

Assignment – 2
Python Programming

Assignment Date	15/11/2022
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Student Roll Number	95071912072

- 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 = 'fasdghfdgh'

@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 Database 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>

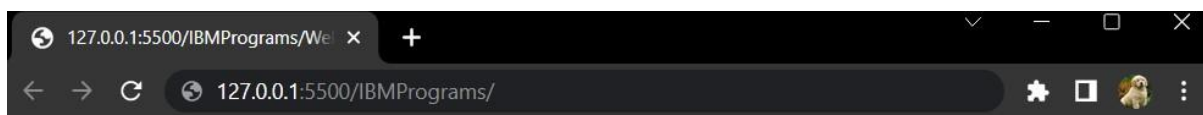
{% endfor %}

</table>

</body>

</html>

```



Welcome to User Database App

[Home](#)
[Log in](#)
[User Registration](#)
[List User](#)
[Remove User](#)



Welcome to User Database App

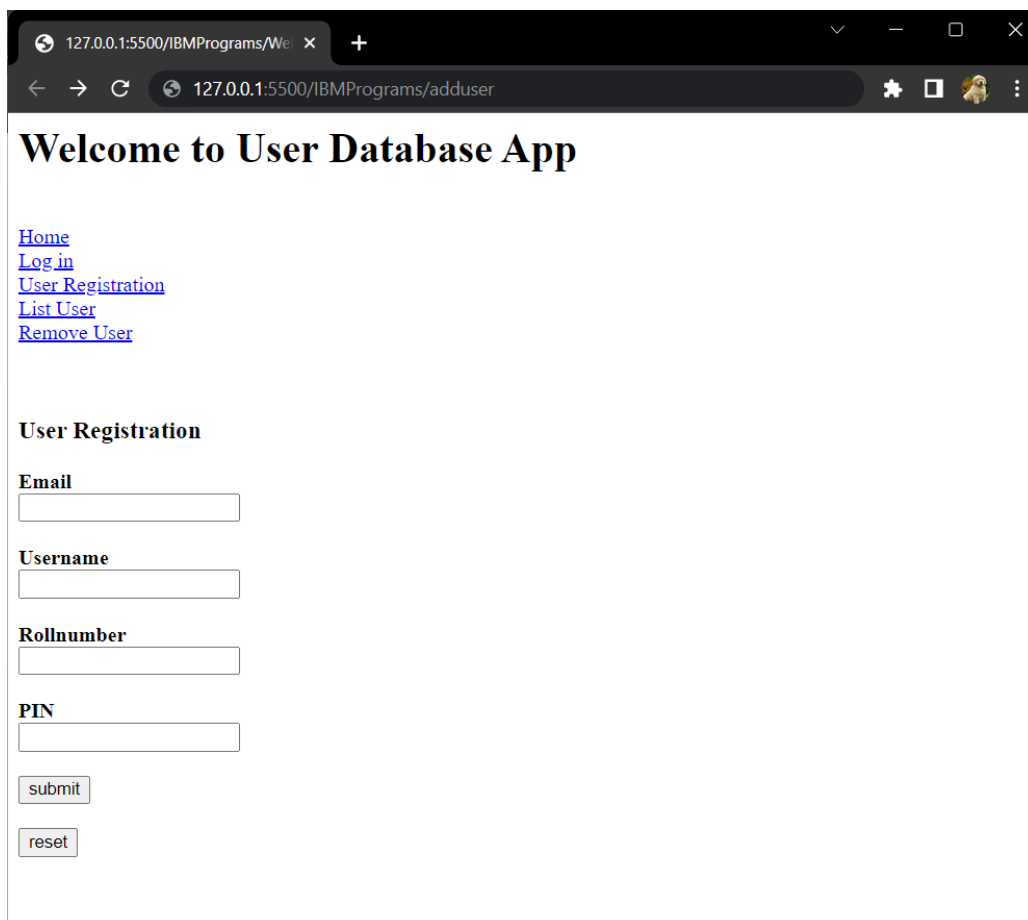
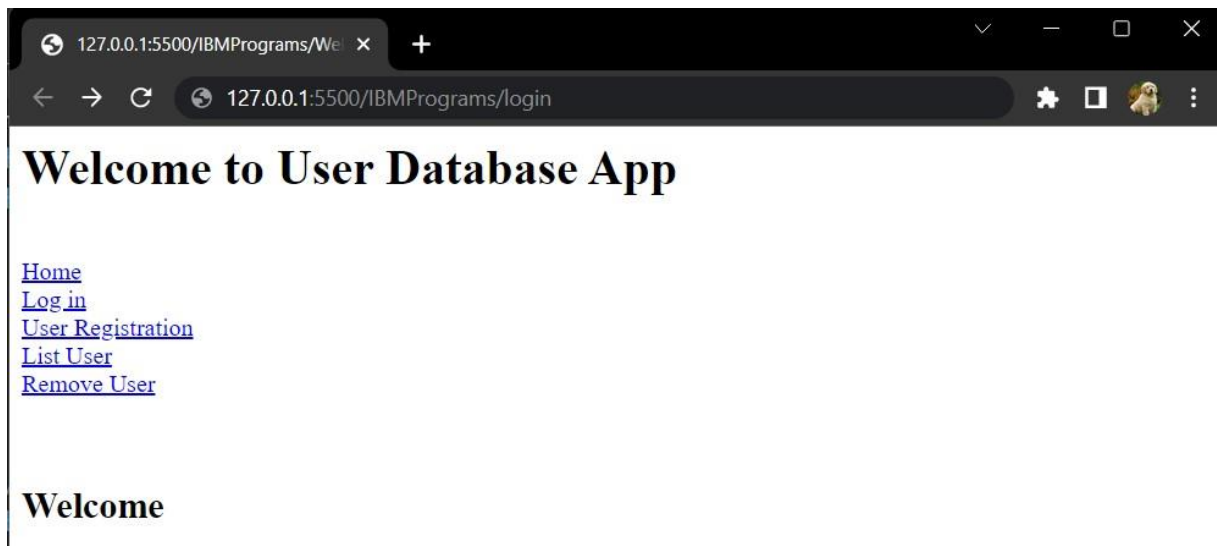
[Home](#)
[Log in](#)
[User Registration](#)
[List User](#)
[Remove User](#)

Log In

Username

PIN

Login



127.0.0.1:5500/IBMPrograms/We

+

127.0.0.1:5500/IBMPrograms/deleterecord

Welcome to User Database App

[Home](#)
[Log in](#)
[User Registration](#)
[List User](#)
[Remove User](#)

Remove User

Username

submit

127.0.0.1:5500/IBMPrograms/We

+

127.0.0.1:5500/IBMPrograms/deleterecord

Welcome to User Database App

[Home](#)
[Log in](#)
[User Registration](#)
[List User](#)
[Remove User](#)

Record successfully deleted

Email	Username	Roll	PIN
Ramakrishnanp699@gmail.com	Ramakrishnan P	95071912072	2370
Sundaramva99@gmail.com	Sundaram VA	95071912099	5524