Assignment-3

Team id	PNT2022TMID49573
PROJECT NAME	SKILL AND JOB RECOMMENDER APPLICATION
NAME	BASVAN V
ROLL NO	950019104009

1. Create User table with user with email, username, roll number, password.

CREATE TABLE user(

username varchar(20) not null, email varchar(50) not null, password varchar(20) not null)

INSERT INTO user(username, email, password)

VALUES('basvan', 'basvan@gmail.com', 'basvan')

2. Perform UPDATE, DELETE Queries with user table

UPDATE user SET username='basvan' WHERE email= 'basvan@gmail.com' DELETE
FROM user WHERE username = 'basvan'

3. Connect python code to db2.

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=b0aebb68-94fa-46ec-a1fc-1c999edb6187.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT=31249;Security=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=xhn44043;PWD=q8X1bG8CN5Uk7nAb;",",")

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>
             k rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">
      </head>
      <body></br></br></br>
             <div align="center">
             <div align="center" class="border">
                    <div class="header">
                           <h1 class="word">Login</h1>
                    </div></br></br>
                    <h2 class="word">
                           <form action="{{ url_for('login') }}" method="post">
                           <div class="msg">{{ msg }}</div>
                                  <input id="username" name="username" type="text"</pre>
placeholder="Enter Your Username" class="textbox"/></br>
                                  <input id="password" name="password"</pre>
type="password" placeholder="Enter Your Password" class="textbox"/></br></br>
                                  <input type="submit" class="btn" value="Sign</pre>
In"></br>
                           </form>
                    </h2>
                    Don't have an account? <a class="bottom"</pre>
href="{{url_for('register')}}"> Sign Up here</a>
             </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>
              <div align="center">
              <div align="center" class="border">
                     <div class="header">
                            <h1 class="word">Register</h1>
                     </div></br></br>
                     <h2 class="word">
                            <form action="{{ url_for('register') }}" method="post">
                            < div class="msg">{{ msg }}</ div>
                                   <input id="username" name="username" type="text"</pre>
placeholder="Enter Your Username" class="textbox"/></br>
                                   <input id="password" name="password"</pre>
type="password" placeholder="Enter Your Password" class="textbox"/></br>
                                   <input id="email" name="email" type="text"</pre>
placeholder="Enter Your Email ID" class="textbox"/></br>
                                   <input type="submit" class="btn" value="Sign</pre>
Up"></br>
                            </form>
                     </h2>
```

```
Already have an account? <a class="bottom"</pre>
href="{{url_for('login')}}"> Sign In here</a>
             </div>
             </div>
      </body>
</html>
index.html:
<html>
      <head>
             <meta charset="UTF-8">
             <title> Index </title>
             k rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">
      </head>
      <body></br></br></br>
             <div align="center">
             <div align="center" class="border">
                   <div class="header">
                          <h1 class="word">Index</h1>
                   </div></br></br>
                          <h1 class="bottom">
                                Hi {{session.username}}!!</br></br>
page...
                          </h1></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=b0aebb68-94fa-46ec-a1fc-
1c999edb6187.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT=31249;Security=
SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=xhn44043;PWD=q8X1bG8CN5Uk7n
Ab;",",")
@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 user WHERE username = ? AND password =
?')
   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 user 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'[^{\circ}@]+@[^{\circ}@]+\.[^{\circ}@]+', 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 user VALUES(?, ?, ?)")
     ibm_db.bind_param(prep_stmt, 1, username)
     ibm_db.bind_param(prep_stmt, 2, email)
     ibm_db.bind_param(prep_stmt, 3, password)
     ibm_db.execute(prep_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:











