

## Assignment-2

### HTML, CSS, DB2, Python & Flask

Assignment Date	19 October 2022
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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"
```

```
def init_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>
  <link 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-
U1DAWAznBHeqElIVSCgzq+c9gqGAJn5c/t99JyeKa9xxaYpSvHU5awsuZVVFlhvj" 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>
        <ul class="navbar-nav" id="navcontent">
          <li class="nav-item">
            <a class="nav-link" aria-current="page" href="/" title="Home Page"><i class="fas fa-home" style="color:
white;"></i>Home</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="#" title="How to write an essay">About</a>
          </li>
          <li class="nav-item">
```

```

        <a class="nav-link" href="#" title="Essay Topics">Contact</a>
    </li>
    <li class="nav-item dropdown">
        <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>
        <ul class="dropdown-menu dropdown-menu-dark" aria-labelledby="navbarDropdownMenuLink">
            {% if session.logged_in %}
                <li><a class="dropdown-item" href="/logout">Logout</a></li>
            {% else %}
                <li><a class="dropdown-item" href="/register">Register</a></li>
                <li><a class="dropdown-item" href="/login">Login</a></li>
            {% endif %}
        </ul>
    </li>
</ul>
</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">
                <li class="nav-item">
                    <a class="nav-link active" aria-current="page" href="/">Home</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#">About</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#">Contact</a>
                </li>
                <li class="nav-item dropdown">
                    <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>
    <ul class="dropdown-menu dropdown-menu-dark" aria-labelledby="navbarDropdownMenuLink">
        {% if session.logged_in %}
            <li><a class="dropdown-item" href="#">Logout</a></li>
        {% else %}
            <li><a class="dropdown-item" href="/register">Register</a></li>
            <li><a class="dropdown-item" href="/login">Login</a></li>
        {% endif %}
    </ul>
</li>
</ul>
</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>
            <p>&nbsp;This website was created to do the follows...<br>
                &nbsp;1.Create user table with email, username,password<br>
                &nbsp;2.perform update, delete queries with usertable<br>
                &nbsp;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.
            </p>
        </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 %}
                <p class="flash-msg alert alert-{{category}}" >{{message}}</p>
            {% 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>
    <p>Don't have an account?<a href="/register" onclick="check(this.form)"><i>Signup</i></a></p>
</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 %}
                        <p class="flash-msg alert alert-{{category}}">{{message}}</p>
                    {% 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>
    </form>
</div>

```

```

<div class="group">
  <input type="submit" name="signup" id="signup" value="Signup">
</div>
<div class="foot">
  <hr>
  <p>Already have an account?<a href="/login"><i>Signin</i></a></p>
</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 -----*/
#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;
}
/*-----signin-form-----*/

```

```
.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-form-----*/
.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-form-----*/
.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
}
```

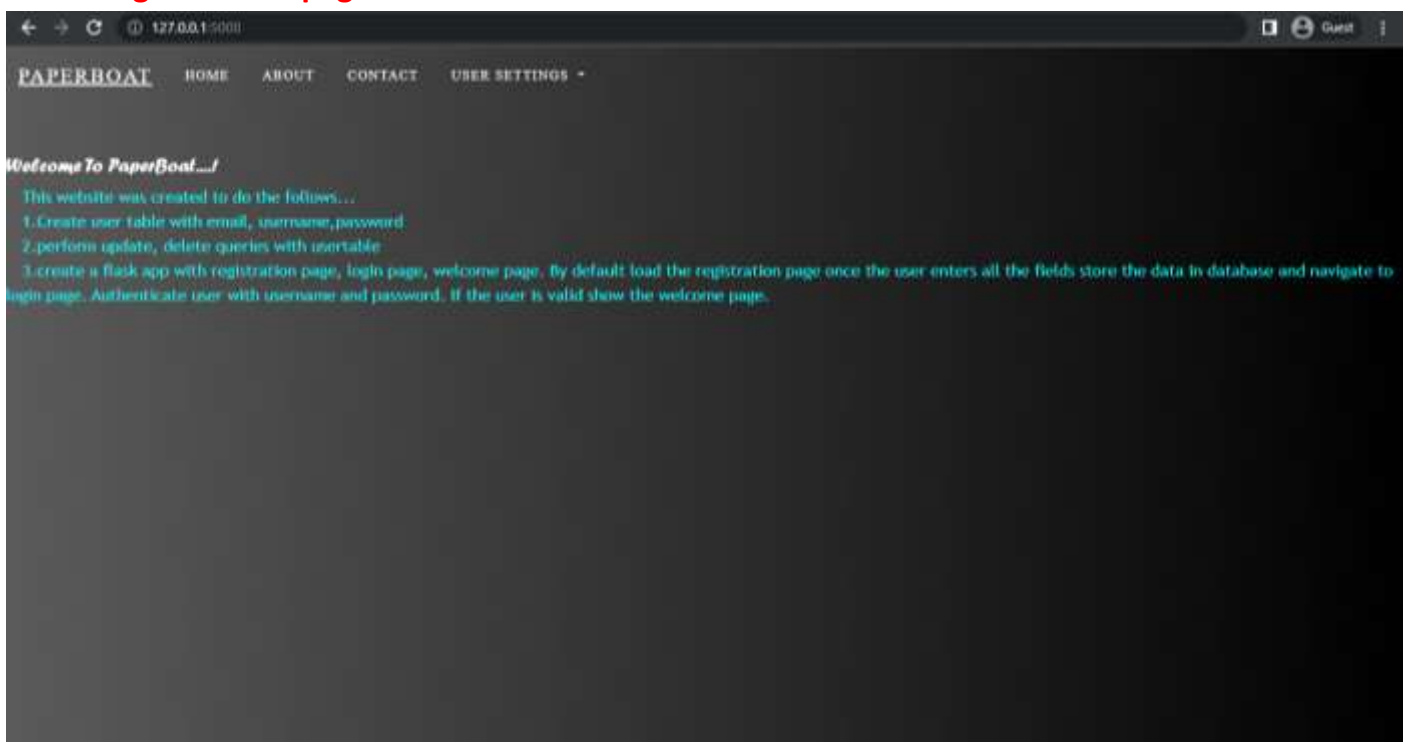
```

.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);
}
/*-----Home-----*/
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:

The screenshot shows a web browser at the address 127.0.0.1:5000/register. The page has a dark theme with a navigation bar at the top containing the 'PAPERBOAT' logo and links for HOME, ABOUT, CONTACT, and USER SETTINGS. The main content area features a central 'SIGNUP' form with rounded rectangular input fields for 'Username', 'Email id', and 'Password'. Below these fields is a green 'Signup' button. At the bottom of the form, there is a link that says 'Already have an account?/Signup'.

## Sign in page:

The screenshot shows a web browser at the address 127.0.0.1:5000/login. The page has a dark theme with a navigation bar at the top containing the 'PAPERBOAT' logo and links for HOME, ABOUT, CONTACT, and USER SETTINGS. The main content area features a central 'LOGIN' form with rounded rectangular input fields for 'Username' and 'Password'. Below these fields is a green 'Login' button. At the bottom of the form, there is a link that says 'Don't have an account?/Signup'.

## After login → home page

The screenshot shows a web browser at the address 127.0.0.1:5000. The page has a dark theme with a navigation bar at the top containing the 'PAPERBOAT' logo and links for HOME, ABOUT, CONTACT, and WELCOME. The main content area displays a welcome message: 'Welcome To PaperBoat...!' followed by a paragraph: 'This website was created to do the follows...'. Below this, there is a list of three items: 1. Create user table with email, username, password; 2. perform update, delete queries with usertable; 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.