

DBMS MINI PROJECT

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INTRODUCTION

1.1 OBJECTIVES:

- The main objective of the project is to design and develop a user friendly-system
- Easy to use and an efficient computerized system.
- To develop an accurate and flexible system, it will eliminate data redundancy.
- To study the functioning of Students management System.
- To make a software fast in processing, with good user interface.
- To make software with good user interface so that user can change it and it should be used for a long time without error and maintenance.
- To provide synchronized and centralized farmer and seller database.
- Computerization can be helpful as a means of saving time and money.
- To provide better Graphical User Interface (GUI).
- Less chances of information leakage.
- Provides Security to the data by using login and password method.
- To provide immediate storage and retrieval of data and information.
- Improving arrangements for students coordination.
- Reducing paperwork.

1.2 LIMITATIONS:

- Time consumption in data entry as the records are to be manually maintained faculties a lot of time.
- Lot of paper work is involved as the records are maintained in the files and registers.
- Storage Requires as files and registers are used the storage space requirement is increased.
- Less Reliable use of papers for storing valuable data information is not at all reliable.
- Aadhar linkage with the official aadhar database has not been done.

STUDY OF EXISTING SYSTEM

2.1 CASE STUDY

The success of any organization such as MIT WPU hinges on its ability to acquire accurate and timely data about its operations, to manage this data effectively, and to use it to analyze and guide its activities. Integrated student database system offer users (Student, Registrar, HOD) with a unified view of data from multiple sources. To provide a single consistent result for every object represented in these data sources, data fusion is concerned with resolving data inconsistency present in the heterogeneous sources of data. The main objective of this project is to build a rigid and robust integrated student database system that will track and store records of students. This easy-to-use, integrated database application is geared towards reducing time spent on administrative tasks. The system is intended to accept process and generate report accurately and any user can access the system at any point in time provided internet facility is available. The system is also intended to provide better services to users, provide meaningful, consistent, and timely data and information and finally promotes efficiency by converting paper processes to electronic form. The system was developed using technologies such as, HTML, CSS ,JS and MySQL. PYTHON- FLASK, HTML and CSS are used to build the user interface and database was built using MySQL. The system is free of errors and very efficient and less time consuming due to the care taken to develop it. All the phases of software development cycle are employed and it is worthwhile to state that the system is very robust. Provision is made for future development in the system.

2.2 PROPOSED SYSTEM

While there has been no consensus on the definition of Students Management in the literature, they have proposed that researchers adopt the below definition to allow for the coherent development of theory in the colleges. In order to have a successful students management, we need to make many decisions related to the flow of marks, attendance, and data. Each records should be added in a way to increase the scalability. Student management is more complex in colleges and other universities because of the impact on people's number requiring adequate and accurate information of students need.

3 3. DATABASE DESIGN

3.1 SOFTWARE REQUIREMENTS SPECIFICATION

3.1.2 SOFTWARE REQUIREMENTS:

Frontend- HTML, CSS, Java Script, Bootstrap

Backend-Python flask (Python 3.7) , SQLAlchemy,

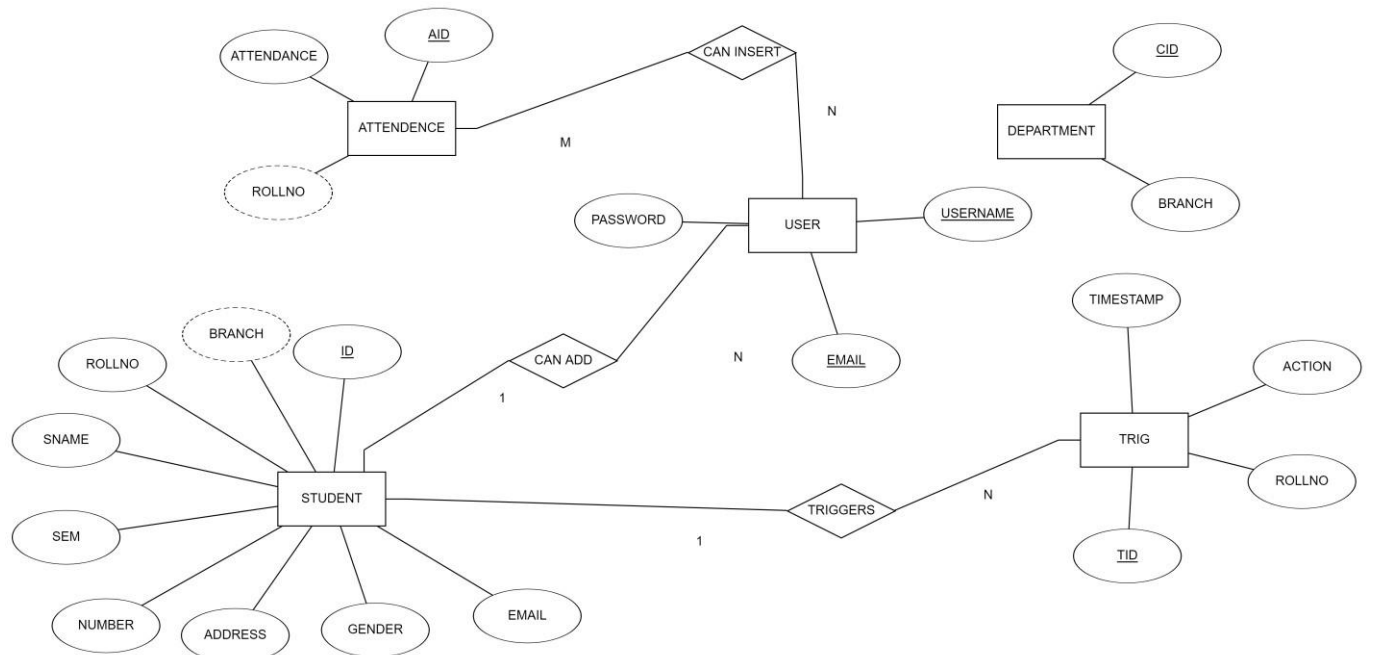
- Operating System: Windows 10
- Google Chrome/Internet Explorer
- XAMPP (Version-3.7)
- Python main editor (user interface): PyCharm Community
- workspace editor: Sublime text 3

HARDWARE REQUIREMENTS:

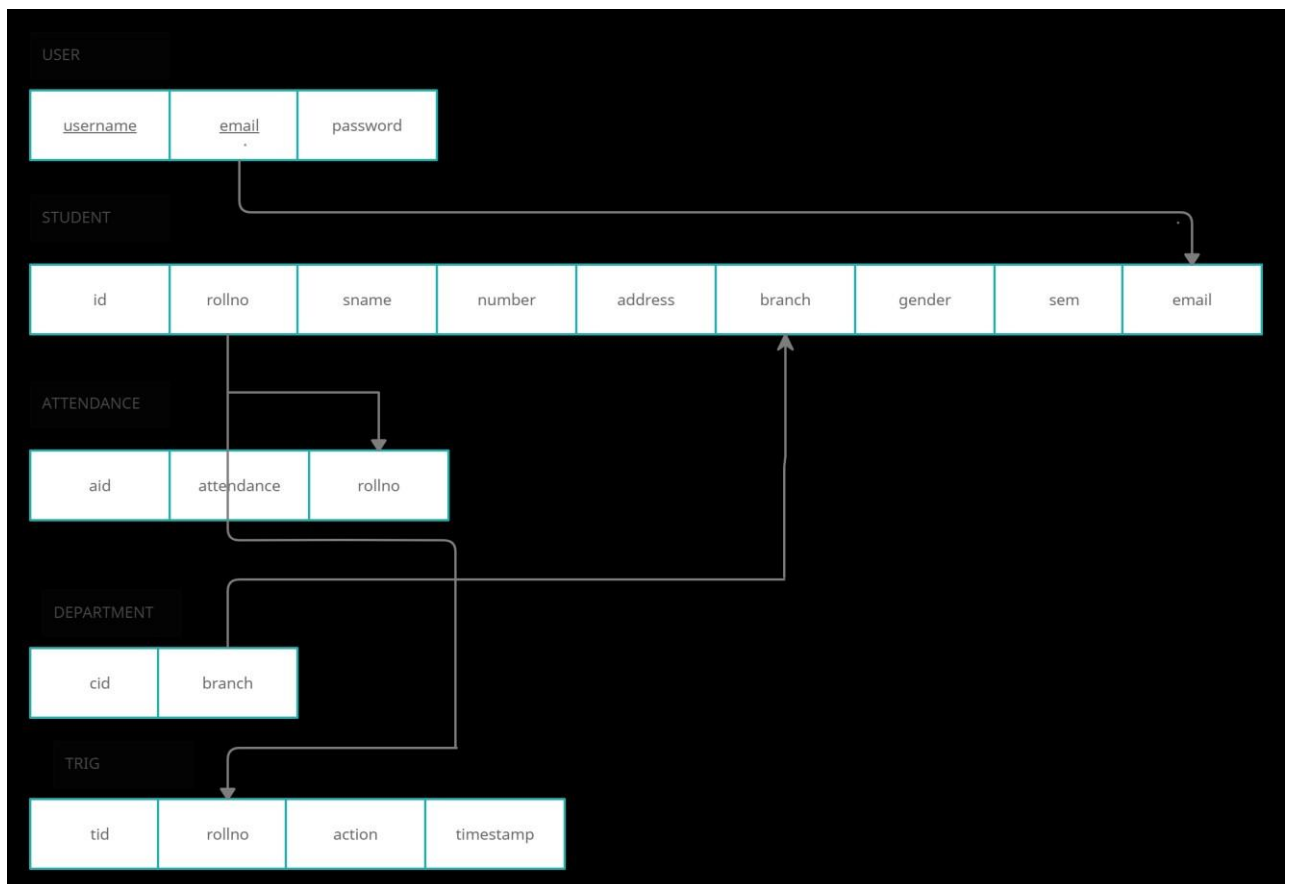
- Computer with a 1.1 GHz or faster processor
- Minimum 2GB of RAM or more
- 2.5 GB of available hard-disk space
- 5400 RPM hard drive
- 1366 × 768 or higher-resolution display
- DVD-ROM drive

3.2 CONCEPTUAL DESIGN:

3.2.1 E-R DIAGRAM:



3.2.2 SCHEMA DIAGRAM:



3.3 IMPLEMENTATION:

An "implementation" of Python should be taken to mean a program or environment which provides support for the execution of programs written in the Python language, as represented by the [CPython](#) reference implementation.

There have been and are several distinct software packages providing of what we all recognize as Python, although some of those are more like distributions or variants of some existing implementation than a completely new implementation of the language.

Back End (MySQL) Database:

A Database Management System (DBMS) is computer software designed for the purpose of managing databases, a large set of structured data, and run operations on the data requested by numerous users. Typical examples of DBMSs include Oracle, DB2, Microsoft Access, Microsoft SQL Server, Firebird, PostgreSQL, MySQL, SQLite, FileMaker and Sybase Adaptive Server Enterprise. DBMSs are typically used by Database administrators in the creation of Database systems. Typical examples of DBMS use include accounting, human resources and customer support systems. Originally found only in large companies with the computer hardware needed to support large data sets, DBMSs have more recently emerged as a fairly standard part of any company back office.

A DBMS is a complex set of software programs that controls the organization, storage, management, and retrieval of data in a database. A DBMS includes:

- A modeling language to define the schema of each database hosted in the DBMS, according to the DBMS data model.
- The dominant model in use today is the ad hoc one embedded in SQL, despite the objections of purists who believe this model is a corruption of the relational model, since it violates several of its fundamental principles for the sake of practicality and performance. Many DBMSs also support the Open Database Connectivity API that supports a standard way for programmers to access the DBMS.
- Data structures (fields, records, files and objects) optimized to deal with very large amounts of data stored on a permanent data storage device (which implies relatively slow access compared to volatile main memory). A database query language and report writer to allow users to interactively interrogate the database, analyze its data and update it according to the users privileges on data.
- Data security prevents unauthorized users from viewing or updating the database. Using passwords, users are allowed access to the entire database or subsets of it called sub schemas. For example, an employee database can contain all the data about an

individual employee, but one group of users may be authorized to view only payroll data, while others are allowed access to only work history and student data.

- If the DBMS provides a way to interactively enter and update the database, as well as interrogate it, this capability allows for managing personal databases. However, it may not leave an audit trail of actions or provide the kinds of controls necessary in a multi-user organization. These controls are only available when a set of application programs are customized for each data entry and updating function.
- ✓ A transaction mechanism, that ideally would guarantee the ACID properties, in order to ensure data integrity, despite concurrent user accesses (concurrency control), and faults (fault tolerance).
 - It also maintains the integrity of the data in the database.
 - The DBMS can maintain the integrity of the database by not allowing more than one user to update the same record at the same time. The DBMS can help prevent duplicate records via unique index constraints; for example, no two customers with the same customer numbers (key fields) can be entered into the database. See ACID properties for more information (Redundancy avoidance).

When a DBMS is used, information systems can be changed much more easily as the organization's information requirements change. Organizations may use one kind of DBMS for daily transaction processing and then move the detail onto another computer that uses another DBMS better suited for random inquiries and analysis. Overall systems design decisions are performed by data administrators and systems analysts. Detailed database design is performed by database administrators.

SQL:

Structured Query Language (SQL) is the language used to manipulate relational databases. SQL is tied very closely with the relational model.

- In the relational model, data is stored in structures called relations or tables.

SQL statements are issued for the purpose of:

- Data definition: Defining tables and structures in the database (DDL used to create, alter and drop schema objects such as tables and indexes)

4.2 : Stored Procedure

Routine name: proc

Type: procedure

Definition: Select * from register;

4.3: Triggers

It is the special kind of stored procedure that automatically executes when an event occurs in the database.

Triggers used :

1: Trigger name: on insert

Table: register

Time: after

Event: insert

INSERT INTO trig VALUES(null,NEW.rid,'Farmer Inserted',NOW())

2: Trigger name: on delete

Table: register

Time: after

Event: delete

Definition: INSERT INTO trig VALUES(null,OLD.rid,'FARMER DELETED',NOW())

3: Trigger name: on update

Table: register

Time: after

Event: update

Definition: INSERT INTO trig VALUES(null,NEW.rid,'FARMER UPDATED',NOW())

BACKEND PYHTON WITH MYSQL CODE

```
from flask import Flask,render_template,request,session,redirect,url_for,flash
from flask_sqlalchemy import SQLAlchemy from flask_login import
UserMixin
from werkzeug.security import generate_password_hash,check_password_hash
from flask_login import login_user,logout_user,login_manager,LoginManager from
flask_login import login_required,current_user import json

# MY db connection
local_server= True app
= Flask(__name__)
app.secret_key='kusumachandashwini'

# this is for getting unique user access
login_manager=LoginManager(app)
login_manager.login_view='login'

@login_manager.user_loader def
load_user(user_id):
    return User.query.get(int(user_id))

#
app.config['SQLALCHEMY_DATABASE_URL']='mysql://username:password@localhost/databas_table_
name'
app.config['SQLALCHEMY_DATABASE_URI']='mysql://root:@localhost/students'
db=SQLAlchemy(app)

# here we will create db models that is tables class
Test(db.Model):
    id=db.Column(db.Integer,primary_key=True)
    name=db.Column(db.String(100))
    email=db.Column(db.String(100))
```


Students Management System

```
class Department(db.Model):
    cid=db.Column(db.Integer,primary_key=True)
    branch=db.Column(db.String(100))

class Attendance(db.Model):
    aid=db.Column(db.Integer,primary_key=True)
    rollno=db.Column(db.String(100))
    attendance=db.Column(db.Integer())

class Trig(db.Model):
    tid=db.Column(db.Integer,primary_key=True)
    rollno=db.Column(db.String(100))
    action=db.Column(db.String(100))
    timestamp=db.Column(db.String(100))

class User(UserMixin,db.Model):
    id=db.Column(db.Integer,primary_key=True)
    username=db.Column(db.String(50))
    email=db.Column(db.String(50),unique=True)
    password=db.Column(db.String(1000))

class Student(db.Model):
    id=db.Column(db.Integer,primary_key=True)
    rollno=db.Column(db.String(50))
    sname=db.Column(db.String(50))
    sem=db.Column(db.Integer)
    gender=db.Column(db.String(50))
    branch=db.Column(db.String(50))
    email=db.Column(db.String(50))
    number=db.Column(db.String(12))
    address=db.Column(db.String(100))

@app.route('/') def
index():
```

Students Management System

```
return render_template('index.html')
```

```
@app.route('/studentdetails') def
```

```
studentdetails():
```

```
    query=db.engine.execute(f"SELECT * FROM `student`")
```

```
return render_template('studentdetails.html',query=query)
```

```
@app.route('/triggers') def
```

```
triggers():
```

```
    query=db.engine.execute(f"SELECT * FROM `trig`")
```

```
return render_template('triggers.html',query=query)
```

```
@app.route('/department',methods=['POST','GET'])
```

```
def department():    if request.method=="POST":
```

```
dept=request.form.get('dept')
```

```
    query=Department.query.filter_by(branch=dept).first()
```

```
if query:
```

```
    flash("Department Already Exist","warning")
```

```
return redirect('/department')
```

```
dep=Department(branch=dept)
```

```
db.session.add(dep)    db.session.commit()
```

```
flash("Department Addes","success")    return
```

```
render_template('department.html')
```

```
@app.route('/addattendance',methods=['POST','GET']) def
```

```
addattendance():
```

```
    query=db.engine.execute(f"SELECT * FROM `student`")
```

```
if request.method=="POST":
```

```
rollno=request.form.get('rollno')
```

```
attend=request.form.get('attend')    print(attend,rollno)
```

```
    atte=Attendance(rollno=rollno,attendance=attend)
```

```
db.session.add(atte)    db.session.commit()
```

```
    flash("Attendance added","warning")
```

```
return render_template('attendance.html',query=query)
```

Students Management System

```
@app.route('/search',methods=['POST','GET'])
def search():    if request.method=="POST":
rollno=request.form.get('roll')
        bio=Student.query.filter_by(rollno=rollno).first()
attend=Attendance.query.filter_by(rollno=rollno).first()    return
render_template('search.html',bio=bio,attend=attend)

    return render_template('search.html')

@app.route("/delete/<string:id>",methods=['POST','GET'])
@login_required def
delete(id):
        db.engine.execute(f"DELETE FROM `student` WHERE `student`.`id`={id}")
flash("Slot Deleted Successful","danger")    return redirect('/studentdetails')

@app.route("/edit/<string:id>",methods=['POST','GET'])
@login_required def
edit(id):
        dept=db.engine.execute("SELECT * FROM `department`")
posts=Student.query.filter_by(id=id).first()    if
request.method=="POST":
        rollno=request.form.get('rollno')
sname=request.form.get('sname')
sem=request.form.get('sem')
gender=request.form.get('gender')
branch=request.form.get('branch')
email=request.form.get('email')
num=request.form.get('num')
address=request.form.get('address')
        query=db.engine.execute(f"UPDATE `student` SET
`rollno`='{rollno}',`sname`='{sname}',`sem`='{sem}',`gender`='{gender}',`branch`='{branch}',`email`='{em
ail}',`number`='{num}',`address`='{address}'")
        flash("Slot is Updates","success")
return redirect('/studentdetails')

    return render_template('edit.html',posts=posts,dept=dept)
```

Students Management System

```
@app.route('/signup',methods=['POST','GET']) def
signup():    if request.method == "POST":
username=request.form.get('username')
email=request.form.get('email')
password=request.form.get('password')
user=User.query.filter_by(email=email).first()
if user:
    flash("Email Already Exist","warning")
return render_template('/signup.html')
encpassword=generate_password_hash(password)

    new_user=db.engine.execute(f"INSERT INTO `user` (`username`,`email`,`password`) VALUES
('{username}','{email}','{encpassword}')")

    # this is method 2 to save data in db
    # newuser=User(username=username,email=email,password=encpassword)
    # db.session.add(newuser)
# db.session.commit()
    flash("Signup Succes Please Login","success")
return render_template('login.html')

return render_template('signup.html')

@app.route('/login',methods=['POST','GET']) def
login():    if request.method == "POST":
email=request.form.get('email')
password=request.form.get('password')
user=User.query.filter_by(email=email).first()
if user and
check_password_hash(user.password,password):
    login_user(user)
    flash("Login Success","primary")
return redirect(url_for('index'))    else:
```

Students Management System

```
flash("invalid credentials","danger")
return render_template('login.html')
```

```
return render_template('login.html')
```

```
@app.route('/logout')
@login_required def
logout():
logout_user()
flash("Logout Successful","warning")
return redirect(url_for('login'))
```

```
@app.route('/addstudent',methods=['POST','GET'])
@login_required def
addstudent():
dept=db.engine.execute("SELECT * FROM `department`")
if request.method=="POST":
rollno=request.form.get('rollno')
sname=request.form.get('sname')
sem=request.form.get('sem')
gender=request.form.get('gender')
branch=request.form.get('branch')
email=request.form.get('email')
num=request.form.get('num')
address=request.form.get('address')
query=db.engine.execute(f"INSERT INTO `student`
(`rollno`,`sname`,`sem`,`gender`,`branch`,`email`,`number`,`address`) VALUES
('{rollno}','{sname}','{sem}','{gender}','{branch}','{email}','{num}','{address}')")
flash("Booking
Confirmed","info")
```

```
return render_template('student.html',dept=dept)
```

```
@app.route('/test')
def test(): try:
```

Students Management System

```
Test.query.all()    return 'My  
database is Connected' except:  
    return 'My db is not Connected'
```

```
app.run(debug=True)
```

FRONT END CODE

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="utf-8">
  <meta content="width=device-width, initial-scale=1.0" name="viewport">

  <title>{ % block title % }
  { % endblock title % }</title>
  <meta content="" name="description">
  <meta content="" name="keywords">

  { % block style % }
  { % endblock style % }

  <link
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,700,700i|Raleway:3
00,400,500,700,800" rel="stylesheet">

  <!-- Vendor CSS Files -->
  <link href="static/assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
  <link href="static/assets/vendor/venobox/venobox.css" rel="stylesheet">
  <link href="static/assets/vendor/font-awesome/css/font-awesome.min.css" rel="stylesheet">
  <link href="static/assets/vendor/owl.carousel/assets/owl.carousel.min.css" rel="stylesheet">
  <link href="static/assets/vendor/aos/aos.css" rel="stylesheet">

  <!-- Template Main CSS File -->
  <link href="static/assets/css/style.css" rel="stylesheet">

</head>

<body>
```

```
<!-- ===== Header ===== -->
<header id="header">
  <div class="container">

    <div id="logo" class="pull-left">

      <a href="/" class="scrollto">S.M.S</a>
    </div>

    <nav id="nav-menu-container">
      <ul class="nav-menu">
        <li class="{ % block home % }
          { % endblock home % }"><a href="/">Home</a></li>

        <li><a href="/addstudent">Students</a></li>
        <li><a href="/addattendance">Attendance</a></li>
        <li><a href="/department">Department</a></li>
        <li><a href="/triggers">Records</a></li>
        <li><a href="/studentdetails">Student Details</a></li>
        <li><a href="/search">Search</a></li>

        <li><a href="/about">About</a></li>

        { % if current_user.is_authenticated % }
        <li class="buy-tickets"><a href="">Welcome</a></li>
        <li class="buy-tickets"><a href="/logout">Logout</a></li>
        { % else % }
        <li class="buy-tickets"><a href="/signup">Signin</a></li>

        { % endif % }
      </ul>
    </nav><!-- #nav-menu-container -->
```



```
</div>
</header><!-- End Header -->

<!-- ===== Intro Section ===== -->
<section id="intro">
  <div class="intro-container" data-aos="zoom-in" data-aos-delay="100">
    <h1 class="mb-4 pb-0">STUDENT MANAGEMENT SYSTEM </span> </h1>
    <p class="mb-4 pb-0">DBMS Mini Project Using Flask & MYSQL</p>

    <a href="" class="about-btn scrollto">View More</a>
  </div>
</section><!-- End Intro Section -->
<main id="main">

  {% block body %}

  {% with messages=get_flashed_messages(with_categories=true) %}
  {% if messages %}
  {% for category, message in messages %}

  <div class="alert alert-{{category}} alert-dismissible fade show" role="alert">
    {{message}}

  </div>

  {% endfor %}
  {% endif %}
  {% endwith %}
  {% endblock body %}

  <a href="#" class="back-to-top"><i class="fa fa-angle-up"></i></a>
```

```
<!-- Vendor JS Files -->
<script src="static/assets/vendor/jquery/jquery.min.js"></script>
<script src="static/assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
<script src="static/assets/vendor/jquery.easing/jquery.easing.min.js"></script>
<script src="static/assets/vendor/php-email-form/validate.js"></script>
<script src="static/assets/vendor/venobox/venobox.min.js"></script>
<script src="static/assets/vendor/owl.carousel/owl.carousel.min.js"></script>
<script src="static/assets/vendor/superfish/superfish.min.js"></script>
<script src="static/assets/vendor/hoverIntent/hoverIntent.js"></script>
<script src="static/assets/vendor/aos/aos.js"></script>
```

```
<!-- Template Main JS File -->
<script src="static/assets/js/main.js"></script>
```

```
</body>
```

```
</html>
```

2.Students.html

```
{% extends 'base.html' %}
```

```
{% block title %}
```

Add Students

```
{% endblock title %}
```

```
{% block body %}
```

```
<h3 class="text-center"><span>Add Student Details</span> </h3>
```

```
{% with messages=get_flashed_messages(with_categories=true) %}
```

```
{% if messages %}
```

```
{% for category, message in messages %}
```

```
<div class="alert alert-{{ category }} alert-dismissible fade show" role="alert">
    {{ message }}
```

```
</div>
```

```
{% endfor %}
```

```
{% endif %}
```

```
{% endwith %}
```

```
<br>
```

```
<div class="container">
```

```
<div class="row">
```

```
<div class="col-md-4"></div>
```

```
<div class="col-md-4">
```

```
<form action="/addstudent" method="post">
```

```
<div class="form-group">
```

```
<label for="rollno">Roll Number</label>
```

```
<input type="text" class="form-control" name="rollno" id="rollno">
```

```
</div>
```

```
<br>
```

```
<div class="form-group">
```

```
<label for="sname">Student Name</label>
```

```
<input type="text" class="form-control" name="sname" id="sname">
```

```
</div>
```

```
<br>
```

```
<div class="form-group">
```

```
<label for="sem">Sem</label>
```

```
<input type="number" class="form-control" name="sem" id="sem">
```

```
</div>
```

```
<br>
```

```
<div class="form-group">
<select class="form-control" id="gender" name="gender" required>
    <option selected>Select Gender</option>

    <option value="male">Male</option>
    <option value="female">Female</option>

</select>
</div>
<br>

<div class="form-group">
<select class="form-control" id="branch" name="branch" required>
    <option selected>Select Branch</option>
    { % for d in dept % }
    <option value="{{ d.branch }}">{{ d.branch }}</option>
    { % endfor % }
</select>
</div>
<br>
<div class="form-group">

<label for="email">Email</label>
<input type="email" class="form-control" name="email" id="email">
</div>
<br>
<div class="form-group">
<label for="num">Phone Number</label>
<input type="number" class="form-control" name="num" id="num">
</div>
<br>

<div class="form-group">
<label for="address">Address</label>
<textarea class="form-control" name="address" id="address"></textarea> </div>
```


<button type="submit" class="btn btn-danger btn-sm btn-block">Add Record</button>

</form>

</div>

<div class="col-md-4"></div>

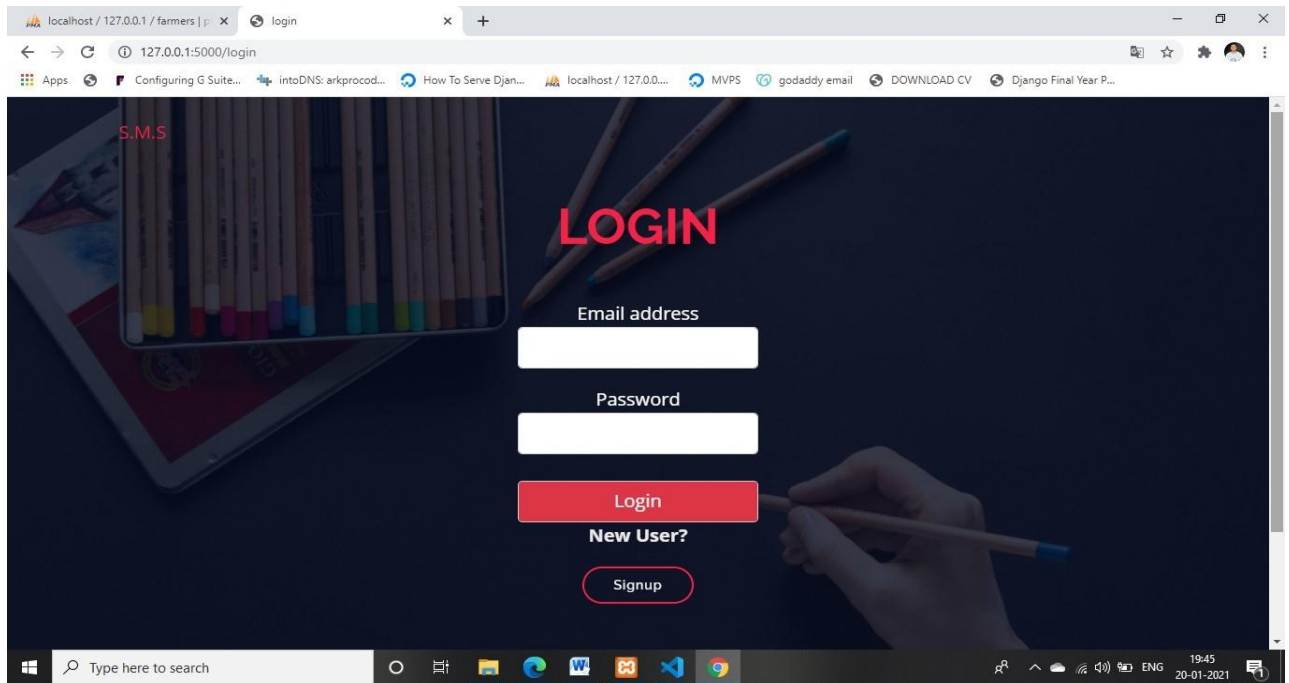
</div></div>

{% endblock body %}

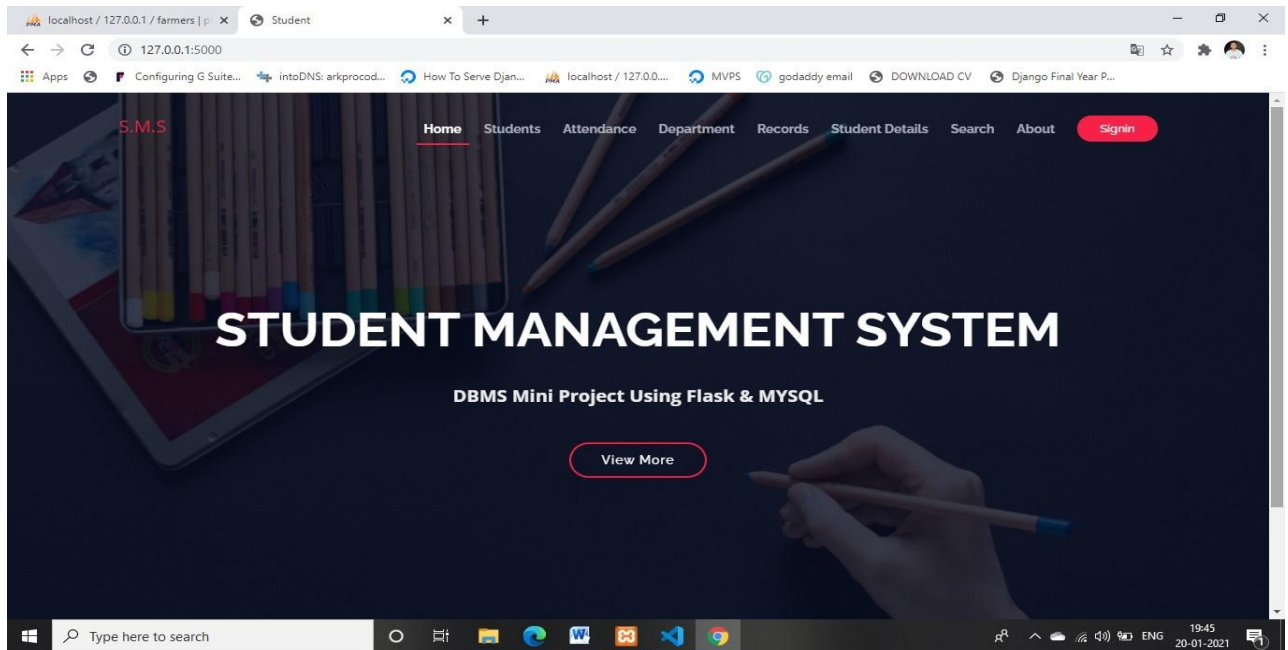
USER INTERFACE

4.1 SCREEN SHOTS

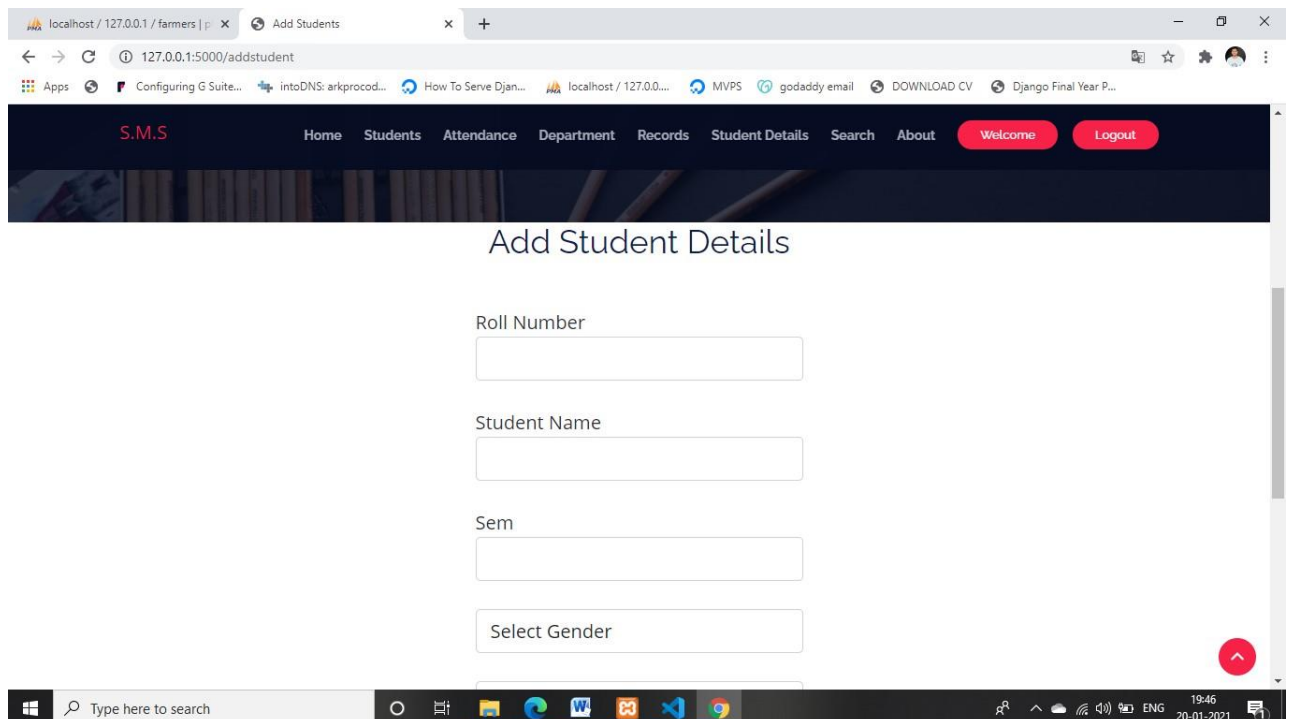
LOGIN PAGE:



Students Management System



ADD STUDENTS INFO



Students Management System

The screenshot shows a web browser window with the URL `127.0.0.1:5000/studentdetails`. The page header includes the logo 'S.M.S.' and navigation links: Home, Students, Attendance, Department, Records, Student Details, Search, and About. There are also 'Welcome kusuma' and 'Logout' buttons. The main content area features a banner for 'DBMS Mini Project Using Flask & MYSQL' with a 'View More' button. Below the banner, the title 'Student Details' is centered. A table displays student information with columns: SID, ROLL NUMBER, STUDENT NAME, SEM, GENDER, BRANCH, EMAIL, NUMBER, ADDRESS, EDIT, and DELETE. The table contains one row for a student named Rohit. The bottom of the screenshot shows a Windows taskbar with the search bar and various application icons.

SID	ROLL NUMBER	STUDENT NAME	SEM	GENDER	BRANCH	EMAIL	NUMBER	ADDRESS	EDIT	DELETE
7	1234	rohit	3	male	Electronic and Communication	rohit@gmail.com	9986786453	bangalore	Edit	Delete

TRIGGERS RECORDS

The screenshot shows a web browser window with the URL `127.0.0.1:5000/triggers`. The page header is identical to the previous screenshot. The main content area features the same banner for 'DBMS Mini Project Using Flask & MYSQL'. Below the banner, the title 'Student Triggers Records' is centered. A table displays trigger records with columns: TID, ROLL NUMBER, ACTION, and TIMESTAMP. The table contains three rows of records. The bottom of the screenshot shows a Windows taskbar with the search bar and various application icons.

TID	ROLL NUMBER	ACTION	TIMESTAMP
7	1ve17cs012	STUDENT INSERTED	2021-01-10 19:19:56
8	1ve17cs012	STUDENT UPDATED	2021-01-10 19:20:31
9	1ve17cs012	STUDENT DELETED	2021-01-10 19:21:23

Students Management System

localhost / 127.0.0.1 / farmers | p x Add Attendance x +

127.0.0.1:5000/addattendance

S.M.S Home Students Attendance Department Records Student Details Search About Welcome kusuma Logout

Add Attendance Details

1234

Attendance Percentage

88

Add Attendance

View More

Type here to search

19:48 20-01-2021

localhost / 127.0.0.1 / farmers | p x Add Department x +

127.0.0.1:5000/department

S.M.S Home Students Attendance Department Records Student Details Search About Welcome Logout

Add Department

Enter Department

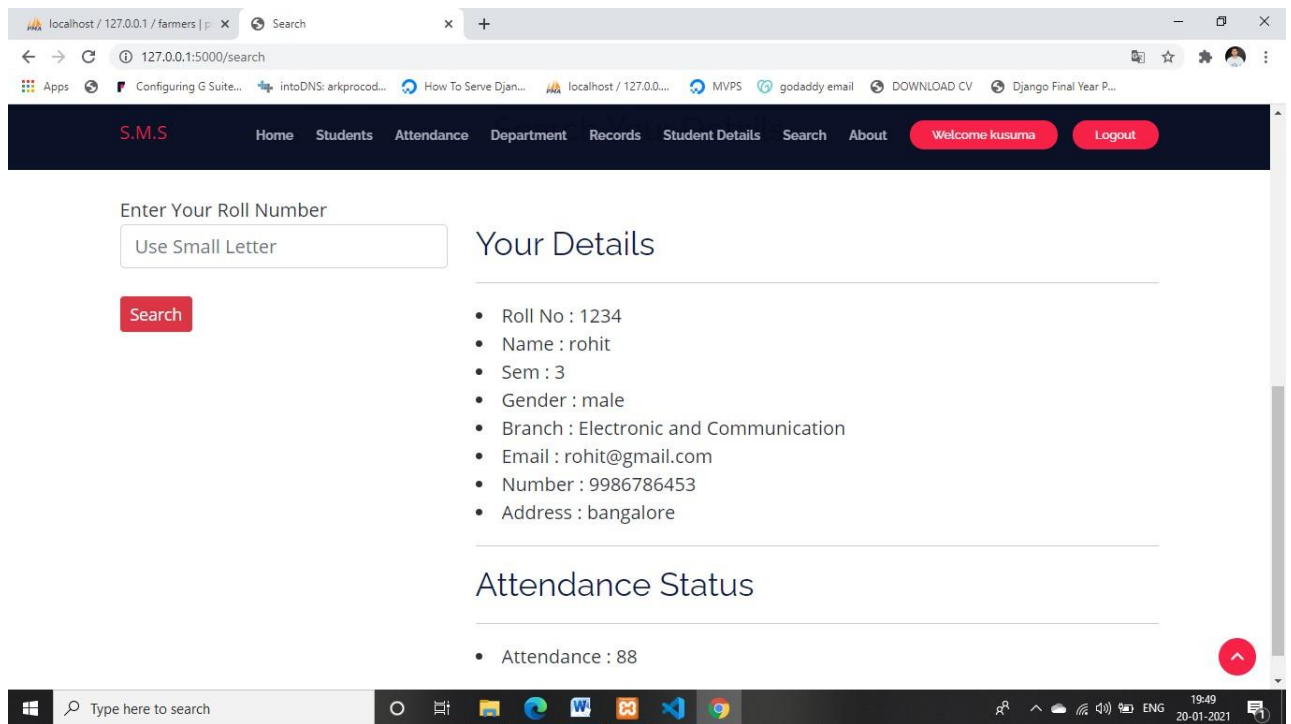
Add Department

View More

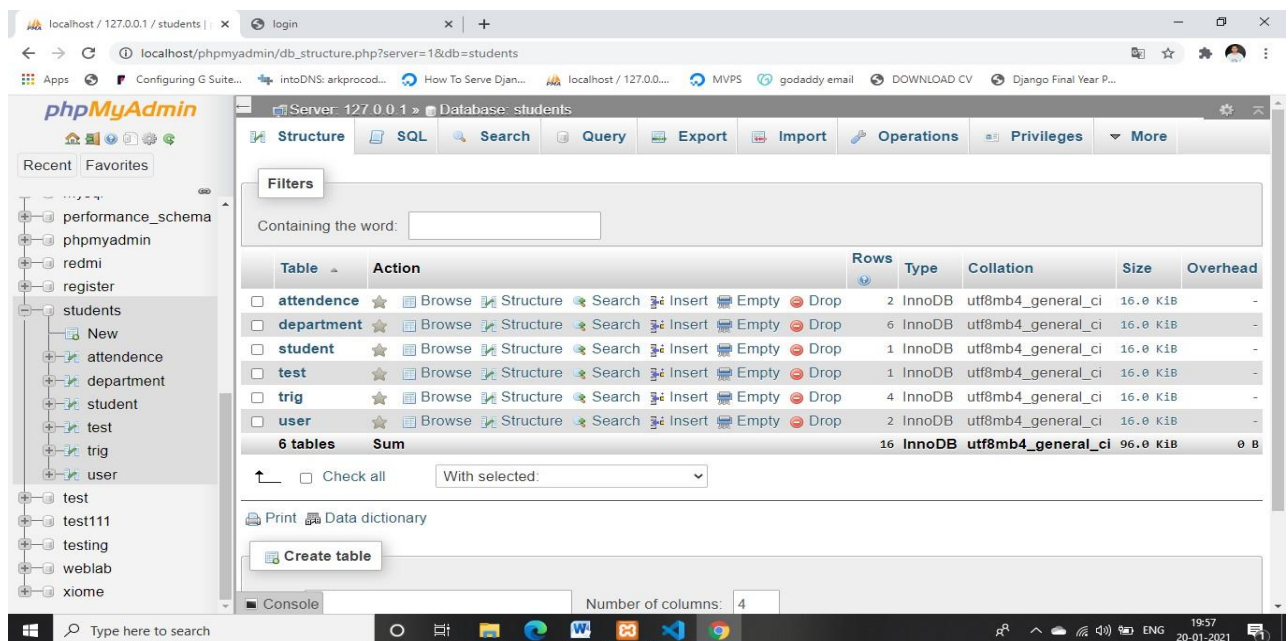
Type here to search

19:46 20-01-2021

Students Management System



DATABASE LOCALHOST



Students Management System

The image displays two screenshots of the phpMyAdmin web interface, showing the 'students' database and its tables.

Top Screenshot: 'student' table

The interface shows the 'student' table with the following columns: id, rollno, sname, sem, gender, branch, email, number, and address. The table contains one row of data.

id	rollno	sname	sem	gender	branch	email	number	address
7	1234	rohit	3	male	Electronic and Communication	rohit@gmail.com	9986786453	bangalore

Bottom Screenshot: 'trig' table

The interface shows the 'trig' table with the following columns: tid, rollno, action, and timestamp. The table contains four rows of data.

tid	rollno	action	timestamp
7	1ve17cs012	STUDENT INSERTED	2021-01-10 19:19:56
8	1ve17cs012	STUDENT UPDATED	2021-01-10 19:20:31
9	1ve17cs012	STUDENT DELETED	2021-01-10 19:21:23
10	1234	STUDENT INSERTED	2021-01-20 19:48:07

Students Management System

The image displays two screenshots of the phpMyAdmin web interface, showing the 'students' database. The top screenshot shows the 'user' table, and the bottom screenshot shows the 'attendance' table.

Top Screenshot: 'user' table

Database: students » Table: user

Showing rows 0 - 1 (2 total, Query took 0.0011 seconds.)

SELECT * FROM `user`

Options: ☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

	id	username	email	password
<input type="checkbox"/>	4	anees	anees@gmail.com	pbkdf2:sha256:150000\$1CSLss89\$ef995dfc48121768b207...
<input type="checkbox"/>	5	kusuma	kusuma@gmail.com	pbkdf2:sha256:150000\$s3QvAXVg\$7092cf5aca424c364dd0...

Query results operations: Print, Copy to clipboard, Export, Display chart, Create view

Bottom Screenshot: 'attendance' table

Database: students » Table: attendance

Showing rows 0 - 0 (1 total, Query took 0.0006 seconds.)

SELECT * FROM `attendance`

Options: ☐ Show all | Number of rows: 25 | Filter rows: Search this table

	aid	rollno	attendance
<input type="checkbox"/>	7	1234	88

Query results operations: Print, Copy to clipboard, Export, Display chart, Create view

CONCLUSION

STUDENT MANAGEMENT SYSTEM successfully implemented based on online data filling which helps us in administrating the data user for managing the tasks performed in students. The project successfully used various functionalities of Xampp and python flask and also create the fully functional database management system for online portals.

Using MySQL as the database is highly beneficial as it is free to download, popular and can be easily customized. The data stored in the MySQL database can easily be retrieved and manipulated according to the requirements with basic knowledge of SQL.

With the theoretical inclination of our syllabus it becomes very essential to take the utmost advantage of any opportunity of gaining practical experience that comes along. The building blocks of this Major Project “Students Management System” was one of these opportunities. It gave us the requisite practical knowledge to supplement the already taught theoretical concepts thus making us more competent as a computer engineer. The project from a personal point of view also helped us in understanding the following aspects of project development:

- The planning that goes into implementing a project.
- The importance of proper planning and an organized methodology.
- The key element of team spirit and co-ordination in a successful project.

FUTURE ENHANCEMENT

- Enhanced database storage facility
- Enhanced user friendly GUI
- more advanced results systems
- online feedbacks forms

REFERENCES

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