

**Assignment -2**  
Python Programming

Assignment Date	04-11-2022
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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

```
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('/delldb', methods = ["POST"])
def delldb():
    con = sqlite3.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>
```

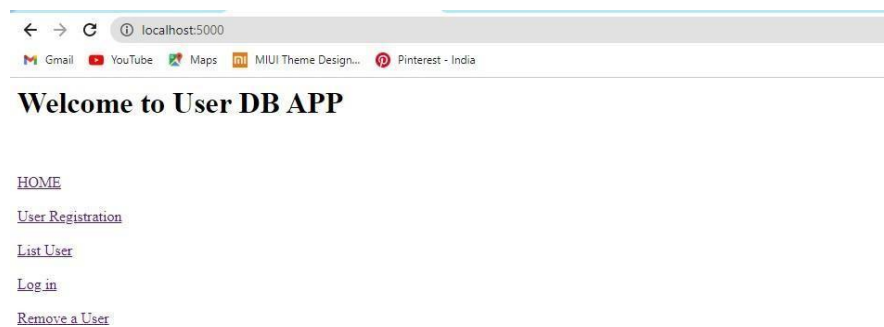
```
<a href="/">HOME</a><br><br>
<a href="/adduser">Add New Student</a><br><br>
<a href="/list">List Student</a><br><br>
<br><hr>
```

```
{{ 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>
```



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### User Information

E-mail

Username

Rollnumber

PIN

EMAIL	USER NAME	ROLL NUMBER	PIN
delvynjones.23cs@licet.ac.in	Delvyn Jones M	311119104017	9876
rubertsheldon.23cs@licet.ac.in	Rupert Sheldon A	311119104050	1234
serena.23cs@licet.ac.in	Serena J E	311119104055	3345
surya200123@gmail.com	Suryanarayan R K		5412

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### Log In

Username

pin

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## Welcome

[HOME](#)

# Remove User

Username

Submit

EMAIL	USER NAME	ROLL NUMBER	PIN
delvynjones.23cs@licet.ac.in	Delvyn Jones M	311119104017	9876
rubertsheldon.23cs@licet.ac.in	Rubert Sheldon A	311119104050	1234
serena.23cs@licet.ac.in	Serena J E	311119104055	3345
surya200123@gmail.com	Suryanarayan R K		5412