Assignment -2
Python Programming

Assignment Date	04-11-2022
Student Name	Melwin Jones J
Student Roll Number	311119104046

1. Create a User table with Username, email, 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 authenticate user username and password. If the user is valid show the welcome page

Solution:

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']
```

```python
        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)
```

```python
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)

@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

import_sqlite3

```python
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>


```html
<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">

```html
  <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>
```
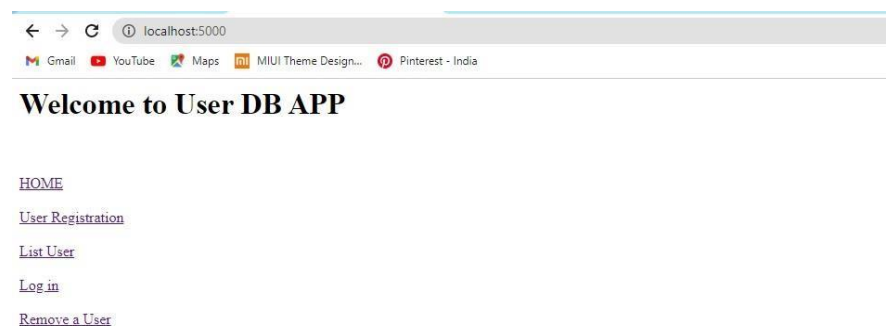
list.html

<!doctype html>

```html
<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>
```


Welcome to User DB APP

HOME

User Registration

List User

Log in

Remove a User

User Information

E-mail
[   ]
Username
[   ]
Rollnumber
[   ]
PIN
[   ]

[submit]

[Reset]

EMAIL	USER NAME	ROLL NUMBER	PIN
sanjay.23cs@licet.ac.in	Sanjay K	311119104046	9876
lokeswar.23cs@licet.ac.in	Lokeswar	311119104040	1234
melvynfrancis.23cs@licet.ac.in	Melvyn Francis	311119104045	3345
melwinjones.23cs@licet.ac.in	Melwin Jones J	311119104046	5412

HOME

User Registration

List User

Log in

Log In

[Username]
[pin]
[Log In]

HOME

User Registration

List User

Log in

Welcome

HOME

Remove User

Username [_____] [Submit]

HOME

User Registration

List User

Log in

Record successfully deleted

EMAIL	USER NAME	ROLL NUMBER	PIN
sanjay.23cs@licet.ac.in	Sanjay K	311119104046	9876
lokeswar.23cs@licet.ac.in	Lokeswar	311119104040	1234
melvynfrancis.23cs@licet.ac.in	Melvyn Francis	311119104045	3345