Assignment -2

Assignment Date	18 November 2022
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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('/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

```
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>

**

```
<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>
```