

## Assignment -2

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('/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><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><br>
```

```
{{ 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>
```