

Assignment-3

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PROJECT NAME	SKILL AND JOB RECOMMENDER APPLICATION
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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('kaikondar','kaikondar@gmail.com', 'kaikondar')
```

2.Perform UPDATE,DELETE Queries with user table

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

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=fmc62217;PWD=hAa2nnBu8JERvLCv;",",")
```

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=fmc62217;PWD=hAa2nnBu8JERvLCv;", "", "")

@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 users 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 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)

    ibm_db.execute(prepare_stmt)

    msg = 'You have successfully registered !'

elif request.method == 'POST':

    msg = 'Please fill out the form !'

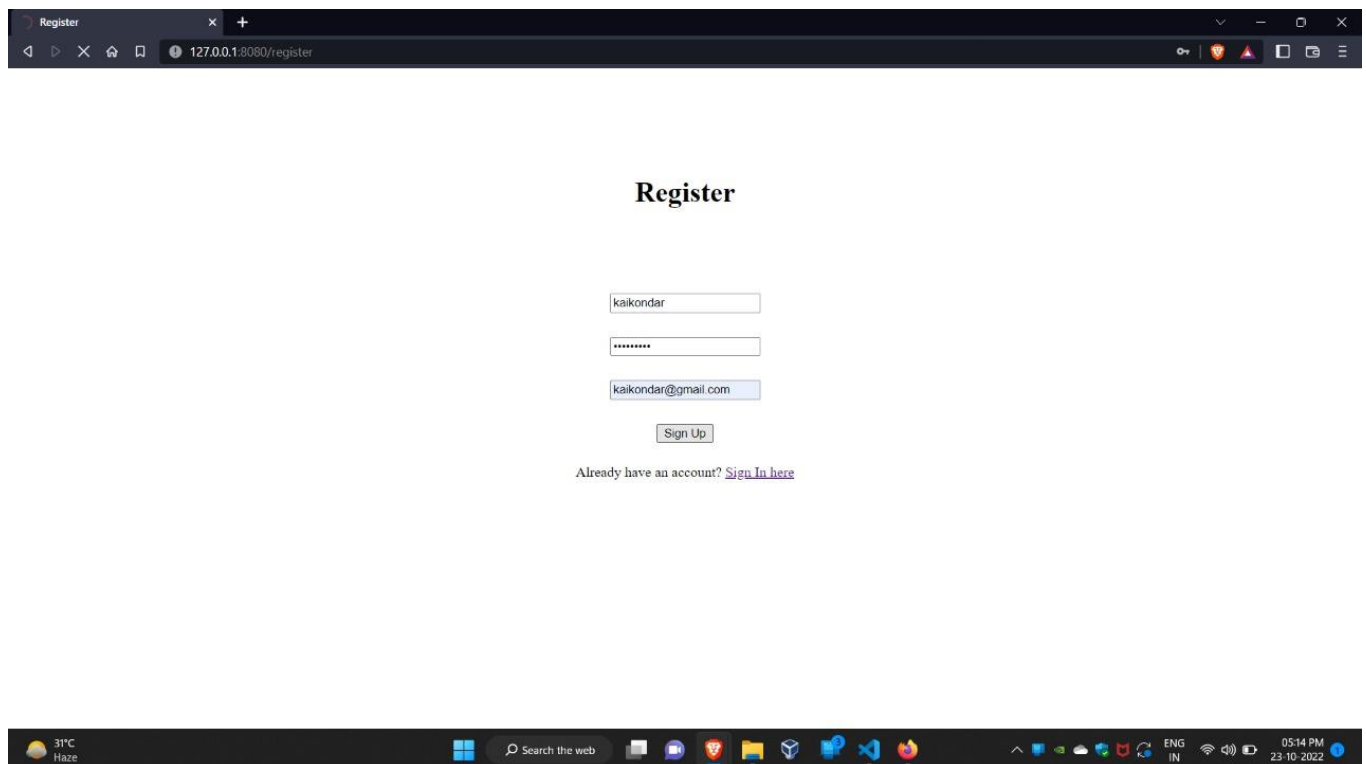
return render_template('register.html', msg = msg)

if __name__ == '__main__':

    app.debug = True

    app.run(host='0.0.0.0',port=8080)
```

Output:





Register

You have successfully registered !

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



Index

Hi kaikondar!!

Welcome to Our page...

[Logout](#)



The screenshot displays the IBM Db2 on Cloud web interface. The main content area shows a table named 'FMC62217.USERS'. The table has three columns: 'USERNAME', 'EMAIL', and 'PASSWORD'. A single row of data is visible, with 'kaikondar' in the USERNAME column, 'kaikondar@gmail.com' in the EMAIL column, and 'kaikondar' in the PASSWORD column. The interface includes a top navigation bar with options like 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. A sidebar on the left contains icons for various database functions. The bottom of the screen shows a Windows taskbar with system information: 31°C Haze, search bar, and the date/time 05:17 PM on 23-10-2022.

USERNAME	EMAIL	PASSWORD
kaikondar	kaikondar@gmail.com	kaikondar

