Assignment -2

Assignment Date	05-10-2022
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Question:

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 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 authenticate username and password. If the user is valid show welcome page

App.py

```python
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:
```

```python
        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('/deldb', methods = ["POST"])
def deldb():
  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)
```

```python
@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

```python
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

```python
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

```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

```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

```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>
```