Assignment-2

HTML, CSS, DB2, Python &Flask

Assignment Date	19 October 2022
Student Name	Kannan.j
Student Roll Number	961819205013
Maximum Marks	2 Marks

Question-1:

- 1. Create User table with email, username, roll number, password.
- 2. Perform UPDATE, DELETE Queries with user table
- 3. Connect python code to db2.
- 4. Create a flask app with registration page, login page and welcome page. By default load the registration page once the user enters all the fields store the data in database and navigate to login page.
- 5. Authenticate user with username and password. If the user is valid show the welcome page

Solution:

Index.py

```
from flask import Flask, render_template, request, redirect, url_for, flash, session
import sqlite3
app = Flask( name )
app = Flask(__name___)
app.secret_key = "12345"
definit db():
  db = sqlite3.connect('Users.db')
  with open('UserScheme.sql', 'r') as schema:
    db.executescript(UserScheme.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 home():
```

```
return render_template('home.html')
@app.route('/login')
def login():
  return render template('signin.html')
@app.route('/register')
def register():
  return render_template('signup.html')
@app.route('/signup', methods = ["POST", "GET"])
def signup():
  if request.method == "POST":
    Username = request.form["Username"]
    EmailId = request.form["EmailId"]
    Password = request.form["Password"]
    db = get db()
    curr = db.cursor()
    curr.execute('INSERT INTO Users (Username, EmailId, Password) VALUES (?, ?, ?);', (Username, EmailId,
Password))
    db.commit()
    curr.close()
    db.close()
    return render_template('signin.html', title="signin", succ="Registration Successfull!")
  return render template('signup.html', title='Sign Up')
@app.route('/signin', methods = ["POST", "GET"])
def signin():
  error = None
  if request.method == "POST":
    Username = request.form["Username"]
    Password = request.form["Password"]
    db = get_db()
    Users = db.execute('SELECT Password FROM Users WHERE Username = ?', (Username, )).fetchone()
    if Users is None:
      session['logged_in'] = False
      error = 'Incorrect Username/Password.'
    elif Password != Users['Password']:
      session['logged in'] = False
      print(Users)
      error = 'Incorrect Password.'
    if error is None:
      session['logged_in'] = True
      return redirect(url_for('home'))
    flash(error)
    db.close()
  return render_template('signin.html', title='Sign In', error=error)
if __name__ == '__main__':
  app.run(debug = True)
```

UserScheme.sql

```
DROP TABLE IF EXISTS Users;
CREATE TABLE Users (
 id INTEGER PRIMARY KEY AUTOINCREMENT,
 Username TEXT NOT NULL.
 EmailId VARCHAR NOT NULL,
  Password VARCHAR NOT NULL
);
INSERT INTO Users (Username, EmailId, Password) VALUES (
 "KK",
 "KK2002@gmail.com",
  "KK@123",
);
base.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>{% block title %}{% endblock %}</title>
  k href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.0/dist/css/bootstrap.min.css" rel="stylesheet"
integrity="sha384-KyZXEAg3QhqLMpG8r+8fhAXLRk2vvoC2f3B09zVXn8CA5QIVfZOJ3BCsw2P0p/We"
crossorigin="anonymous">
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.0/dist/js/bootstrap.bundle.min.js" integrity="sha384-</p>
U1DAWAznBHeqEllVSCgzq+c9gqGAJn5c/t99JyeKa9xxaYpSvHU5awsuZVVFIhvj" crossorigin="anonymous"></script>
  <script src="https://kit.fontawesome.com/78bf8e323a.js" crossorigin="anonymous"></script>
  <!--<script type="text/javascript" src="{{ url for('static', filename = 'js/proj.js')}}"></script>
  link rel="icon" href="{{url for('static', filename = 'image/icon.png')}}" color ="#191919" sizes="any"
type="image/png">-->
  <link rel="stylesheet" href="{{ url for('static', filename = 'css/style.css')}}">
</head>
<body>
<div class="navigation">
  <!--<nav class="navbar navbar-expand-lg navbar-dark">
    <div class="container-fluid">
     <a class="navbar-brand" href="/" title="PaperBoat"><i class="fas fa-ship"></i>PaperBoat</a>
      <a class="nav-link" aria-current="page" href="/" title="Home Page"><i class="fas fa-home" style="color:
white;"></i>Home</a>
       class="nav-item">
        <a class="nav-link" href="#" title="How to write an essay">About</a>
       class="nav-item">
```

```
<a class="nav-link" href="#" title="Essay Topics">Contact</a>
      <a class="nav-link dropdown-toggle" href="#" id="navbarDarkDropdownMenuLink" role="button" data-bs-
toggle="dropdown" aria-expanded="false">
        {% if session.logged in %}
          welcome <i class="far fa-smile-wink"></i>!!
        {% else %}
         User settings
        {% endif %}
       </a>
       {% if session.logged_in %}
        <a class="dropdown-item" href="/logout">Logout</a>
        {% else %}
        <a class="dropdown-item" href="/register">Register</a>
        <a class="dropdown-item" href="/login">Login</a>
        {% endif %}
       </div>
 </nav>-->
 <nav class="navbar navbar-expand-lg bg-dark">
  <div class="container-fluid">
   <a class="navbar-brand" href="/">PaperBoat</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="nav justify-content-end">
     <a class="nav-link active" aria-current="page" href="/">Home</a>
     class="nav-item">
      <a class="nav-link" href="#">About</a>
     <a class="nav-link" href="#">Contact</a>
     <a class="nav-link dropdown-toggle" href="#" id="navbarDarkDropdownMenuLink" role="button" data-bs-
toggle="dropdown" aria-expanded="false">
       {% if session.logged_in %}
         welcome <i class="far fa-smile-wink"></i>!!
       {% else %}
         User settings
```

```
{% endif %}
      </a>
      {% if session.logged in %}
        <a class="dropdown-item" href="#">Logout</a>
       {% else %}
        <a class="dropdown-item" href="/register">Register</a>
        <a class="dropdown-item" href="/login">Login</a>
       {% endif %}
      </div>
  </div>
 </nav>
</div>
{% block content %}{% endblock %}
</body>
</html>
home.html
{% extends 'base.html' %}
{% block title %} Home {% endblock %}
{% block content %}
<br><br>>
<div>
 <div>
  <h1>Welcome To PaperBoat....!</h1>
   This website was created to do the follows...<br>
     1.Create user table with email, username,password<br>
     2.perform update, delete queries with usertable<br>
     3.create a flask app with registration page, login page, welcome page. By default load the registration
page once the user enters all the
       fields store the data in database and navigate to login page. Authenticate user with username and
password. If the user is valid show the welcome page.
  </div>
</div>
{% endblock content %}
signin.html
{% extends 'base.html' %}
{% block title %} Login {% endblock %}
{% block content %}
<div class="login-frame" id="id01">
 <form action="/signin" class="loginform" method="post">
```

<h1>LOGIN</h1>

```
<div class="group">
     {% with messages = get_flashed_messages(with_categories=true) %}
       {% if messages %}
         {% for category, message in messages %}
           {{message}}
         {% endfor %}
       {% endif %}
     {% endwith %}
     <input type="text" name = "Username" placeholder="Username" required>
   </div>
   <div class="group">
     <input type="password" name="Password" placeholder="Password" required>
   </div>
   <div class="group">
     <input type="submit" name="signin" id="signin" value="Login">
   </div>
   <div class="foot">
     <hr>
     Don't have an account?<a href="/register" onclick="check(this.form)"><i>Signup</i>
   </div>
  </form>
</div>
{% endblock content %}
signup.html
{% extends 'base.html' %}
{% block title %} Signup {% endblock %}
{% block content %}
<div class="signup-frame" id="id02">
  <form action="/signup" class="signupform" method="post">
   <h1>SIGNUP</h1>
   <div class="group">
     {% with messages = get_flashed_messages(with_categories=true) %}
       {% if messages %}
         {% for category, message in messages %}
           {{message}}
         {% endfor %}
       {% endif %}
     {% endwith %}
     <input type="text" name = "Username" placeholder="Username" required>
   </div>
   <div class="group">
     <input type="email" name = "EmailId" placeholder="Email Id" required>
   </div>
   <div class="group">
     <input type="password" name="Password" placeholder="Password" required>
   </div>
```

```
<div class="group">
      <input type="submit" name="signup" id="signup" value="Signup">
    </div>
    <div class="foot">
      <hr>
      Already have an account?<a href="/login"><i>Signin</i></a>
    </div>
  </form>
</div>
{% endblock content %}
style.css
body{
  /*background-color: rgb(54, 54, 54);*/
  background: linear-gradient(to right, rgb(92, 91, 91), rgb(0,0,0));
}
/*----*/
#navbar-brand{
  color: white;
  position: relative;
}
.navigation .navbar {
  background: linear-gradient(to right, rgb(92, 91, 91), rgb(0, 0, 0));
  font-family: "Montserrat";
}
.navigation .navbar-brand {
 text-transform: uppercase;
 letter-spacing: .1em;
 text-decoration: underline;
  color: #fff;
  position: relative;
}
.navbar-brand:hover, .navbar-brand:focus {
  text-decoration: none;
}
.navigation .navbar .nav-item .nav-link {
  outline: none !important;
 font-size: 13px;
 text-transform: uppercase;
 letter-spacing: .1em;
  color:#fff;
  text-decoration: none;
  font-family: "Montserrat";
}
.navigation .navbar .nav-item .nav-link:hover, .nav-link:focus {
  text-decoration: underline;
}
/*----*/
```

```
.login-frame{
  margin: 0;
  padding: 0;
  font-family: sans-serif;
  border: none
}
.loginform{
  max-width: 500px;
  margin: auto;
  top: 50px;
  width: 400px;
  padding: 30px;
  position: relative;
  background: #191919;
  text-align: center;
  transition: 0.25s;
  border-radius: 20px;
}
.loginform input[type="text"],
.loginform input[type="password"] {
  border: 0;
  background: none;
  display: block;
  margin: 20px auto;
  text-align: center;
  border: 2px solid #3498db;
  padding: 10px 10px;
  width: 250px;
  outline: none;
  color: white;
  border-radius: 24px;
  transition: 0.25s;
  color: rgb(156, 156, 156);
}
.loginform h1 {
  color: white;
  text-transform: uppercase;
  font-weight: 500
.loginform input[type="text"]:hover,
.loginform input[type="password"]:hover {
  width: 300px;
  border-color: #2ecc71
}
.loginform input[type="submit"] {
  border: 0;
  background: none;
```

```
display: block;
  margin: 20px auto;
  text-align: center;
  border: 2px solid #2ecc71;
  padding: 14px 40px;
  outline: none;
  color: white;
  border-radius: 24px;
  transition: 0.25s;
  cursor: pointer
}
.loginform input[type="submit"]:hover{
  border: 2px solid #2ecc71;
  background: linear-gradient(to right, #2ecc71, #1565c0);
}
.foot p, a{
  color: rgb(156, 156, 156);
}
.foot hr{
  color: rgb(92, 91, 91);
}
.flash-msg{
  background-color: #191919;
  border: none;
}
/*----*/
.signup-frame{
  margin: 0;
  padding: 0;
  font-family: sans-serif;
  margin-bottom: 10px;
  border: none
}
.signupform{
  width: 400px;
  padding: 30px;
  position: relative;
  max-width: 500px;
  margin: auto;
  top: 50px;
  background: #191919;
  text-align: center;
  transition: 0.25s;
  margin-top: 20px;
  border-radius: 20px;
.signupform input[type="text"],
.signupform input[type = "email"],
```

```
.signupform input[type="password"] {
  border: 0;
  background: none;
  display: block;
  margin: 20px auto;
  text-align: center;
  border: 2px solid #3498db;
  padding: 10px 10px;
  width: 250px;
  outline: none;
  color: white;
  border-radius: 24px;
  transition: 0.25s;
  color: rgb(156, 156, 156);
}
.signupform h1 {
  color: white;
  text-transform: uppercase;
  font-weight: 500
}
.signupform input[type="text"]:hover,
.signupform input[type = "email"]:hover,
.signupform input[type="password"]:hover {
 width: 300px;
  border-color: #2ecc71
}
.signupform input[type="submit"]{
  border: 0;
  background: none;
  display: block;
  margin: 20px auto;
  text-align: center;
  border: 2px solid #2ecc71;
  padding: 14px 40px;
  outline: none;
  color: white;
  border-radius: 24px;
  transition: 0.25s;
  cursor: pointer
}
.signupform input[type="submit"]:hover {
  border: 2px solid #2ecc71;
  background: linear-gradient(to right, #2ecc71, #1565c0);
/*----*/
.signout-frame{
```

```
margin: 0;
  padding: 0;
  font-family: sans-serif;
  margin-bottom: 10px;
  border: none
}
.signoutform{
  width: 400px;
  padding: 30px;
  position: relative;
  max-width: 500px;
  margin: auto;
  top: 50px;
  background: #191919;
  text-align: center;
  transition: 0.25s;
  margin-top: 20px;
  border-radius: 20px;
}
.signoutform input[type="text"],
.signoutform input[type = "email"],
.signoutform input[type="password"] {
  border: 0;
  background: none;
  display: block;
  margin: 20px auto;
  text-align: center;
  border: 2px solid #3498db;
  padding: 10px 10px;
  width: 250px;
  outline: none;
  color: white;
  border-radius: 24px;
  transition: 0.25s;
  color: rgb(156, 156, 156);
.signoutform h1 {
  color: white;
  text-transform: uppercase;
  font-weight: 500
}
.signoutform input[type="text"]:hover,
.signoutform input[type = "email"]:hover,
.signoutform input[type="password"]:hover {
  width: 300px;
  border-color: #2ecc71
```

```
.signoutform input[type="submit"]{
  border: 0;
  background: none;
  display: block;
  margin: 20px auto;
  text-align: center;
  border: 2px solid #2ecc71;
  padding: 14px 40px;
  outline: none;
  color: white;
  border-radius: 24px;
  transition: 0.25s;
  cursor: pointer
}
.signoutform input[type="submit"]:hover {
  border: 2px solid #2ecc71;
  background: linear-gradient(to right, #2ecc71, #1565c0);
}
/*----*/
h1{
  color: #fff;
  font-family: Forte;
  font-size: larger;
}
p{
  color: aqua;
  font-family: 'Trebuchet MS', 'Lucida Sans Unicode', 'Lucida Grande', 'Lucida Sans', Arial, sans-serif;
}
```

Before login → home page



Signup page:



Sign in page:



After login → home page

