

Assignment -2

Team id	PNT2022TMID50267
PROJECT NAME	SKILL\JOB RECOMMENDER APPLICATION
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1. Create User table with usertable with email, username, roll number, password.

```
CREATE TABLE users(email varchar(50) not null,  
                    username varchar(20) not null,  
                    password varchar(20) not null)
```

```
INSERT INTO users(email, username, , password)
```

```
VALUES('muthuajay@gmail.com', 'muthuajay', 'muthu')
```

2. Perform UPDATE, DELETE Queries with user table

```
UPDATE users SET username='muthuajay' WHERE  
email='muthuajay@gmail.com' DELETE FROM usertable WHERE username =  
'muthuajay'
```

3. Connect python code to db2.

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME= 9938aec0-8105-  
433e-8bf9-0fbb7e483086.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;  
PORT=32459;  
Security=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID= thj60473; PWD=  
I3kWDRo08yQRjnYS;","")
```

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.

login.html

```
<html>

  <head>

    <meta charset="UTF-8">

    <title> Login </title>

    <link rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">

  </head>

  <body></br></br></br></br>

    <div align="center">

      <div align="center" class="border">

        <div class="header">

          <h1 class="word">Login</h1>

        </div></br></br></br>

        <h2 class="word">

          <form action="{{ url_for('login') }}" method="post">

            <div class="msg">{{ msg }}</div>

            <input id="username" name="username" type="text"
placeholder="Enter Your Username" class="textbox"/></br></br>

            <input id="password" name="password"
type="password" placeholder="Enter Your Password" class="textbox"/></br></br></br>

            <input type="submit" class="btn" value="Sign
In"></br></br>

          </form>

        </h2>

        <p class="bottom">Don't have an account? <a class="bottom"
href="{{ url_for('register') }}"> Sign Up here</a></p>

      </div>
```

```
        </div>
    </body>
</html>
```

register.html:

```
<html>
    <head>
        <meta charset="UTF-8">
        <title> Register </title>
        <link rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">

    </head>
    <body></br></br></br></br></br>

        <div align="center">
            <div align="center" class="border">
                <div class="header">
                    <h1 class="word">Register</h1>
                </div></br></br></br>
                <h2 class="word">
                    <form action="{{ url_for('register') }}" method="post">
                        <div class="msg">{{ msg }}</div>
                        <input id="username" name="username" type="text"
placeholder="Enter Your Username" class="textbox"/></br></br>
                        <input id="password" name="password"
type="password" placeholder="Enter Your Password" class="textbox"/></br></br>
                        <input id="email" name="email" type="text"
placeholder="Enter Your Email ID" class="textbox"/></br></br>
                        <input type="submit" class="btn" value="Sign
Up"></br>
                    </form>
                </h2>
                <p class="bottom">Already have an account? <a class="bottom"
href="{{ url_for('login') }}"> Sign In here</a></p>
```

```
        </div>
    </div>
</body>
</html>
```

index.html:

```
<html>
    <head>
        <meta charset="UTF-8">
        <title> Index </title>
        <link rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">

    </head>
    <body></br></br></br></br></br>
        <div align="center">
            <div align="center" class="border">
                <div class="header">
                    <h1 class="word">Index</h1>
                </div></br></br></br>
                <h1 class="bottom">
                    Hi {{ session.username }}!!</br></br> Welcome to Our
page..
                </h1></br></br></br>
                <a href="{{ url_for('logout') }}" class="btn">Logout</a>
            </div>
        </div>
    </body>
</html>
```

app.py:

```
from flask import Flask, render_template, request, redirect, url_for, session

import ibm_db

import re

app = Flask(__name__)
app.secret_key= 'a'

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME= 9938aec0-8105-433e-8bf9-
0fbb7e483086.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud",;PORT=32459;Security=SSL
;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID= thj60473;PWD=
"I3kWDRo08yQRjnYS",)

@app.route('/')
@app.route('/login', methods =['GET', 'POST'])
def login():    msg = "

    if request.method == 'POST' and 'username' in request.form and 'password' in
request.form:

        username = request.form['username']
password = request.form['password']

        stmt = ibm_db.prepare(conn,'SELECT * FROM usertable WHERE username = ?
ANDpassword = ?')

        ibm_db.bind_param(stmt,1,username)

        ibm_db.bind_param(stmt,2,password)

        ibm_db.execute(stmt)

        account = ibm_db.fetch_assoc(stmt)

    if account:

        session['loggedin'] = True

        session['username'] = account['USERNAME']

    msg = 'Logged in successfully !'

        return render_template('index.html', msg = msg)

    else:

        msg = 'Incorrect username / password !'

    return render_template('login.html', msg = msg)
```

```

@app.route('/logout') def
logout():
    session.pop('loggedin', None)
session.pop('id', None)
session.pop('username', None)
    return redirect(url_for('login'))

@app.route('/register', methods=['GET', 'POST'])
def register():    msg = "

    if request.method == 'POST' and 'username' in request.form and 'password' in request.form
and 'email' in request.form :

        username = request.form['username']
password = request.form['password']
email = request.form['email']

        stmt = ibm_db.prepare(conn,'SELECT * FROM users WHERE username = ?')
ibm_db.bind_param(stmt,1,username)        ibm_db.execute(stmt)

        account = ibm_db.fetch_assoc(stmt)
if account:

            msg = 'Account already exists !'        elif not
re.match(r'^@[^@]+\.[^@]+', email):

            msg = 'Invalid email address !'        elif
not re.match(r'[A-Za-z0-9]+', username):

            msg = 'Username must contain only characters and numbers !'
elif not username or not password or not email:

            msg = 'Please fill out the form !'
else:

            prep_stmt = ibm_db.prepare(conn,"INSERT INTO users VALUES(?, ?, ?)")
ibm_db.bind_param(prepare_stmt, 1, username)
ibm_db.bind_param(prepare_stmt, 2, email)

ibm_db.bind_param(prepare_stmt, 3,password)        i

bm_db.execute(prepare_stmt)

```

```
        msg = 'You have successfully registered !'

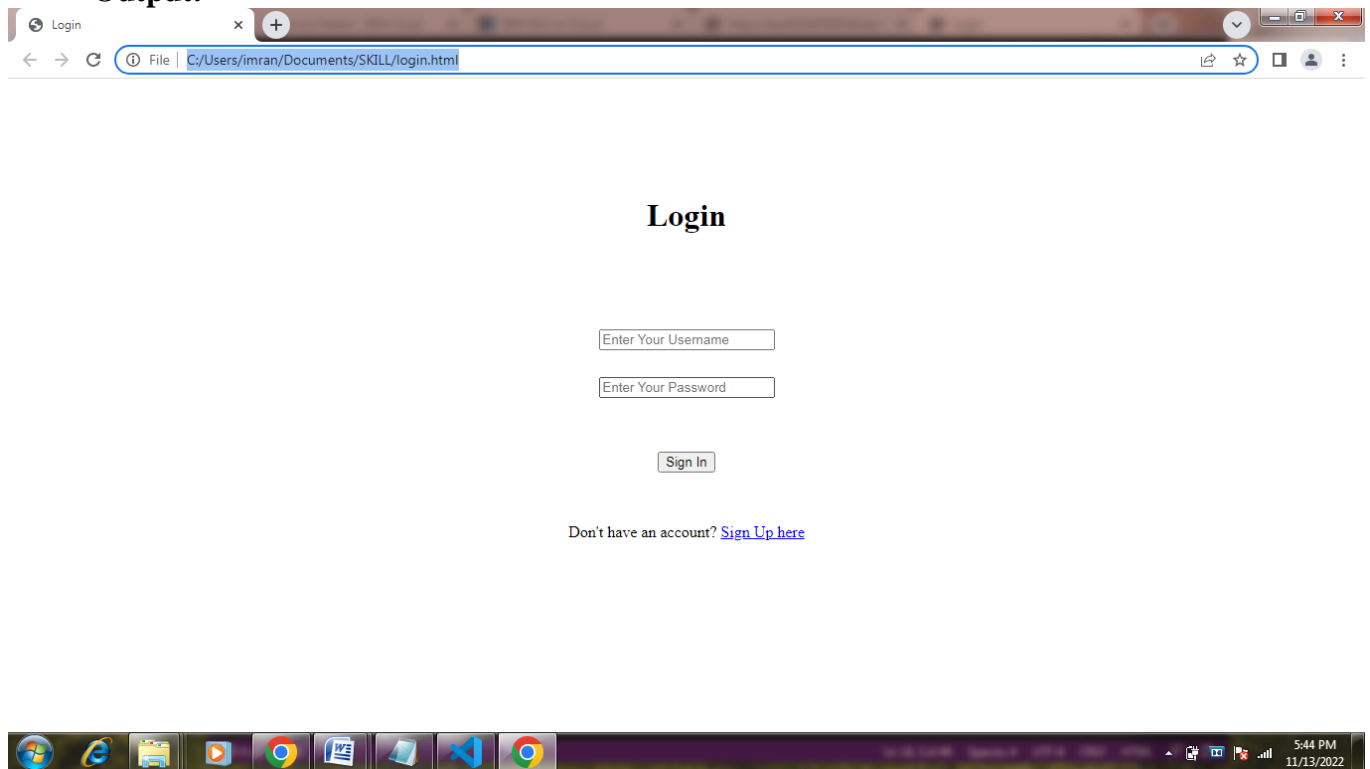
elif request.method == 'POST':    msg =

'Please fill out the form !'

    return render_template('register.html', msg = msg)

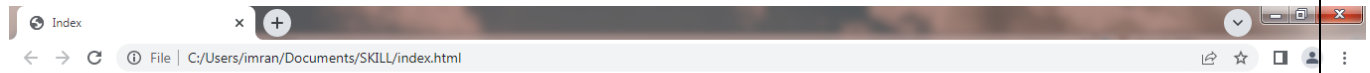
if __name__ == '__main__':
    app.debug = True
    app.run(host='0.0.0.0',port=8080)
```

Output:



Register

Already have an account? [Sign In here](#)



Index

Hi Mohamed Imran !!

Welcome to Our page..

[Logout](#)

The screenshot shows the IBM Db2 on Cloud console interface. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' section is active, displaying a list of tables. Two tables are listed: 'USERS' and 'USERTABLE', both in the 'BHB82079' schema. The 'USERS' table is selected, and its definition is shown on the right. The definition includes columns: 'USERNAME' (VARCHAR, 20, N, 0), 'EMAIL' (VARCHAR, 50, N, 0), and 'PASSWORD' (VARCHAR, 20, N, 0). A 'View data' button is visible at the bottom of the table definition panel.

Name	Data type	Nullable	Length	Scale
USERNAME	VARCHAR	N	20	0
EMAIL	VARCHAR	N	50	0
PASSWORD	VARCHAR	N	20	0