

Assignment -2
Python
Programming

Assignment Date	02-10-2022
Student Name	Dheena K
Student Roll Number	2019105522
Team ID	PNT2022TMID35426

Question-1:

1. Create a User table with Username, email, rollnumber, 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 model 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="errorininsertoperation"

    finally:
        return render_template("list.html",msg =
        msg)con.close()

@app.route('/list')
def list():
    con =
    sql.connect("User_database.db")con.row_factory=sq
    l.Row

    cur =
    con.cursor()cur.execute("select
    *fromusers")

    users=cur.fetchall()
    return render_template("list.html", users=users)

ifname_____== 'main
    _____':app.run(debu
    g = True)

@app.route("/delete")
def delete():
    returnrender_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)

ifname_____== 'main
    _____':app.run(debu
    g = True)

@app.route('/delddb', methods =
["POST"])def delddb():
    con =
    sql.connect('User_database.db')cur=co
    n.cursor()cur.execute('DELETEFROM
    users;')con.commit()
    con.close()
    msg='Allthe 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
    uest.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">UserRegistration</a><br><br>
<a href="/list">ListUser</a><br><br>
<a href="/log">Log in</a><br><br>
<a href="/delete">Remove aUser</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 NewStudent</a><br><br>
<a href="/list">ListStudent</a><br><br>
<br><hr>

{{ msg }}

<table border =1>
<thead>
<td>    Email    </td>
<td>Username</td>
<td>RollNumber</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>
```