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
```

```
import sqlite3
```

HOME


```
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></ri>
<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>
 <input type = "submit" value = "submit" />
 <input type = "reset"/>
</form>
list.html
<!doctype html>
<html>
<body>
```

```
<a href="/adduser">Add New Student</a><br><br>
<a href="/list">List Student</a><br><br><</pre>
<br><hr>
{{ msg }}
 <thead>
   Email
              Username 
    Roll Number 
   Pin
  </thead>
  {% for row in users %}
   {{row["email"]}}
    {{row["username"]}}
    {{ row["rollnumber"]}}
    {{row['pin']}}
   {% endfor %}
 </body>
</html>
```



Welcome to User DB APP

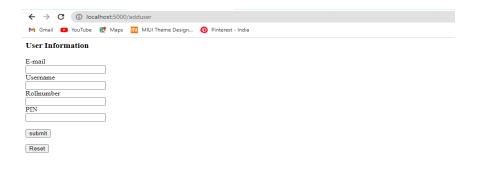
HOME

User Registration

<u>List User</u>

<u>Log in</u>

Remove a User





| Username | Roll Number | Pin | kumar 56684@gmail.com | Tharun | 512219205009 | 1911 | ic007@skpec.in | Raja | 512219205008 | 1234 | mizhsuvya 232@gmail.com | Senthamizh | 512219104701 | 2221 | nsarali 26112001@skpec.in | Ansar | 512219104302 | 4321



Log In

Username pin Log In



Welcome

User Tharun Logged in successfully!





Record successfully deleted



il	Username	Roll Number	Pin
ific007@skpec.in	Raja	512219205008	1234
namizhsurya232@gmail.com	Senthamizh	512219104701	2221
dansarali26112001@skpec.in	Ansar	512219104302	4321