A Mini Project Report

on

"Student Information Management System"

Submitted by

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Batch – K9, Group Id - 5

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ABSTRACT

In current situation, there is a need for a platform to connect students and teachers virtually. The system is developed for students as well as teachers / mentors to help them communicate with each other and share information, or ask/resolve queries. Students can also submit files to teachers along with a message and teachers can review them. Teachers will also be able to post notices/ reminders regarding college and those will be visible to students when they log in. Teachers will be provided an admin access to the system and will be able to view all students and delete records.

The student management system is developed using PHP as backend, HTML, CSS, JS as frontend and MySQL as relational database. By virtue of this project, we were able to implement Relational database management concepts, functionalities and applications, as we learn it in the current semester. While developing this project, we also focused on HCI and UI/UX aspects along with the DBMS concept.

ACKNOWLEDGEMENT

We would like to thank our teacher and guide **Dr. Emmanuel. M.**, who gave us his valuable suggestions and ideas when we were in need of them. He encouraged us to work on this project as well as helped us out in the technical problems we faced.

We are immensely grateful to our college and our HOD **Dr. A. M. Bagade** for providing us with the opportunity to work on this project and providing us with the necessary resources for it. We are thankful to all involved in this project as without their inspiration and valuable suggestions, it would not have been possible to develop the project within the prescribed time.

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INTRODUCTION

❖ Purpose

The student details are often very difficult to handle and record, especially for large colleges where there are numerous students across various branches. Data entry, and retrieval is cumbersome and most of the existing systems do not allow sending notifications and receiving different files from students.
Through this project we have addressed the issues existing in the current system by making a visually pleasing user interface so that even a non-technical person can handle the system. We have provided various features like student notifications, admin authorities etc along with basic database CRUD operations. Our system can be modified to be used for other purposes too with a little modification.

❖ Scope

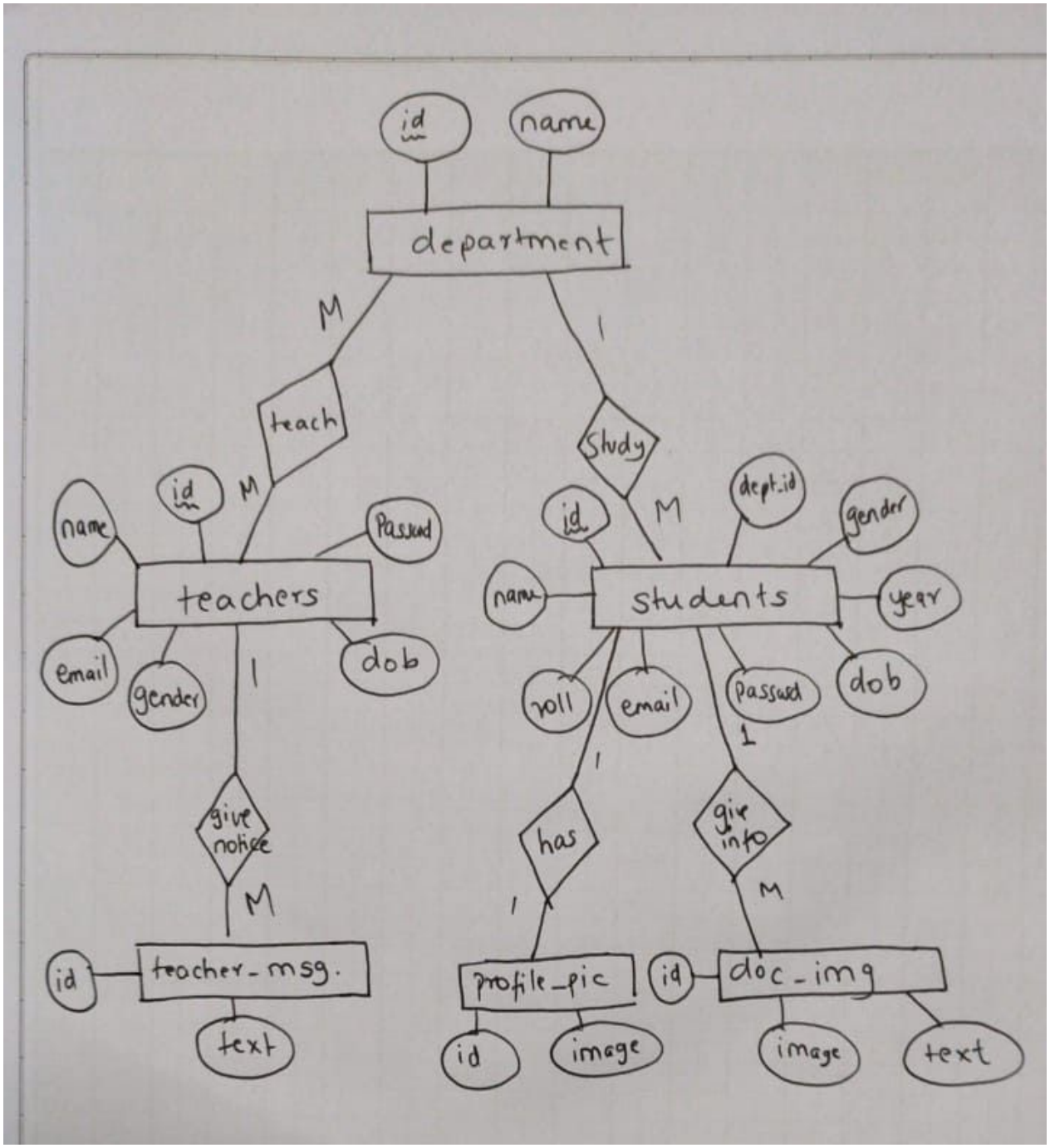
Our system performs the following
• Adding students to the system via login
• Adding teachers to the system via a separate login
• Ability to add profile photos
• Update the recorded information
• Deleting student entries
• Displaying all the student records
• A beautiful interface which adheres to all the HCI standards.

❖ Developers' Responsibilities

• Researching, designing, implementing, and managing software programs.
• Testing and evaluating the program(s).
• Identifying areas for modification in existing programs and subsequently developing these modifications.
• Writing and implementing efficient code.
• Determining operational practicality.
• Developing quality assurance procedures.
• Deploying software tools, processes, and metrics.
• Maintaining and upgrading existing systems.
• Training users.
• Working closely with other developers, UX designers, business, and systems analysts.

SYSTEM DESIGN

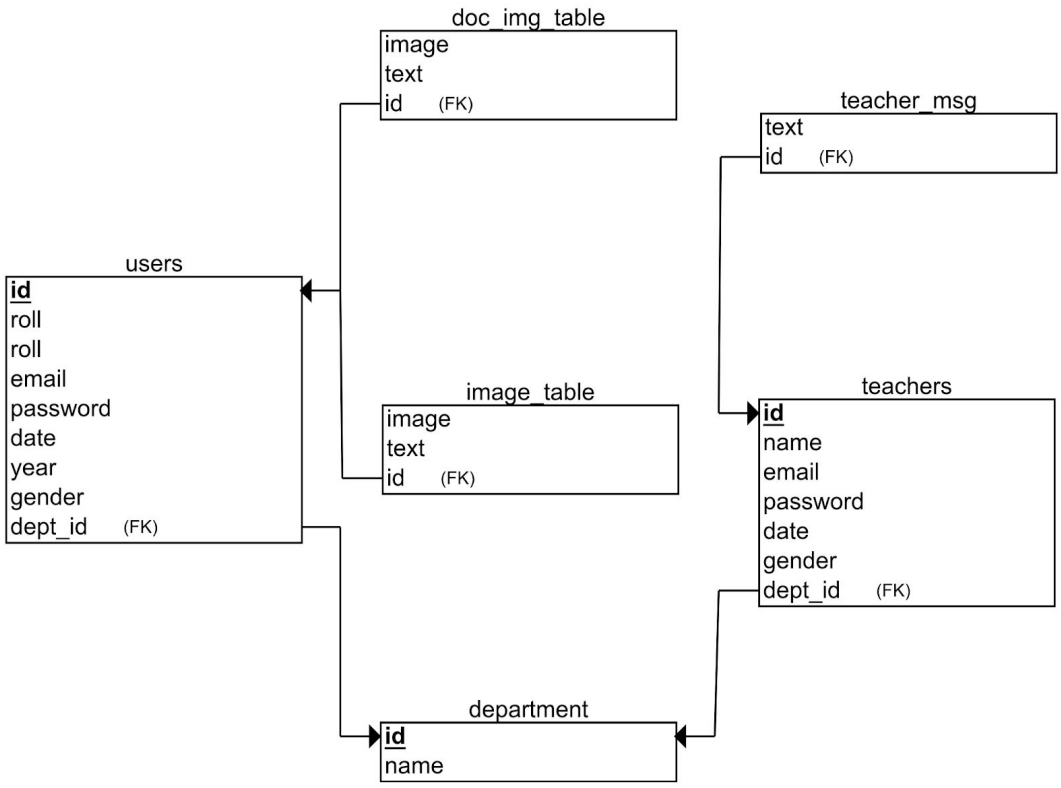
2.1 ER Diagram



2.2 Schema Description

1. users(id,name,roll,email,password,date,year,gender,dept_id).
2. teachers(id,name,email,password,date,gender).
3. department(id,name).
4. teachers_messages(id,text).
5. image_table(id,image).
6. documents_image_table(id,image,text).

2.3 Table Description



SYSTEM IMPLEMENTATION

➢Hardware and Software Platform Description

- **Hardware Platform Description**
  Core i5 processor
  1 GB RAM
  3 GB HDD

- **Software Platform Description**
  VS Code IDE
  XAMPP
  PHPMyAdmin

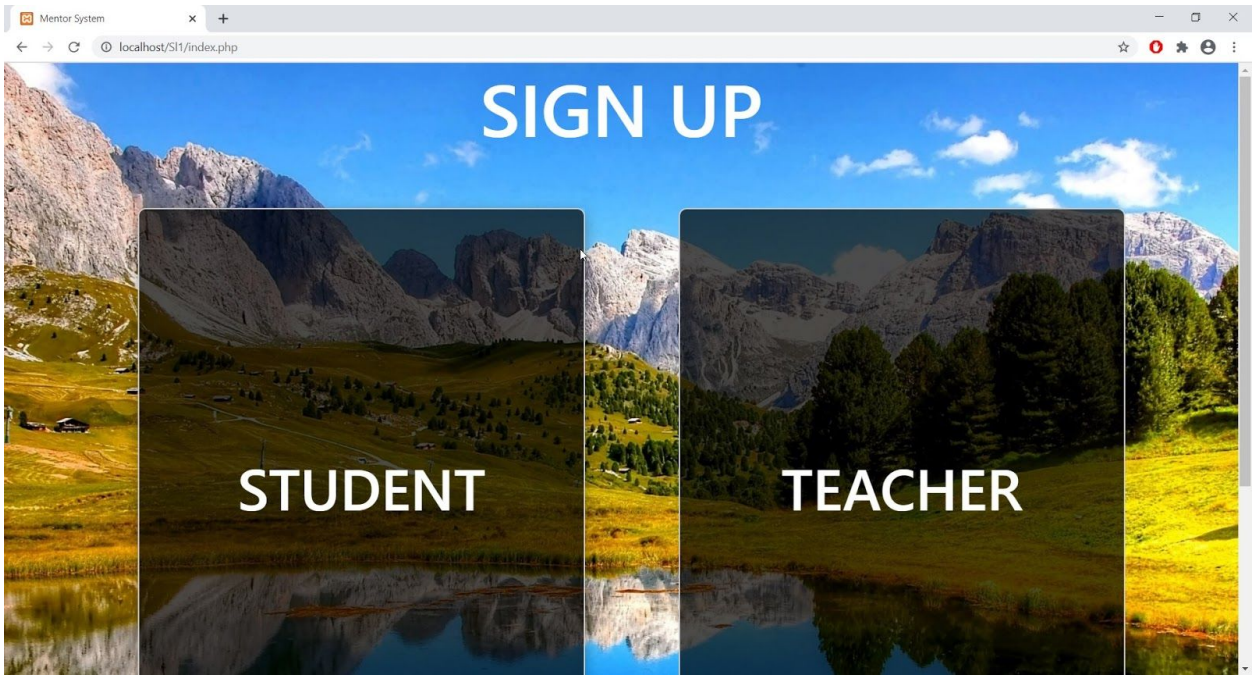
➢Tools Used

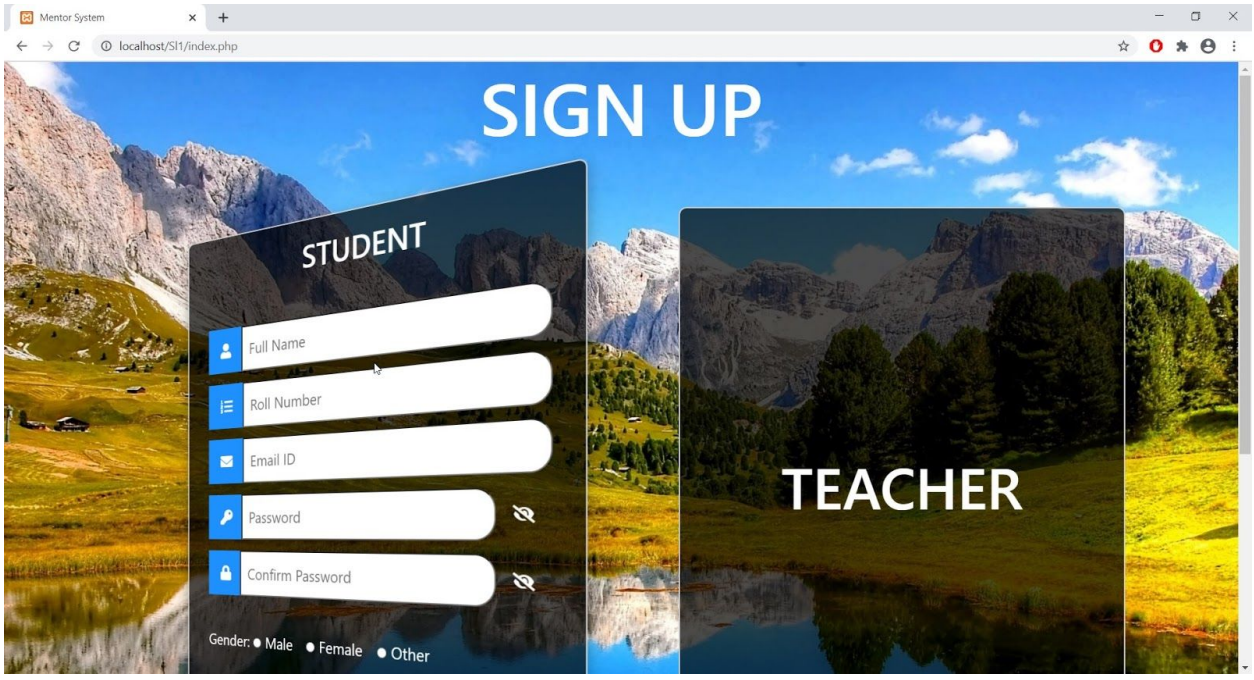
- **Front End**
  HTML5, CSS3, Javascript, Bootstrap

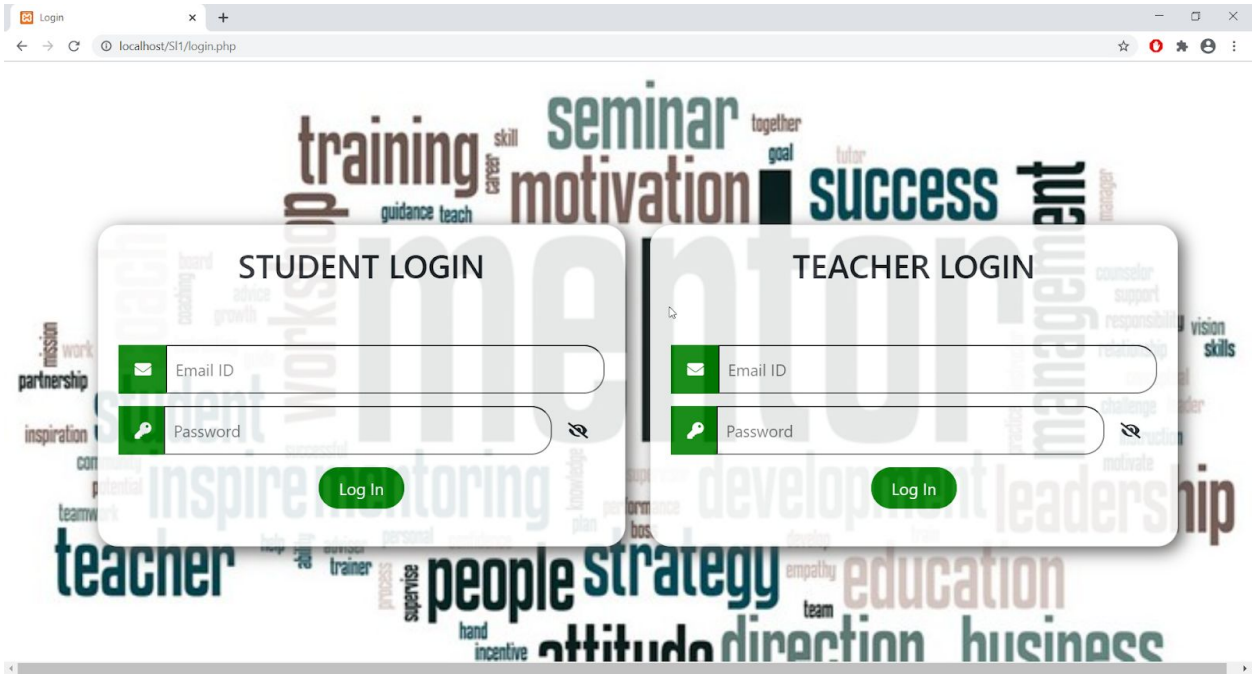
- **Back End**
  PHP

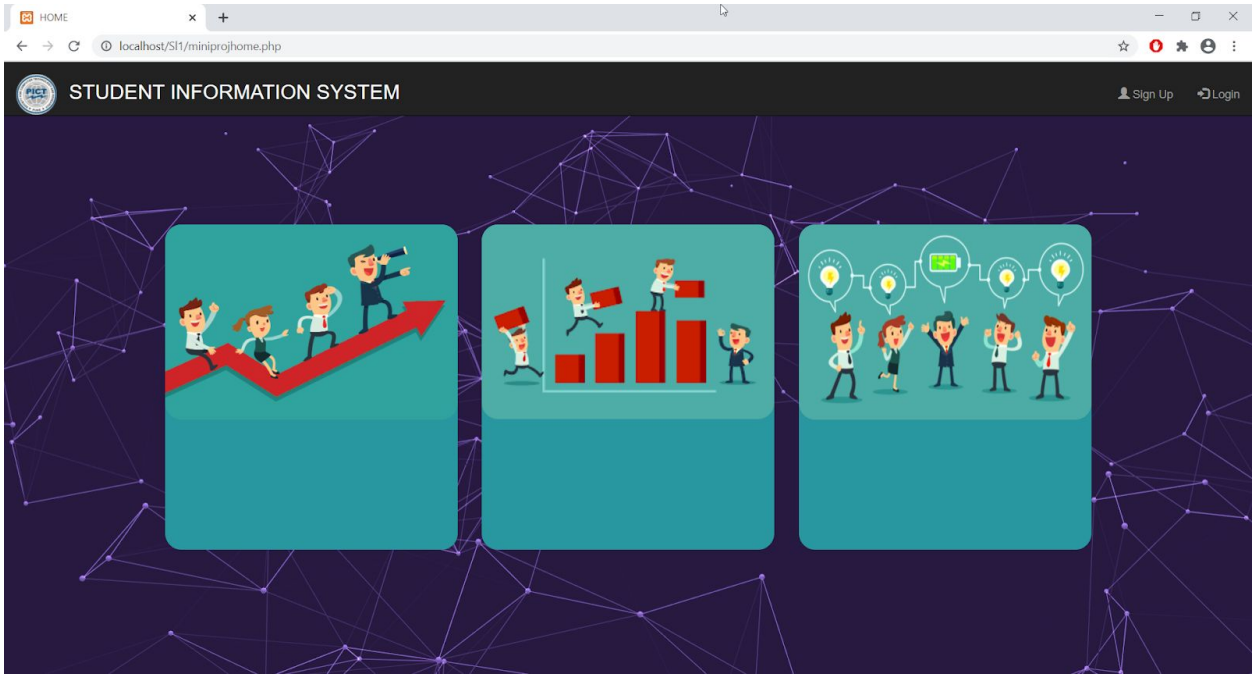
- **Database**
  MySQL on XAMPP

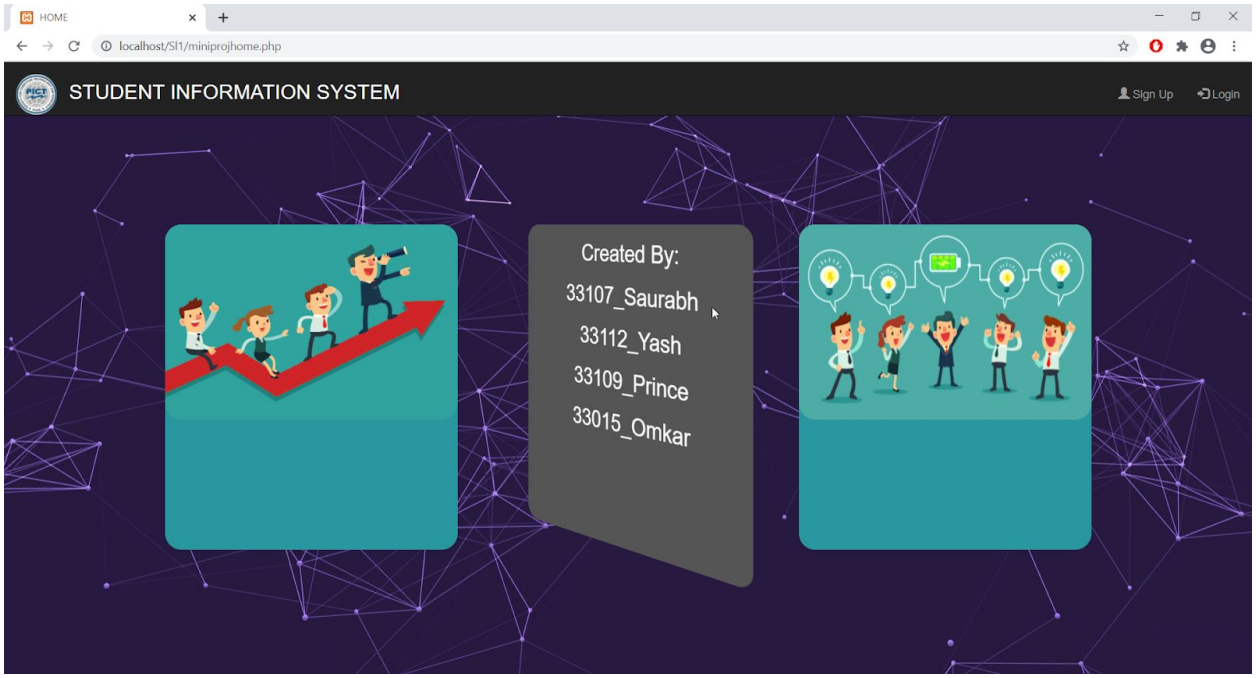
PROJECT DEMONSTRATION

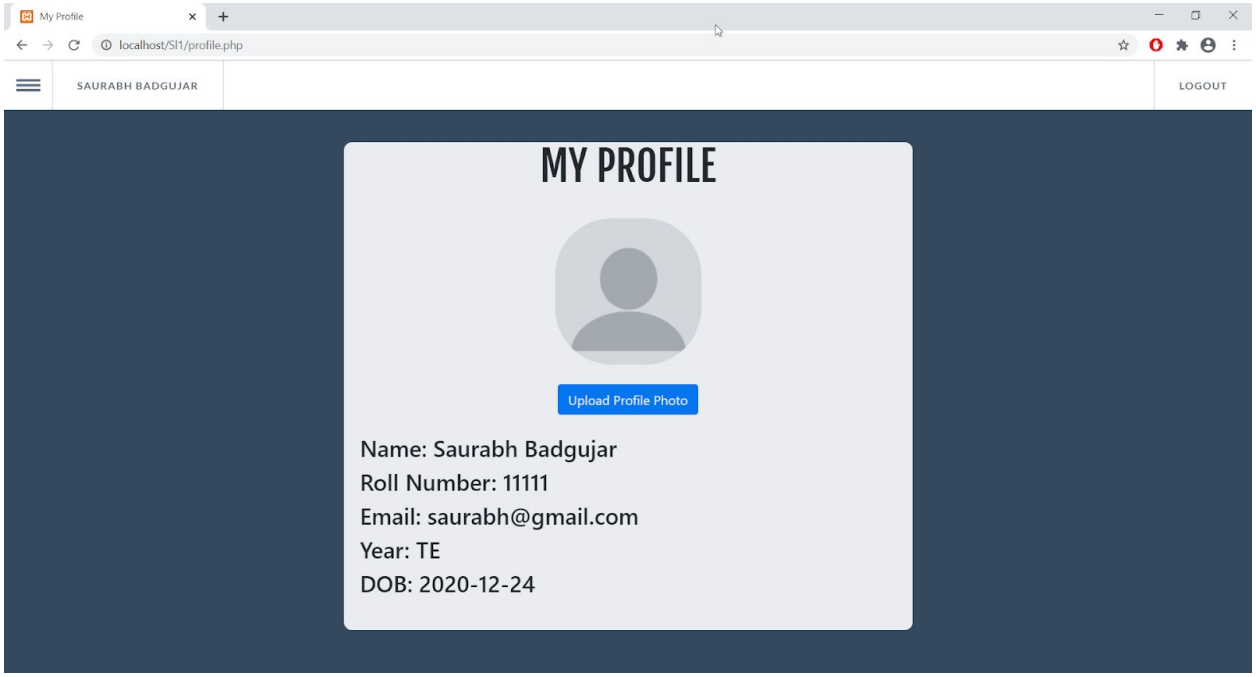


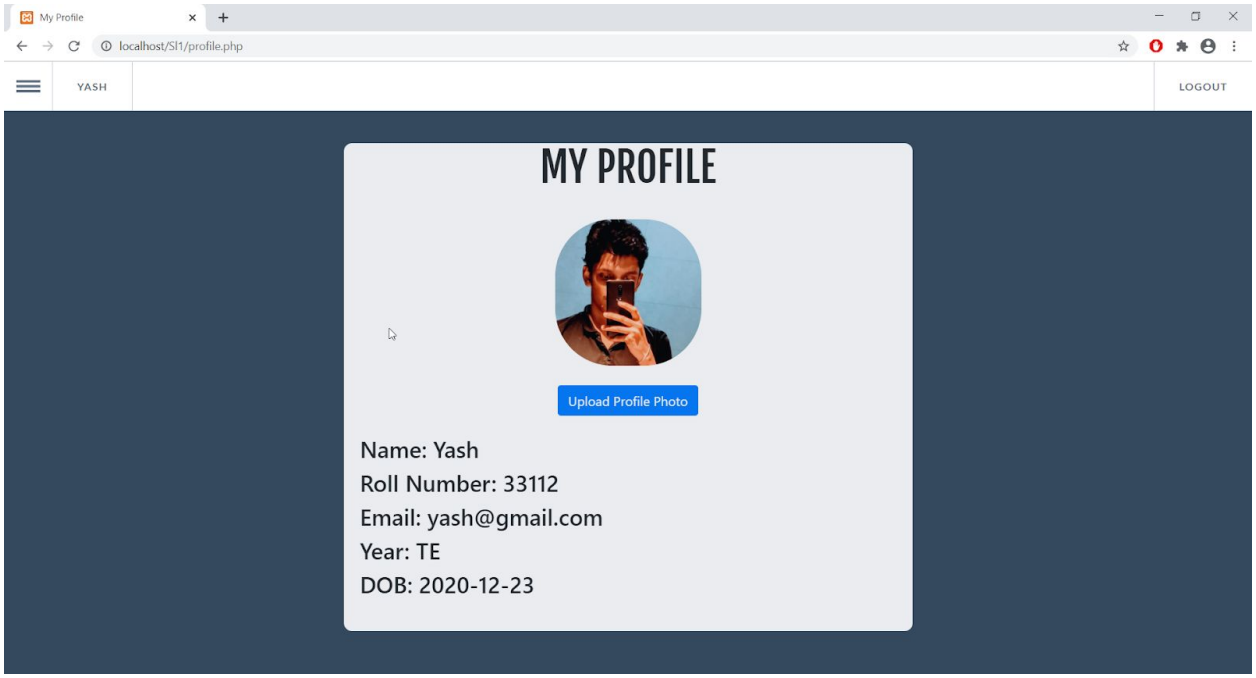


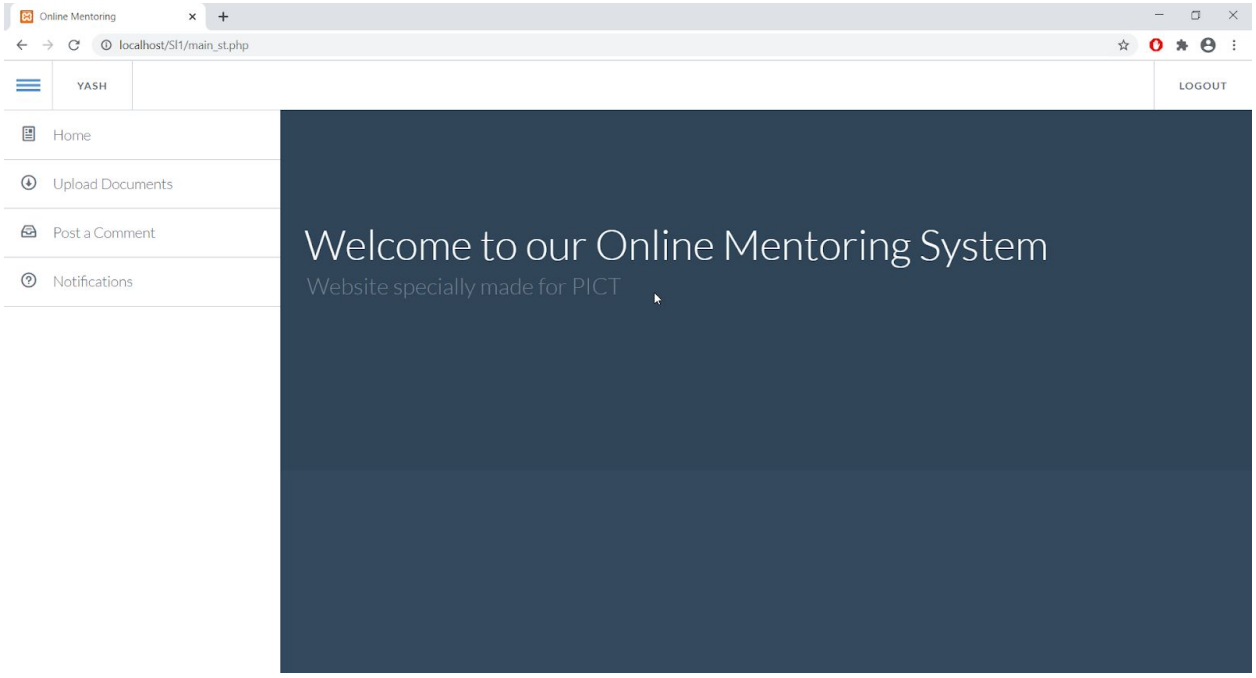

Login
localhost/Sl1/login.php
STUDENT LOGIN
Email ID
Password
Log In
TEACHER LOGIN
Email ID
Password
Log In

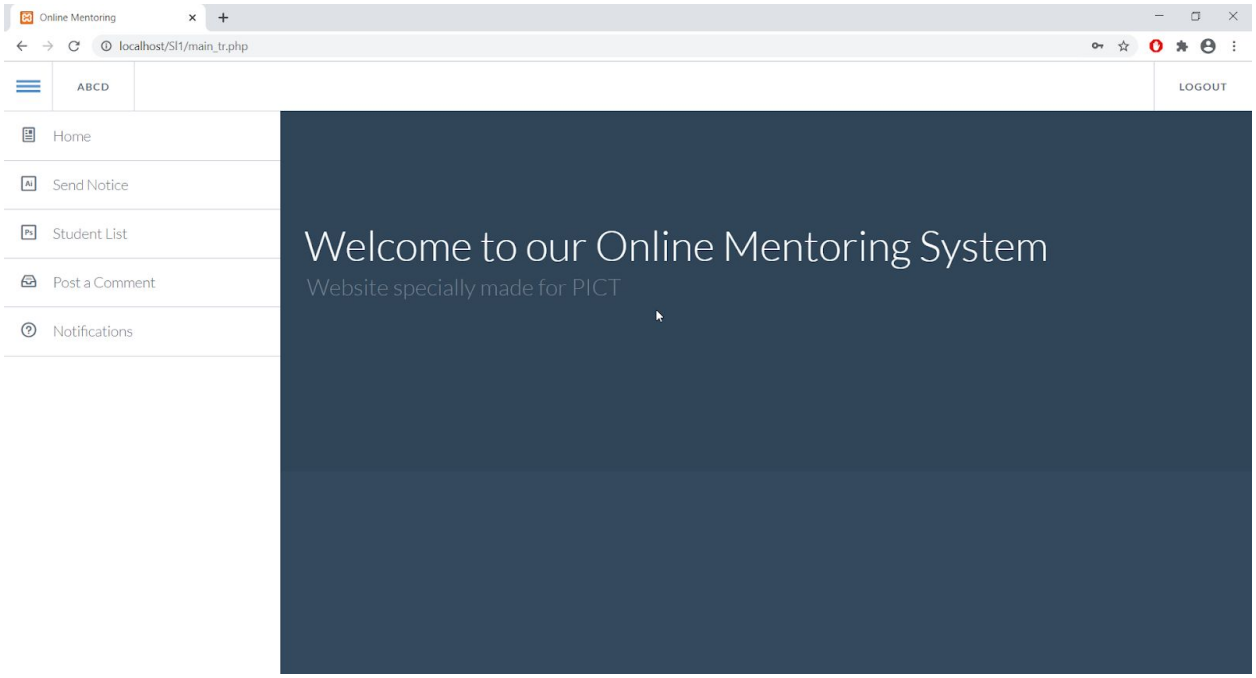

HOME
localhost/Sl1/miniprojhome.php
STUDENT INFORMATION SYSTEM
Sign Up
Login

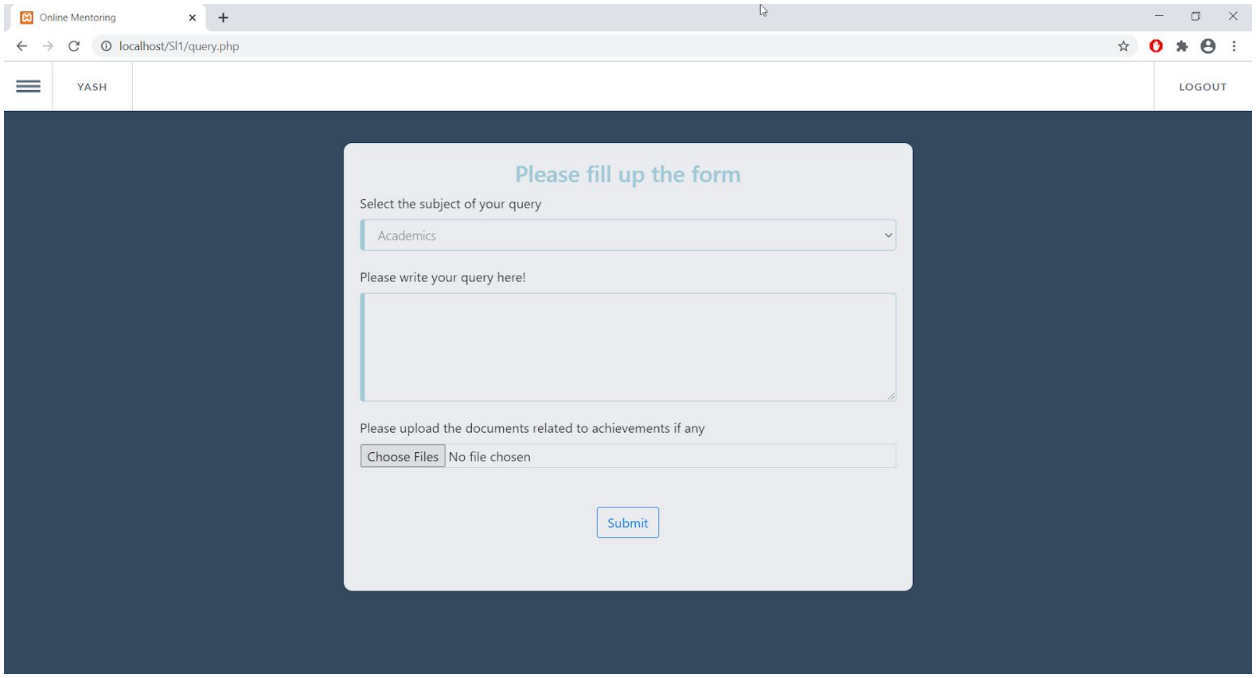

HOME
localhost/SI1/miniprojhome.php
STUDENT INFORMATION SYSTEM
Sign Up
Login
Created By:
33107_Saurabh
33112_Yash
33109_Prince
33015_Omkar

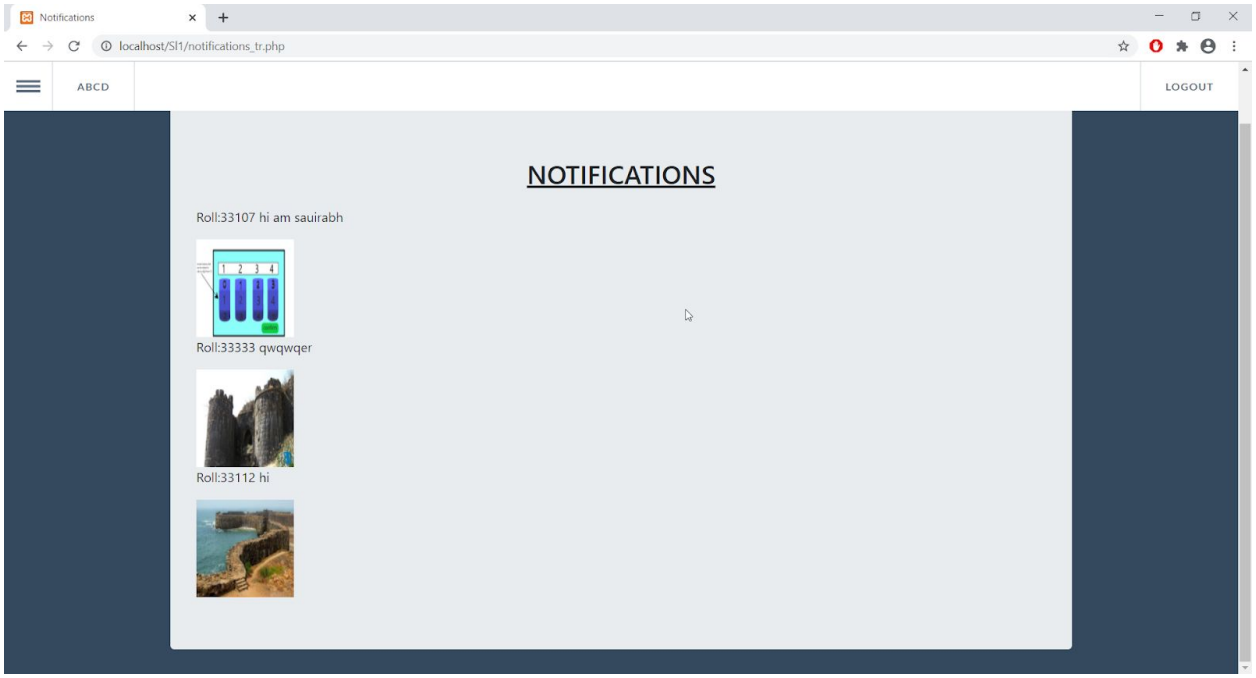

My Profile
localhost/SI1/profile.php
SAURABH BADGUJAR
LOGOUT
MY PROFILE
Upload Profile Photo
Name: Saurabh Badgujar
Roll Number: 11111
Email: saurabh@gmail.com
Year: TE
DOB: 2020-12-24

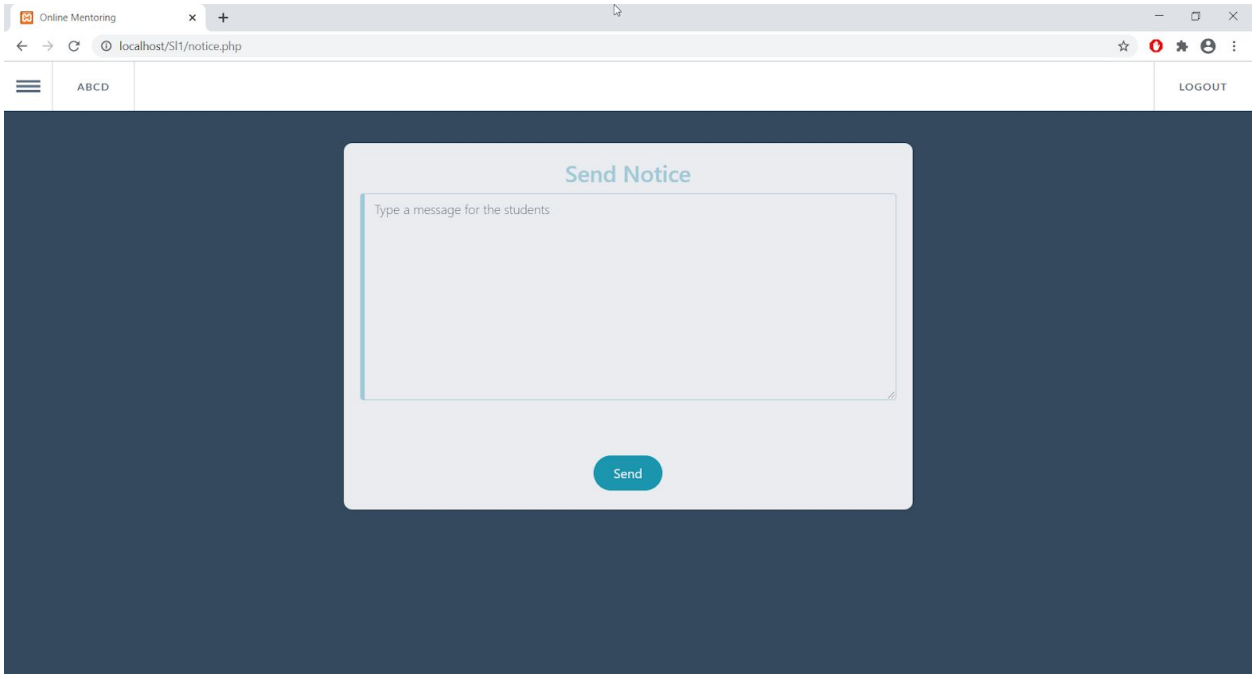

My Profile
localhost/Sl1/profile.php
YASH
LOGOUT
MY PROFILE
Upload Profile Photo
Name: Yash
Roll Number: 33112
Email: yash@gmail.com
Year: TE
DOB: 2020-12-23

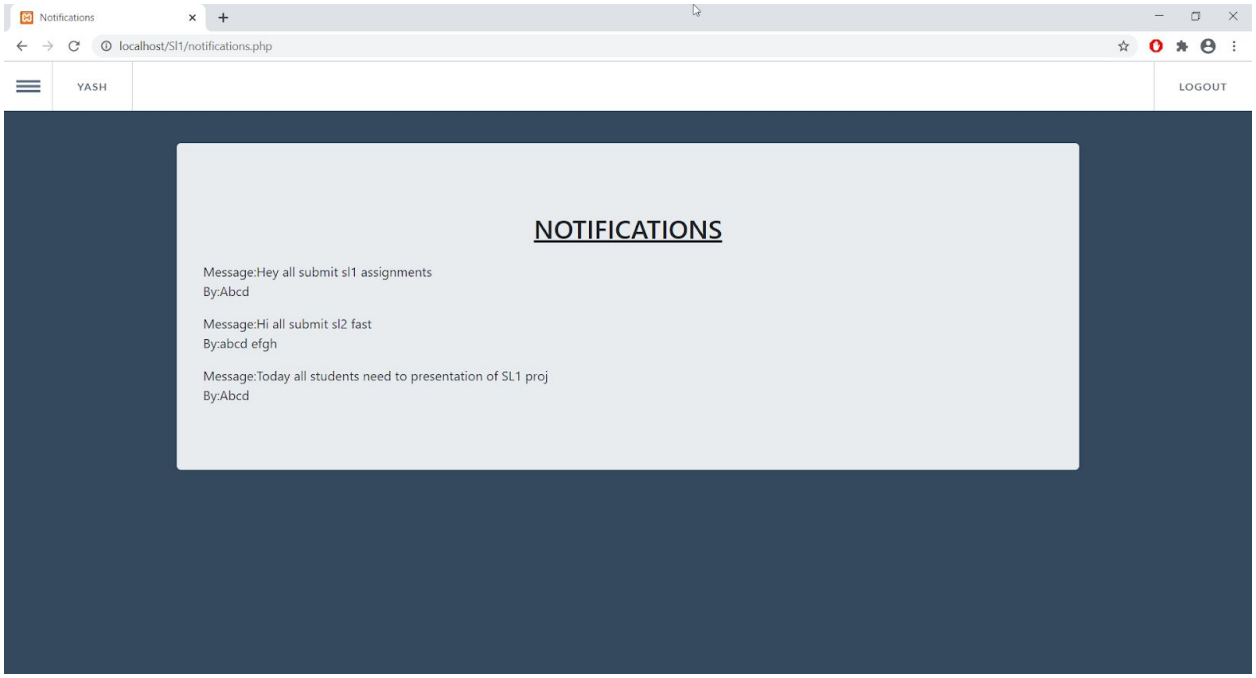

Online Mentoring
localhost/Sl1/main_st.php
YASH
LOGOUT
Home
Upload Documents
Post a Comment
Notifications
Welcome to our Online Mentoring System
Website specially made for PICT

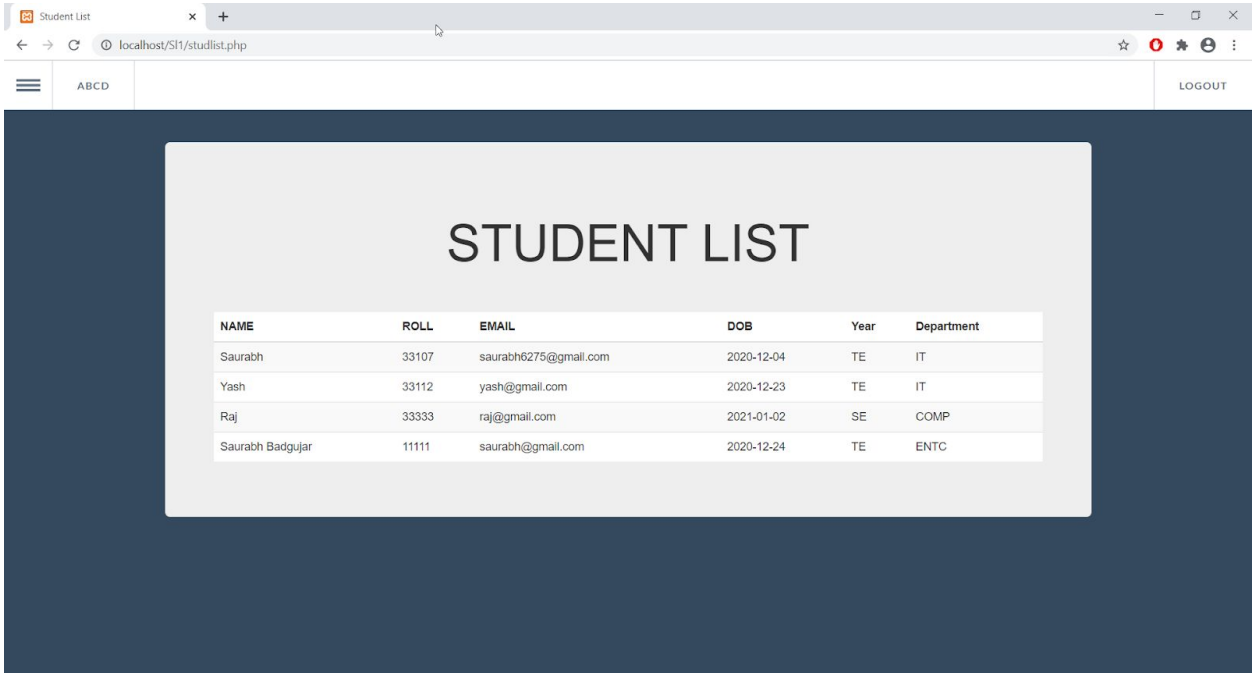

Online Mentoring
localhost/Sl1/main_tr.php
ABCD
LOGOUT
Home
Send Notice
Student List
Post a Comment
Notifications
Welcome to our Online Mentoring System
Website specially made for PICT

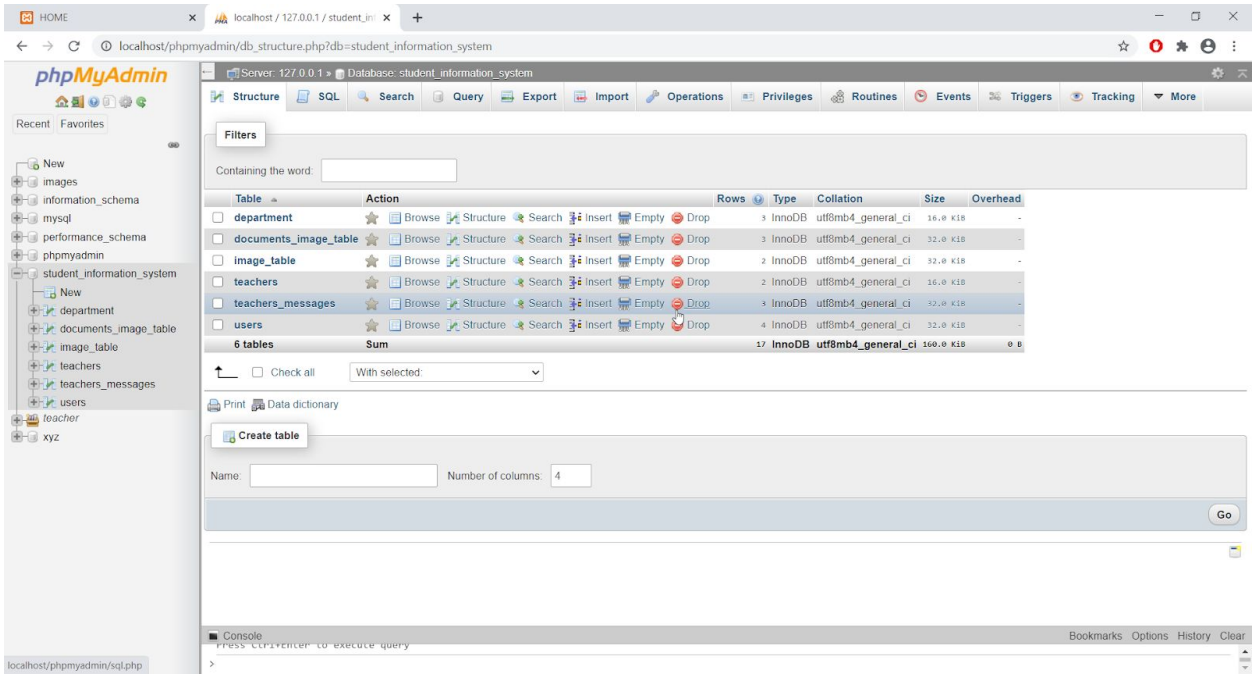

Online Mentoring
localhost/Sl1/query.php
YASH
LOGOUT
Please fill up the form
Select the subject of your query
Academics
Please write your query here!
Please upload the documents related to achievements if any
Choose Files
No file chosen
Submit

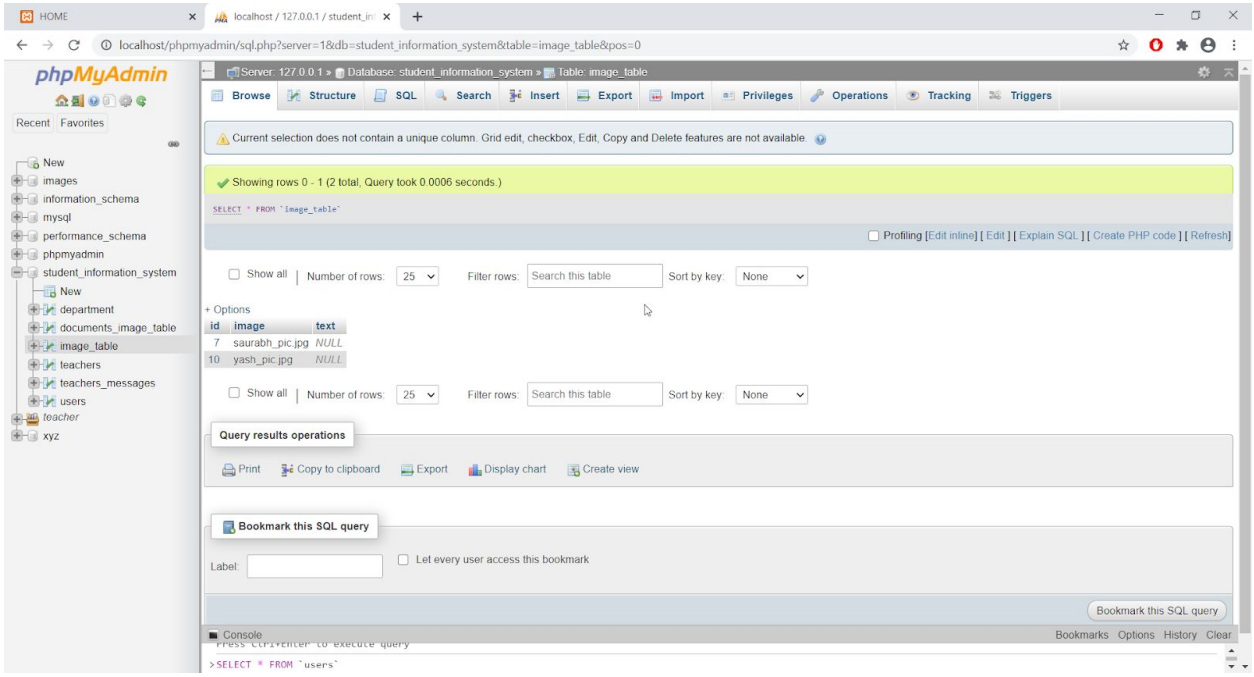

Notifications
localhost/Sl1/notifications_tr.php
ABCD
LOGOUT
NOTIFICATIONS
Roll:33107 hi am sauirabh
Roll:33333 qwqwqer
Roll:33112 hi

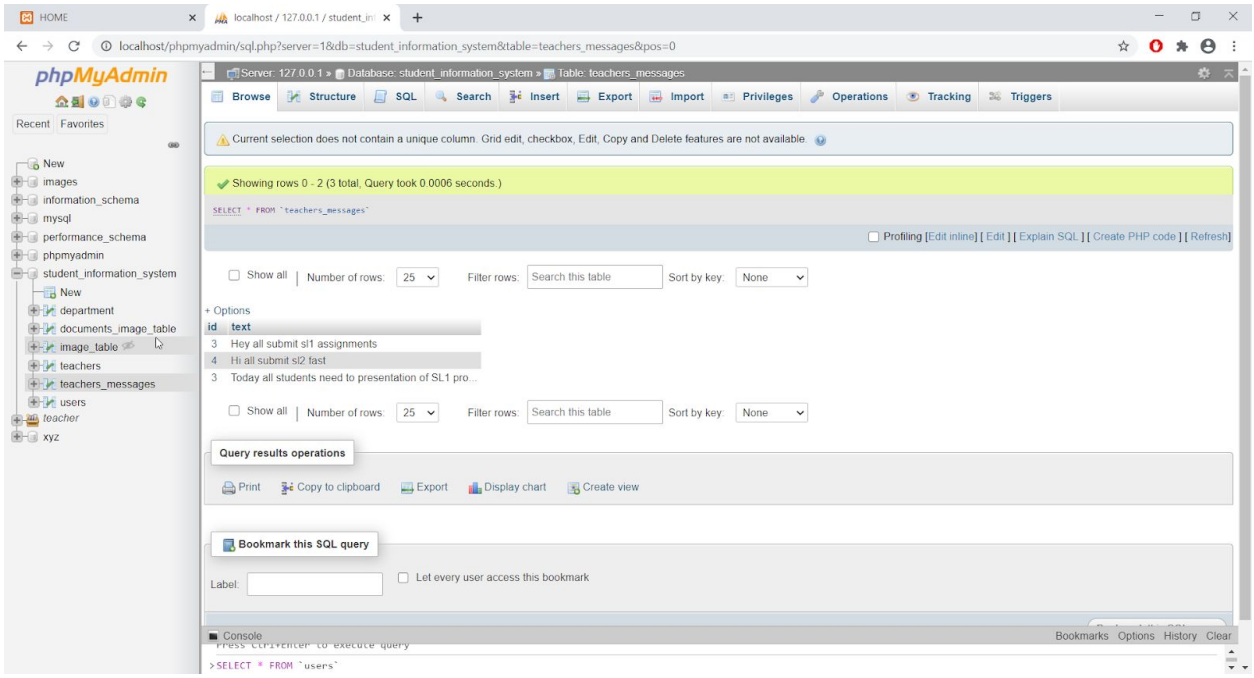

Online Mentoring
localhost/Sl1/notice.php
ABCD
LOGOUT
Send Notice
Type a message for the students
Send

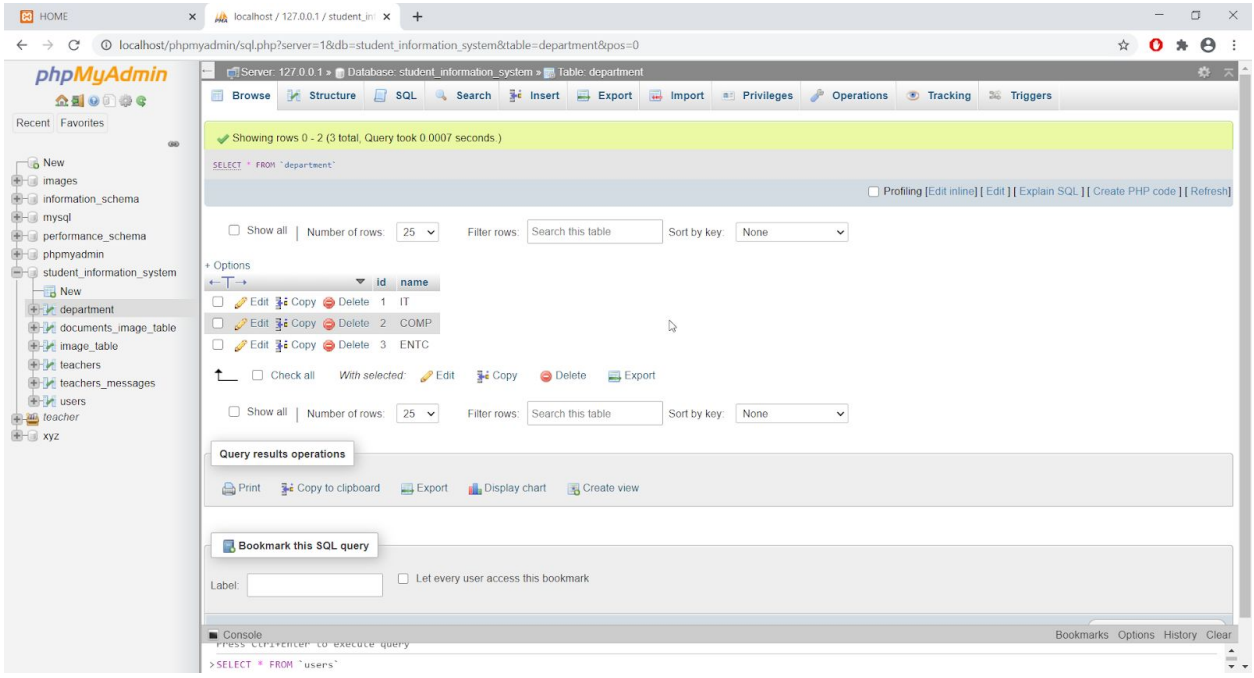

Notifications
localhost/Sl1/notifications.php
YASH
LOGOUT
NOTIFICATIONS
Message:Hey all submit sl1 assignments
By:Abcd
Message:Hi all submit sl2 fast
By:abcd efgh
Message:Today all students need to presentation of SL1 proj
By:Abcd

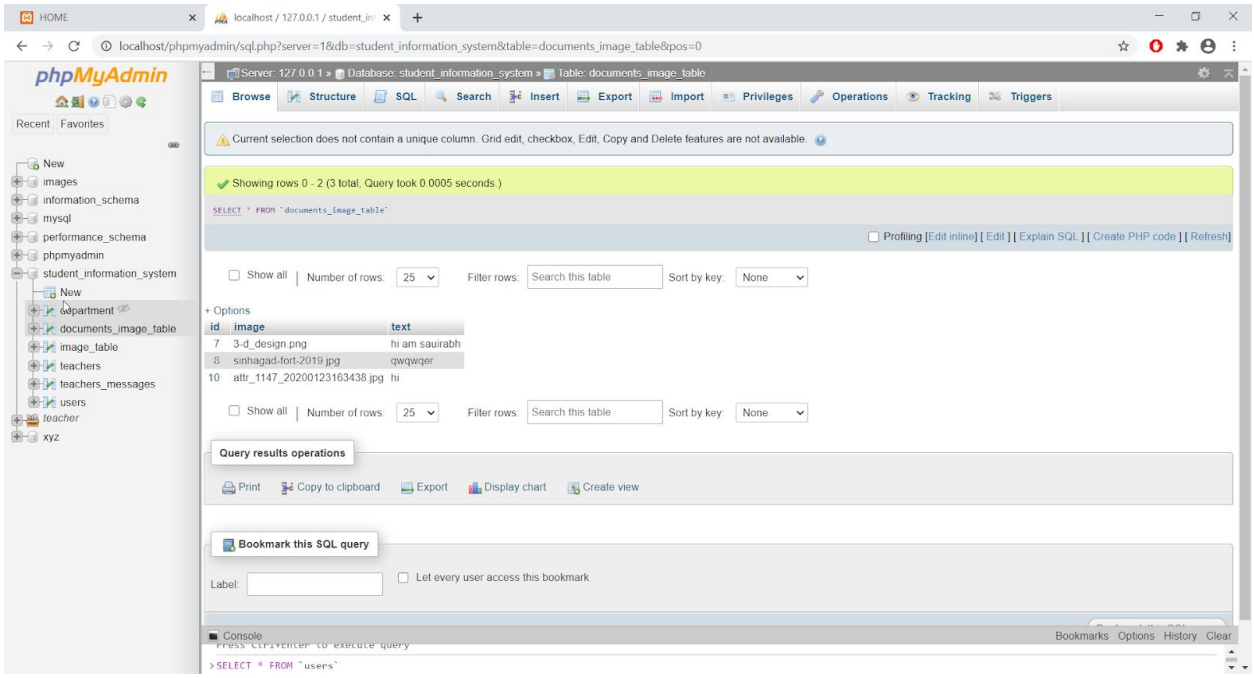

Student List
localhost/Sl1/studlist.php
ABCD
LOGOUT
STUDENT LIST
NAME ROLL EMAIL DOB Year Department
Saurabh 33107 saurabh6275@gmail.com 2020-12-04 TE IT
Yash 33112 yash@gmail.com 2020-12-23 TE IT
Raj 33333 raj@gmail.com 2021-01-02 SE COMP
Saurabh Badgujar 11111 saurabh@gmail.com 2020-12-24 TE ENTC

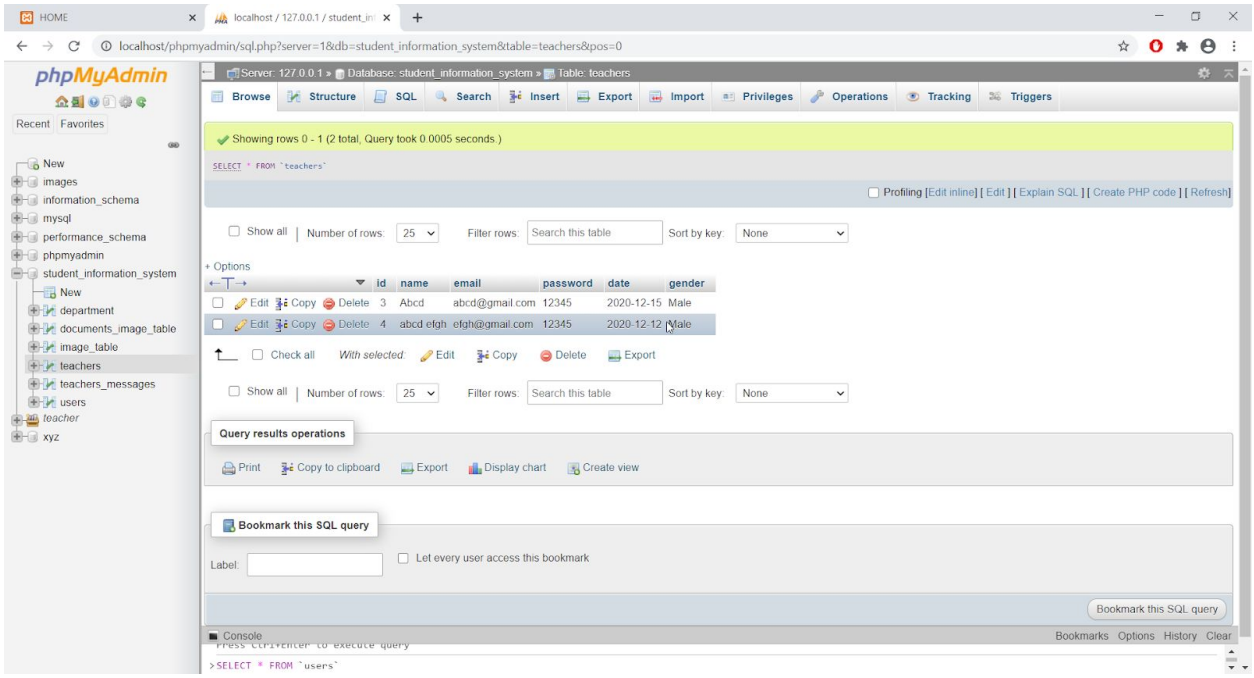

HOME
localhost / 127.0.0.1 / student_in
localhost/phpmyadmin/db_structure.php?db=student_information_system
phpMyAdmin
Recent
Favorites
New
images
information_schema
mysql
performance_schema
phpmyadmin
student_information_system
New
department
documents_image_table
image_table
teachers
teachers_messages
users
teacher
xyz
Server: 127.0.0.1 » Database: student_information_system
Structure
SQL
Search
Query
Export
Import
Operations
Privileges
Routines
Events
Triggers
Tracking
More
Filters
Containing the word:
Table
Action
Rows
Type
Collation
Size
Overhead
department
documents_image_table
image_table
teachers
teachers_messages
users
6 tables
Sum
Browse
Structure
Search
Insert
Empty
Drop
InnoDB
utf8mb4_general_ci
Check all
With selected:
Print
Data dictionary
Create table
Name:
Number of columns:
Go
Console
Bookmarks
Options
History
Clear
localhost/phpmyadmin/sql.php

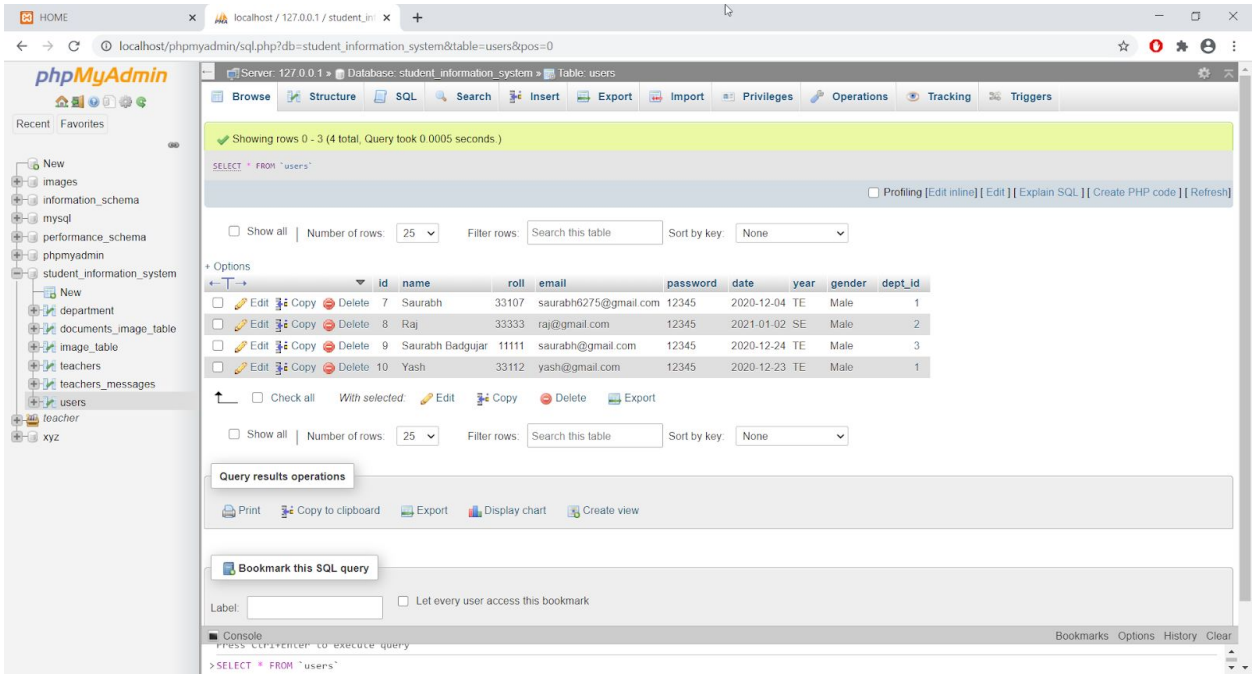

HOME
localhost / 127.0.0.1 / student_in
localhost/phpmyadmin/sql.php?server=1&db=student_information_system&table=image_table&pos=0
phpMyAdmin
Recent
Favorites
New
images
information_schema
mysql
performance_schema
phpmyadmin
student_information_system
New
department
documents_image_table
image_table
teachers
teachers_messages
users
teacher
xyz
Server: 127.0.0.1 » Database: student_information_system » Table: image_table
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
Triggers
Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
Showing rows 0 - 1 (2 total, Query took 0.0006 seconds.)
SELECT * FROM `image_table`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all
Number of rows:
25
Filter rows:
Search this table
Sort by key:
None
+ Options
id
image
text
7
saurabh_pic.jpg
NULL
10
yash_pic.jpg
NULL
Query results operations
Print
Copy to clipboard
Export
Display chart
Create view
Bookmark this SQL query
Label:
Let every user access this bookmark
Console
Bookmarks
Options
History
Clear
>SELECT * FROM `users`


HOME
localhost / 127.0.0.1 / student_in
localhost/phpmyadmin/sql.php?server=1&db=student_information_system&table=teachers_messages&pos=0
phpMyAdmin
Recent
Favorites
New
images
information_schema
mysql
performance_schema
phpmyadmin
student_information_system
New
department
documents_image_table
image_table
teachers
teachers_messages
users
teacher
xyz
Server: 127.0.0.1 » Database: student_information_system » Table: teachers_messages
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
Triggers
Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
Showing rows 0 - 2 (3 total, Query took 0.0006 seconds.)
SELECT * FROM `teachers_messages`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all
Number of rows: 25
Filter rows: Search this table
Sort by key: None
+ Options
id text
3 Hey all submit sl1 assignments
4 Hi all submit sl2 fast
3 Today all students need to presentation of SL1 pro...
Query results operations
Print
Copy to clipboard
Export
Display chart
Create view
Bookmark this SQL query
Label:
Let every user access this bookmark
Console
Bookmarks
Options
History
Clear
>SELECT * FROM `users`


HOME
localhost / 127.0.0.1 / student_in
localhost/phpmyadmin/sql.php?server=1&db=student_information_system&table=department&pos=0
phpMyAdmin
Recent
Favorites
New
images
information_schema
mysql
performance_schema
phpmyadmin
student_information_system
New
department
documents_image_table
image_table
teachers
teachers_messages
users
teacher
xyz
Server: 127.0.0.1 » Database: student_information_system » Table: department
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
Triggers
Showing rows 0 - 2 (3 total, Query took 0.0007 seconds.)
SELECT * FROM `department`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all
Number of rows: 25
Filter rows: Search this table
Sort by key: None
+ Options
id name
Edit Copy Delete 1 IT
Edit Copy Delete 2 COMP
Edit Copy Delete 3 ENTC
Check all
With selected:
Edit
Copy
Delete
Export
Query results operations
Print
Copy to clipboard
Export
Display chart
Create view
Bookmark this SQL query
Label:
Let every user access this bookmark
Console
Bookmarks
Options
History
Clear
>SELECT * FROM `users`


HOME
localhost / 127.0.0.1 / student_in
localhost/phpmyadmin/sql.php?server=1&db=student_information_system&table=documents_image_table&pos=0
phpMyAdmin
Recent
Favorites
New
images
information_schema
mysql
performance_schema
phpmyadmin
student_information_system
New
department
documents_image_table
image_table
teachers
teachers_messages
users
teacher
xyz
Server: 127.0.0.1 » Database: student_information_system » Table: documents_image_table
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
Triggers
Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
Showing rows 0 - 2 (3 total, Query took 0.0005 seconds.)
SELECT * FROM `documents_image_table`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all
Number of rows: 25
Filter rows: Search this table
Sort by key: None
+ Options
id image text
7 3-d_design.png hi am saurabh
8 sinhagad-fort-2019.jpg qwqwqer
10 attr_1147_20200123163438.jpg hi
Query results operations
Print
Copy to clipboard
Export
Display chart
Create view
Bookmark this SQL query
Label:
Let every user access this bookmark
Console
Bookmarks
Options
History
Clear
>SELECT * FROM `users`


HOME
localhost / 127.0.0.1 / student_in
localhost/phpmyadmin/sql.php?server=1&db=student_information_system&table=teachers&pos=0
phpMyAdmin
Recent
Favorites
New
images
information_schema
mysql
performance_schema
phpmyadmin
student_information_system
New
department
documents_image_table
image_table
teachers
teachers_messages
users
teacher
xyz
Server: 127.0.0.1 » Database: student_information_system » Table: teachers
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
Triggers
Showing rows 0 - 1 (2 total, Query took 0.0005 seconds.)
SELECT * FROM `teachers`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all
Number of rows: 25
Filter rows: Search this table
Sort by key: None
+ Options
id name email password date gender
Edit Copy Delete 3 Abcd abcd@gmail.com 12345 2020-12-15 Male
Edit Copy Delete 4 abcd efgh efgh@gmail.com 12345 2020-12-12 Male
Check all
With selected:
Edit
Copy
Delete
Export
Query results operations
Print
Copy to clipboard
Export
Display chart
Create view
Bookmark this SQL query
Label:
Let every user access this bookmark
Console
Bookmarks
Options
History
Clear
>SELECT * FROM `users`


HOME
localhost / 127.0.0.1 / student_in
localhost/phpmyadmin/sql.php?db=student_information_system&table=users&pos=0
phpMyAdmin
Recent
Favorites
New
images
information_schema
mysql
performance_schema
phpmyadmin
student_information_system
New
department
documents_image_table
image_table
teachers
teachers_messages
users
teacher
xyz
Server: 127.0.0.1 » Database: student_information_system » Table: users
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
Triggers
Showing rows 0 - 3 (4 total, Query took 0.0005 seconds.)
SELECT * FROM `users`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all
Number of rows: 25
Filter rows: Search this table
Sort by key: None
+ Options
id name roll email password date year gender dept_id
Edit Copy Delete 7 Saurabh 33107 saurabh6275@gmail.com 12345 2020-12-04 TE Male 1
Edit Copy Delete 8 Raj 33333 raj@gmail.com 12345 2021-01-02 SE Male 2
Edit Copy Delete 9 Saurabh Badgujar 11111 saurabh@gmail.com 12345 2020-12-24 TE Male 3
Edit Copy Delete 10 Yash 33112 yash@gmail.com 12345 2020-12-23 TE Male 1
Check all
With selected:
Edit
Copy
Delete
Export
Query results operations
Print
Copy to clipboard
Export
Display chart
Create view
Bookmark this SQL query
Label:
Let every user access this bookmark
Console
Bookmarks
Options
History
Clear
>SELECT * FROM `users`

FUTURE SCOPE

- In future, we can add new features of individual chatting between teaching staff and students for improvement of student-teacher interaction.
- We can also add a feature online MCQ test for tracking students performance in individual subjects or for particular chapters.

REFERENCES

- https://www.w3schools.com/
- https://dev.mysql.com/
- https://developer.mozilla.org/en-US/docs/Web/javascript
- https://www.php.net/docs.php

Conclusion

We have implemented a Student Management system. It mainly helps Staff to keep a record of all the student's performance. Using PHP as Backend Language and MySql as Database Storage we performed basic to advance database operations required. With some new concepts like normalization, triggers, views we successfully executed a PHP based project.