

Assignment -2
Python Programming

Assignment Date	24/09/22
Student Name	Raja.M
Student Roll Number	512219205008
Maximum Marks	2 Marks

Question-1:

1. Create a User table with Username, email, roll number, password
2. Perform UPDATE and DELETE queries
3. Connect python code to database
4. Create Flask app for a User registration and User login

Solution:

App.py

```
from flask import Flask, render_template, request, redirect
```

```
import sqlite3 as sql  
import models as dbHandler
```

```
app = Flask(__name__)  
app.secret_key = 'fasdgfdgdfg'
```

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

```
@app.route('/adduser')  
def new_user():  
    return render_template('add_user.html')
```

```
@app.route('/addrec', methods = ['POST', 'GET'])  
def addrec():  
    if request.method == 'POST':  
        try:  
            email = request.form['email']  
            un = request.form['username']  
            rn = request.form['rollnumber']
```

```

        pin = request.form['pin']

        with sql.connect("User_database.db") as con:
            cur = con.cursor()
            cur.execute("INSERT INTO users (email,username,rollnumber,pin) VALUES
            (?, ?, ?, ?)", (email, un, rn, pin) )
            con.commit()
            msg = "Record successfully added!"
        except:
            con.rollback()
            msg = "error in insert operation"

        finally:
            return render_template("list.html", msg = msg)
            con.close()

```

```

@app.route('/list')
def list():
    con = sql.connect("User_database.db")
    con.row_factory = sql.Row

    cur = con.cursor()
    cur.execute("select * from users")

    users = cur.fetchall()
    return render_template("list.html", users = users)

```

```

if __name__ == '__main__':
    app.run(debug = True)

```

```

@app.route("/delete")
def delete():
    return render_template("delete.html")

```

```

@app.route('/deleterecord', methods = ["POST"])
def deleterecord():
    un = request.form['username']
    with sql.connect("User_database.db") as con:
        try:
            cur = con.cursor()
            cur.execute("DELETE FROM users WHERE username = ?", [un])
            con.commit()
            msg = "Record successfully deleted"
        except:
            msg = "can't be deleted"
        finally:
            return render_template("home1.html", msg = msg)

```

```

if __name__ == '__main__':

```

```

app.run(debug = True)

@app.route('/delldb', methods = ["POST"])
def delldb():
    con = sql.connect('User_database.db')
    cur = con.cursor()
    cur.execute('DELETE FROM users;')
    con.commit()
    con.close()
    msg = 'All the data has been deleted'
    return render_template("home1.html",msg = msg)

@app.route("/log")
def log():
    return render_template("login.html")

@app.route('/login', methods =['GET', 'POST'])
def login():
    un = request.form['username']
    if request.method=='POST':
        users = dbHandler.retrieveUsers()
        msg = 'Logged in successfully!'
        return render_template('welcome.html', users=un, msg=msg)
    else:
        msg = 'You are not registered, would you like to be registered'
        return render_template('home1.html', msg=msg)

if __name__ == '__main__':
    app.run(debug=False, host='0.0.0.0')

```

Models.py

```

import sqlite3 as sql

def retrieveUsers():
    con = sql.connect("User_database.db")
    cur = con.cursor()
    cur.execute("SELECT username, pin FROM users")
    users = cur.fetchone()
    con.close()
    return users

```

sqlite db setup.py

```
import sqlite3
```

```
conn = sqlite3.connect('User_database.db')  
print("Opened database successfully")
```

```
conn.execute('CREATE TABLE users (email TEXT, username TEXT, rollnumber  
INTEGER, pin INTEGER)')  
print("Table created successfully")  
conn.close()
```

Home.html

```
<h1>Welcome to User DB APP</h1><br><br>
```

```
<a href="/">HOME</a><br><br>  
<a href="/adduser">User Registration</a><br><br>  
<a href="/list">List User</a><br><br>  
<a href="/log">Log in</a><br><br>  
<a href="/delete">Remove a User</a>
```

Add user.html

```
<form action = "{{ url for('addrec') }}" method = "POST">
```

```
  <h3>User Information</h3>  
  E-mail<br>  
  <input type = "email" name = "email" /></br>  
    
  Username<br>  
  <input type = "text" name = "username" /></br>  
    
  Rollnumber<br>  
  <input type = "text" name = "rollnumber" /><br>  
    
  PIN<br>  
  <input type = "password" name = "pin" min="4" max="8" /><br><br>  
  <input type = "submit" value = "submit" /><p>      </p>  
  <input type = "reset"/>  
</form>
```

list.html

```
<!doctype html>
```

```
<html>  
<body>
```

```
  <a href="/">HOME</a><br><br>
```

```
<a href="/adduser">Add New Student</a><br><br>
<a href="/list">List Student</a><br><br>
<br><hr>
```

```
{{ msg }}
```

```
<table border = 1>
  <thead>
    <td> Email </td>
    <td> Username </td>
    <td> Roll Number </td>
    <td> Pin </td>
  </thead>
  {% for row in users %}
    <tr>
      <td>{{row["email"]}}</td>
      <td>{{row["username"]}}</td>
      <td> {{ row["rollnumber"] }}</td>
      <td>{{row['pin']}}</td>
    </tr>
  {% endfor %}
</table>
```

```
</body>
</html>
```

← → ↻ ⓘ localhost:5000

 Gmail  YouTube  Maps  MIUI Theme Design...  Pinterest - India

Welcome to User DB APP

[HOME](#)

[User Registration](#)

[List User](#)

[Log in](#)

[Remove a User](#)

localhost:5000/adduser

Gmail

YouTube

Maps

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User Information

E-mail

Username

Rollnumber

PIN

submit

Reset

localhost:5000/list

ail

YouTube

Maps

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vw User

er

	Username	Roll Number	Pin
kumar56684@gmail.com	Tharun	512219205009	1911
ic007@skpec.in	Raja	512219205008	1234
mizhsurya232@gmail.com	Senthamizh	512219104701	2221
nsarali26112001@skpec.in	Ansar	512219104302	4321

localhost:5000/log

Gmail

YouTube

Maps

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HOME

User Registration

List User

Log in

Log In

Username

pin

Log In

[HOME](#)

[User Registration](#)

[List User](#)

[Log in](#)

Welcome

User Tharun Logged in successfully!

[HOME](#)

Remove User

username

[HOME](#)

[User Registration](#)

[List User](#)

[Log in](#)

Record successfully deleted

🔗

[New User](#)

[/ser](#)

il	Username	Roll Number	Pin
ific007@skpec.in	Raja	512219205008	1234
iamizhsurya232@gmail.com	Senthamizh	512219104701	2221
dansarali26112001@skpec.in	Ansar	512219104302	4321