ASSIGNMENT - 2

Assignment Date	01 October 2022
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Student Roll Number	311619104070
Maximum Marks	2 Marks

Question-1:

Create a Flask App

```python
from flask import Flask, render_template, request, redirect, url_for, flash
import sqlite3
app = Flask(__name__)
app.secret_key = "69420"
def init_db():
    db = sqlite3.connect('users.db')
    with open('schema.sql', 'r') as schema:
        db.executescript(schema.read())
    db.commit()
@app.cli.command('initdb')
def initdb_cmd():
    init_db()
    print("Initialised database.")
def get_db():
    conn = sqlite3.connect('users.db')
    conn.row_factory = sqlite3.Row
    return conn
@app.route('/')
def index():
    return render_template('index.html', title='Home')
@app.route('/about')
def about():
    return render_template('about.html', title='About')
@app.route('/signin', methods=('GET', 'POST'))
def signin():
    error = None
    if request.method == 'POST':
        username = request.form['username']
        password = request.form['password']
        db = get_db()
        user = db.execute(
            'SELECT password FROM users WHERE username = ?', (username, )
        ).fetchone()
        if user is None:
            error = 'Incorrect Username/Password.'
        elif password != user['password']:
            print(user)
            error = 'Incorrect Password.'
        if error is None:
            return redirect(url_for('about'))
        flash(error)
        db.close()
    return render_template('signin.html', title='Sign In', error=error)
@app.route('/signup', methods=('POST', 'GET'))
def signup():
    if request.method == 'POST':
        username = request.form['username']
        password = request.form['password']
        email = request.form['email']
        name = request.form['name']
        db = get_db()
        curr = db.cursor()
        curr.execute(
            'INSERT INTO users (username, password, email, name) VALUES (?, ?, ?, ?);', (username, password, email, name)
        )
        db.commit()
        curr.close()
        db.close()
        return render_template('index.html', title="Home", succ="Registration Successfull!")
    return render_template('signup.html', title='Sign Up')
if __name__ == '__app__':
    app.run(debug = True)
```

Question-2:

Add the Home page, About Page

<u>Home page</u>

```html
about.html    signin.html    signup.html    base.html ×    app.py
S: > Project_1 > Assignments > Team Leader > Assignment 2 > flask-app > templates > <> base.html
 1    <!DOCTYPE html>
 2    <html lang="en">
 3
 4    <head>
 5      <meta charset="UTF-8">
 6      <meta http-equiv="X-UA-Compatible" content="IE=edge">
 7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
 8      <title>{% block title %}{% endblock title %}</title>
 9      <link rel="stylesheet" href="/static/style.css">
10      <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css" rel="stylesheet"
11        integrity="sha384-iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+fzT" crossorigin="anonymous">
12    </head>
13
14    <body>
15      <div id="content">
16        <nav class="navbar navbar-dark navbar-expand-lg bg-dark">
17          <div class="container-fluid">
18            <a class="navbar-brand" href="#">flask-app</a>
19            <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNavAltMarkup"
20              aria-controls="navbarNavAltMarkup" aria-expanded="false" aria-label="Toggle navigation">
21              <span class="navbar-toggler-icon"></span>
22            </button>
23            <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
24              <div class="navbar-nav">
25                <a class="nav-link active" aria-current="page" href="/">Home</a>
26                <a class="nav-link" href="signin">Sign In</a>
27                <a class="nav-link" href="signup">Sign Up</a>
28                <a class="nav-link" href="about">About</a>
29              </div>
30            </div>
31          </div>
32        </nav>
33        {% block content %}
34        {% endblock content %}
35      </div>
36      <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/js/bootstrap.bundle.min.js"
37        integrity="sha384-u1OknCvxWvY5kfmNBILK2hRnQC3Pr17a+RTT6rIHI7NnikvbZlHgTPOOmMi466C8"
38        crossorigin="anonymous"></script>
39    </body>
40
41    </html>
```

About page

```
about.html ✕    signin.html    signup.html    base.html    ● app.py

S: > Project_1 > Assignments > Team Leader > Assignment 2 > flask-app > templates > ◇ about.html
  1  {% extends 'base.html' %}
  2  {% block title %}
  3  About
  4  {% endblock title %}
  5  {% block content %}
  6  <div class="text-center">
  7      <br>
  8      <h1>About</h1>
  9      <br>
 10      <h1>Me!</h1>
 11      <br>
 12      <br>
 13      <p>Hi, I'm <strong>Somasundaram R</strong>, I like to code and play computer games.
 14      </p>
 15      <br>
 16  </div>
 17  <div class="form">
 18      <br>
 19      <hr>
 20      <br>
 21      <h3>Education</h3>
 22      <br>
 23      <p>I am currently in final year of my college studying <strong>COMPUTER SCIENCE & ENGINEERING</strong>.</p>
 24      <br>
 25      <h3>Languages</h3>
 26      <br>
 27      <p>I can speak and write <strong>Tamil</strong> & <strong>English</strong> fluently.</p>
 28      <p>As for programming languages, please take a look at the below information.</p>
 29      <h5>Python</h5>
 30      <div class="progress">
 31          <div class="progress-bar bg-progress" role="progressbar" style="width: 90%" aria-valuenow="90" aria-valuemin="0"
 32              aria-valuemax="100"></div>
 33      </div>
 34      <h5>C</h5>
 35      <div class="progress">
 36          <div class="progress-bar bg-dark" role="progressbar" style="width: 70%" aria-valuenow="70" aria-valuemin="0"
 37              aria-valuemax="100"></div>
 38      </div>
 39      <h5>Java</h5>
 40      <div class="progress">
 41          <div class="progress-bar bg-warning" role="progressbar" style="width: 60%" aria-valuenow="60" aria-valuemin="0"
 42              aria-valuemax="100"></div>
 43      </div>
 44      <h5>HTML</h5>
 45      <div class="progress">
 46          <div class="progress-bar bg-danger" role="progressbar" style="width: 80%" aria-valuenow="80" aria-valuemin="0"
 47              aria-valuemax="100"></div>
 48      </div>
 49      <br>
 50  </div>
 51  <br>
 52
 53  <br>
 54  {% endblock content %}
```

Question-3:

Add the Bootstrap

```
1  <!-- Connect Bootstrap -->
2  <link
3      href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
4      rel="stylesheet"
5  />
```

Question-4:

Add the Sign in page and App the Signup Page + database connectivity

Sign-in page

```
about.html        signin.html ×        signup.html        base.html        app.py
S: > Project_1 > Assignments > Team Leader > Assignment 2 > flask-app > templates > <> signin.html
 1   {% extends 'base.html' %}
 2   {% block title %}
 3   {{title}}
 4   {% endblock title %}
 5   {% block content %}
 6   <br>
 7   <div class="formuwu">
 8       <div class="form">
 9           <form method="post">
10               <div class="form-group">
11                   <label for="exampleInputUsername">Username</label>
12                   <input type="text" class="form-control" name="username" id="username" aria-describedby="usernameHelp"
13                     placeholder="Enter Username">
14                   <small id="usernameHelp" class="form-text text-muted">We'll never share your username with anyone else.</small>
15               </div>
16               <div class="form-group">
17                   <label for="exampleInputPassword1">Password</label>
18                   <input type="password" class="form-control" name="password" id="password" placeholder="Password">
19               </div>
20               <br>
21               {% if error %}
22               <div class="alert alert-danger">
23                 {{error}}
24               </div>
25               {% endif %}
26               <button type="submit" class="btn btn-primary">Submit</button>
27           </form>
28       </div>
29   </div>
30
31   {% endblock content %}
```

Sign-up page

```
about.html        signin.html        signup.html ×        base.html        app.py
S: > Project_1 > Assignments > Team Leader > Assignment 2 > flask-app > templates > <> signup.html
 1   {% extends 'base.html' %}
 2   {% block title %}
 3   {{title}}
 4   {% endblock title %}
 5   {% block content %}
 6   <br>
 7   <div class="formuwu">
 8       <div class="form" method="post">
 9           <form method="post">
10               <div class="mb-3">
11                   <label for="" class="form-label">Name</label>
12                   <input type="text" class="form-control" name="name" id="name" aria-describedby="helpId"
13                     placeholder="please enter your name " required>
14                   <small id="helpId" class="form-text text-muted">Enter your name.</small>
15               </div>
16               <div class="mb-3">
17                   <label for="" class="form-label">Username</label>
18                   <input type="text" class="form-control" name="username" id="username" aria-describedby="helpId"
19                     placeholder="Your Username." required>
20                   <small id="helpId" class="form-text text-muted">We'll never share your username with anyone else.</small>
21               </div>
22               <div class="mb-3">
23                   <label for="" class="form-label">Email</label>
24                   <input type="email" class="form-control" name="email" id="email" aria-describedby="emailHelpId"
25                     placeholder="abc@mail.com" required>
26                   <small id="emailHelpId" class="form-text text-muted">Enter your email. Your data is secure!</small>
27               </div>
28               <div class="form-group">
29                   <label for="exampleInputPassword1">Password</label>
30                   <input type="password" class="form-control" name="password" id="password" placeholder="Password" required>
31               </div>
32               <br>
33               <button type="submit" class="btn btn-primary">Sign Up</button>
34           </form>
35       </div>
36   </div>
37
38   {% endblock content %}
```

<u>Output</u>

Registration Successfull!

WELCOME TO MY SITE

Feel free to browse through the site.

This is a **flask-app** assignment.

was written by

Somasundaram

About

Me!

Hi I'm **Somasundaram,** I like to code and playing games

Education

I am currently in final year of my college studying **COMPUTER SCIENCE & ENGINEERING**.

Languages

I can speak and write **Tamil** & **English** fluently.

As for programming languages, please take a look at the below information.

Python

C

Java

HTML