**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('/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><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>









