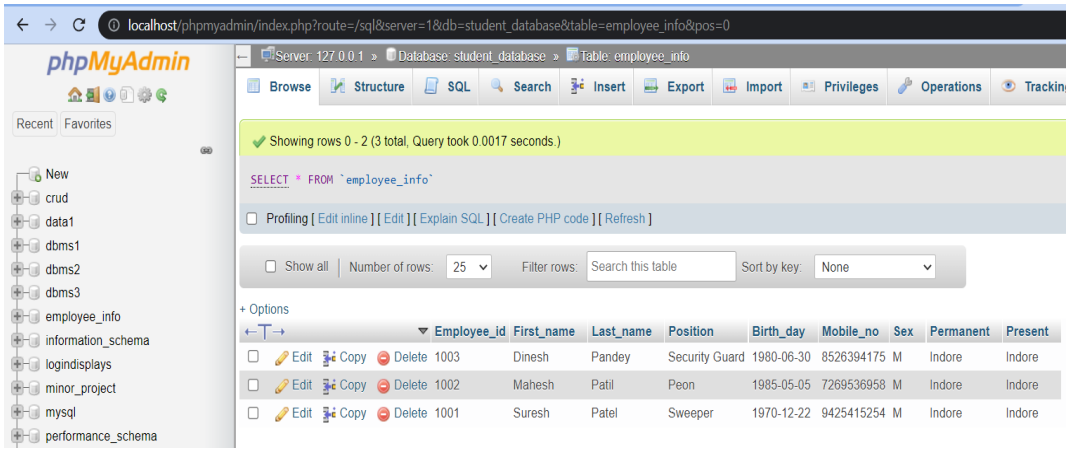


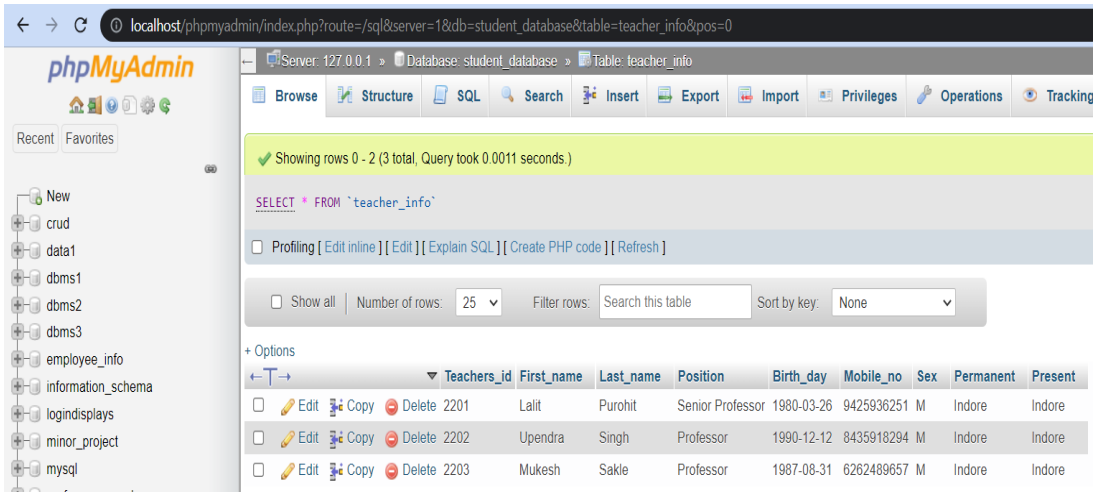
Staff's page for insertion, updation, deletion, viewing :-



Snapshots of Database :-







CONCLUSION -

School Management is a system which maintains the information about the students, teachers, staffs. This is very difficult to organize manually. Maintenance of all this information manually is a very complex task. Owing to the advancement of technology, organization of a complex network becomes much simple.

The project solves the real life problem of maintaining huge records and simplifies the process. It can be deployed and would be of great use to schools.