

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 = 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>
```

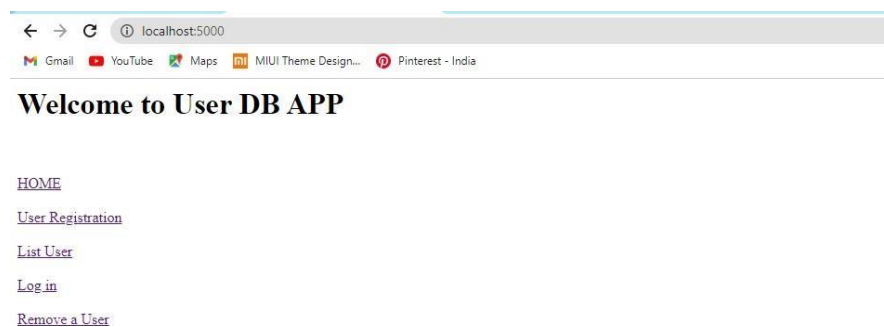
```
<a href="/">HOME</a><br><br>
<a href="/adduser">Add New Student</a><br><br>
<a href="/list">List Student</a><br><br>
<br><hr>
```

```
{{ 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>
```



localhost:5000/adduser

Gmail

YouTube

Maps

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User Information

E-mail

Username

Rollnumber

PIN

submit

Reset

EMAIL	USER NAME	ROLL NUMBER	PIN
sanjay.23cs@licet.ac.in	Sanjay K	311119104046	9876
lokeswar.23cs@licet.ac.in	Lokeswar	311119104040	1234
melvynfrancis.23cs@licet.ac.in	Melvyn Francis	311119104045	3345
melwinjones.23cs@licet.ac.in	Melwin Jones J	311119104046	5412

localhost:5000/log

Gmail

YouTube

Maps

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[HOME](#)

[User Registration](#)

[List User](#)

[Log in](#)

Log In

Username

pin

Log In

localhost:5000/login

Gmail

YouTube

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[HOME](#)

[User Registration](#)

[List User](#)

[Log in](#)

Welcome

← → ↻ localhost:5000/delete record

[HOME](#)

Remove User

Username

← → ↻ localhost:5000/delete record

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[HOME](#)

[User Registration](#)

[List User](#)

[Log in](#)

Record successfully deleted

EMAIL	USER NAME	ROLL NUMBER	PIN
sanjay.23cs@licet.ac.in	Sanjay K	311119104046	9876
lokeswar.23cs@licet.ac.in	Lokeswar	311119104040	1234
melvynfrancis.23cs@licet.ac.in	Melvyn Francis	311119104045	3345