## Assignment 2
Python Programming

| Assignment Date | 24/09/2022 |
|---|---|
| Student Name | Durai Raj.S |
| Student Roll Number | 512219104006 |
| Maximum Marks | 2 Marks |

**Question:**

1.create a flask app.

2.Add home page, about page.

3.Add the bootstrap.

4.Add the sign-in page and app the sign-up page + database connectivity.

**Solution:**

**App.py**

```python
from turtle import st from flask import Flask, render_template, request,
redirect, url_for, session from markupsafe import escape
 import ibm_db conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=
0c77d6f2-5da9-48a9-81f8-
86b520b87518.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=31198;SECURIT
Y=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=jjb21184;PWD=0qXEvJbc6
J8Qdphs",'','') app = Flask(__name__)


@app.route('/') def
home():
  return render_template('home.html')
@app.route('/about') def
about():
  return render_template('about.html')


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

```python
    return render_template('signin.html')

@app.route('/signup') def
signup():
  return render_template('signup.html')

@app.route('/addstudent')
def new_student():
  return render_template('add_student.html')

@app.route('/addrec',methods = ['POST',
'GET']) def addrec():   if request.method ==
'POST':
     name = request.form['name']
address = request.form['address']
city = request.form['city']      pin
= request.form['pin']
     sql = "SELECT * FROM students WHERE name
=?"     stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt,1,name)
ibm_db.execute(stmt)     account =
ibm_db.fetch_assoc(stmt)
     if
account:
      return render_template('list.html', msg="You are already a
member, please login using your details")     else:
      insert_sql = "INSERT INTO students VALUES (?,?,?,?)"
prep_stmt = ibm_db.prepare(conn, insert_sql)
ibm_db.bind_param(prep_stmt, 1, name)
ibm_db.bind_param(prep_stmt, 2, address)
ibm_db.bind_param(prep_stmt, 3, city)
ibm_db.bind_param(prep_stmt, 4, pin)
ibm_db.execute(prep_stmt)
        return render_template('home.html', msg="Student Data
saved successfuly..")

@app.route('/list') def
list():
  students = []   sql = "SELECT * FROM
Students"    stmt =
ibm_db.exec_immediate(conn, sql)
dictionary = ibm_db.fetch_both(stmt)
while dictionary != False:
    print ("The Name is : ",  dictionary)
```

```python
        students.append(dictionary)
        dictionary = ibm_db.fetch_both(stmt)
    if students:
        return render_template("list.html", students = students)
@app.route('/delete/<name>') def
delete(name):
    sql = f"SELECT * FROM Students WHERE name='{escape(name)}'"
print(sql)    stmt = ibm_db.exec_immediate(conn, sql)    student
= ibm_db.fetch_row(stmt)    print ("The Name is : ",  student)
if student:      sql = f"DELETE FROM Students WHERE
name='{escape(name)}'"       print(sql)        stmt =
ibm_db.exec_immediate(conn, sql)
        students = []     sql = "SELECT * FROM Students"      stmt =
ibm_db.exec_immediate(conn, sql)        dictionary = ibm_db.fetch_both(stmt)
while dictionary != False:           students.append(dictionary)
dictionary = ibm_db.fetch_both(stmt)     if students:           return
render_template("list.html", students = students, msg="Delete successfully")


    return "success..."
```

**home.html**

```html
<!DOCTYPE html>
<html>
<head>     <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2
.2/dist/css/bootstrap.min.css" rel="stylesheet"
integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrP
F/et3URy9Bv1WTRi" crossorigin="anonymous">
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.
2/dist/js/bootstrap.bundle.min .js"
integrity="sha384OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY
```

```html
7qPCqsdltbNJuaOe923+mo//f6V8Qbsw3"
crossorigin="anonymous"></script>
</head>

<nav class="navbar navbar-expand-lg text-white">
    <div class="container-fluid">
        <a class="navbar-brand text-decoration-none" href="/">HOME</a>
<button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-
bs-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-
label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarNav">
            <ul class="navbar-nav">
              <li class="navbar-brand">
                <a  class="text-decoration-none " href="/addstudent">Add New
Student</a>
              </li>
              <li class="navbar-brand">

                <a class="text-decoration-none" href="/signin">SignIn Page</a>
              </li>
              <li class="navbar-brand">
                <a class="text-decoration-none" href="/signup">SignUP Page</a>
              </li>
            </li>
            <li class="navbar-brand">
                <a class="text-decoration-none" href="/about">About Page</a>
            </li>
        </li>
        <li class="navbar-brand">
            <a class="text-decoration-none " href="/list">List Student</a>
        </li>
            </ul>
          </div>
        </div>
      </nav>




<hr>

{{msg}}

<h1 >Welcome to Home Page...</h1>
</html>
```

**About.html**

```html
<html>
    <head>          <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous">
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.bundle.min
.js" integrity="sha384-
OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY7qPCqsdltbNJuaOe923+mo//f6V8Qbsw3"
crossorigin="anonymous"></script>
    </head>
<nav class="navbar navbar-expand-lg text-white ">
    <div class="container-fluid">
        <a class="navbar-brand text-decoration-none" href="/">HOME</a>
        <button class="navbar-toggler" type="button" data-bs-toggle="collapse"
data-bs-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false"
aria-label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarNav">
            <ul class="navbar-nav">

                <li class="navbar-brand">

                    <a  class="text-decoration-none"  href="/signin">SignIn  Page</a>
</li>
                <li class="navbar-brand">
                    <a class="text-decoration-none" href="/signup">SignUP Page</a>
                </li>
            </li>
            <li class="navbar-brand">
                <a class="text-decoration-none" href="/about">About Page</a>
            </li>
</li>
            </ul>
        </div>
    </div>
</nav>
    <body>
        <h3>1. Create a Flask App</h3>
        <h3>2. Add the Home page, About Page</h3>
        <h3> 3. Add the Bootstrap</h3>
        <h3> 4. Add the Sign in page and App the Signup Page + database
connectivity</h3>


    </body> </html>
```

## Sign in .html

```html
<!DOCTYPE html>
<html>
    <head>          <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous">
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.bundle.min
.js" integrity="sha384-
OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY7qPCqsdltbNJuaOe923+mo//f6V8Qbsw3"
crossorigin="anonymous"></script>
    </head>

<nav class="navbar navbar-expand-lg text-white">
    <div class="container-fluid">
      <a class="navbar-brand text-decoration-none" href="/">HOME</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse"
data-bs-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false"
aria-label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarNav">
        <ul class="navbar-nav">

          <li class="navbar-brand">

            <a  class="text-decoration-none"  href="/signin">SignIn  Page</a>
</li>
          <li class="navbar-brand">
            <a class="text-decoration-none" href="/signup">SignUP Page</a>
          </li>
        </li>
        <li class="navbar-brand">
            <a class="text-decoration-none" href="/about">About Page</a>
        </li>
    </li>
    <li class="navbar-brand">
        <a  class="text-decoration-none  "  href="/list">List  Student</a>
</li>
```

```html
        </ul>
      </div>
    </div>
  </nav>



<form action = "{{ url_for('signin') }}" method = "POST">
    <h3>SIGN IN PAGE</h3>
    Email<br>
    <input type = "text" name="name" /><br>
    Password<br>
    <input type = "password" name="password" /><br>

    <br>
    <button type="button" class="btn btn-primary">Submit</button><br>

</form>
</html>
```

**Signup.html**

```html
<html>
<head>
    <head>            <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous">
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.bundle.min
.js" integrity="sha384-
OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY7qPCqsdltbNJuaOe923+mo//f6V8Qbsw3"
crossorigin="anonymous"></script>
    </head>
</head>

<nav class="navbar navbar-expand-lg text-white">
    <div class="container-fluid">
      <a class="navbar-brand text-decoration-none" href="/">HOME</a>
<button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-
bs-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-
label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
```

```html
        <div class="collapse navbar-collapse" id="navbarNav">
          <ul class="navbar-nav">

            <li class="navbar-brand">

                <a class="text-decoration-none" href="/signin">SignIn Page</a>
</li>
            <li class="navbar-brand">
                <a class="text-decoration-none" href="/signup">SignUP Page</a>
              </li>
            </li>
            <li class="navbar-brand">
                <a class="text-decoration-none " href="/list">List Student</a>
            </li>
      </li>
      <li class="navbar-brand">
          <a class="text-decoration-none" href="/about">About Page</a>
      </li>
          </ul>
        </div>
      </div>
    </nav>

<form action = "{{ url_for('addrec') }}" method = "POST">
    <h3>SIGN UP PAGE</h3>
    Name<br>
    <input type = "text" name="name" /></br>

    Email<br>
    <input type = "email" name="email" /><br>
    Password<br>
    <input type = "password" name="password" /><br>

    Re-Password<br>
    <input type ="password" name="password" /><br><br>
    <button type="button" class="btn btn-primary">Submit</button<br>
 </form>
 </html>
```

## Database connectivity:

### Add_student.html

```html
<!DOCTYPE html>
<html>
<head>
```

```html
    <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous">
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.bundle.min
.js" integrity="sha384-
OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY7qPCqsdltbNJuaOe923+mo//f6V8Qbsw3"
crossorigin="anonymous"></script>
</head>



<nav class="navbar navbar-expand-lg text-white">
    <div class="container-fluid">
      <a class="navbar-brand text-decoration-none" href="/">HOME</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse"
data-bs-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false"
aria-label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarNav">
        <ul class="navbar-nav">
          <li class="navbar-brand">
            <a  class="text-decoration-none " href="/addstudent">Add New
Student</a>
    </li>
    <li class="navbar-brand">
        <a class="text-decoration-none " href="/list">List Student</a>
    </li>
        </ul>
      </div>
    </div>
  </nav>



<form action = "{{ url_for('addrec') }}" method = "POST">
    <h3>Student Information</h3>
    Name<br>
    <input type = "text" name="name" /><br>

    Address<br>
    <textarea name="address" ></textarea><br>
    City<br>
    <input type = "text" name="city" /><br>

    PINCODE<br>
```

```
    <input type = "text" name="pin" /><br><br>
    <button type="button" class="btn btn-
primary">Submit</button><br>
 </form>
 </html>
```

## List.html

```
<!doctype html>
<html>
    <head>          <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous">
        <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.bundle.min
.js" integrity="sha384-
OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY7qPCqsdltbNJuaOe923+mo//f6V8Qbsw3"
crossorigin="anonymous"></script>
    </head>
    <nav class="navbar navbar-expand-lg text-white">
        <div class="container-fluid">
            <a class="navbar-brand text-decoration-none" href="/">HOME</a>
<button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-
bs-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-
label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarNav">
            <ul class="navbar-nav">
              <li class="navbar-brand">
                <a  class="text-decoration-none " href="/addstudent">Add New
Student</a>
            </li>
        <li class="navbar-brand">
            <a class="text-decoration-none " href="/list">List Student</a>
        </li>
            </ul>
        </div>
        </div>
    </nav>
    <body>


    {{ msg }}

        <table class="table">
```

```
        <thead>
            <td scope="col">Name</td>
            <td scope="col">Address</td>
<td scope="col">city</td>
            <td scope="col">Pincode</td>
        </thead>
        {% for row in students %}
            <tr>
                <td>{{row["NAME"]}}</td>
                <td> {{ row["ADDRESS"]}}</td>
                <td>{{row["CITY"]}}</td>
                <td>{{row['PIN']}}</td>
                <td><a href="/delete/{{row['NAME']}}">Delete</a></td>
            </tr>
        {% endfor %}
    </table>


    </body>
</html>
```

**Screenshots:**

## **Home:**

HOME   Add New Student   SignIn Page   SignUP Page   About Page   List Student

Welcome to Home Page...

## About:

HOME  SignIn Page  SignUP Page  About Page

1. Create a Flask App
2. Add the Home page, About Page
3. Add the Bootstrap
4. Add the Sign in page and App the Signup Page + database connectivity

---

## Sign in:

HOME  SignIn Page  SignUP Page  About Page  List Student

**SIGN IN PAGE**

Email

Password

Submit

---

## Sign up:

HOME    SignIn Page    SignUP Page    List Student    About Page

## SIGN UP PAGE

Name

Email

Password

Re-Password

Submit

---

# Database connectivity:

HOME    Add New Student    List Student

## Student Information

Name

Address

City

PINCODE

Submit

HOME  Add New Student  List Student

| Name | Address | city | Pincode | |
|------|---------|------|---------|---|
| DURAI RAJ | nagar | thiruvannamalai | 123456 | Delete |