

## Assignment -2

Assignment Date	18 November 2022
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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 = 'fasdgsdgsdgsd'
```

```
@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('/delddb', methods = ["POST"]) def
```

```
delddb(): 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>
```