Assignment-3

Team id	PNT2022TMID49573
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('sathees','0703sathees@gmail.com', 'sathees')
```

2. Perform UPDATE,DELETE Queries with user table

```
UPDATE user SET username='sathees' WHERE email= '0703sathees@gmail.com

DELETE FROM user WHERE username = 'sathees'
```

3. Connect python code to db2.

```
conn = ibm_db.connect("DATABASE=bludb;

HOSTNAME=b70af05b-76e4-4bca-a1f5-
23dbb4c6a74e.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></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"></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>
```

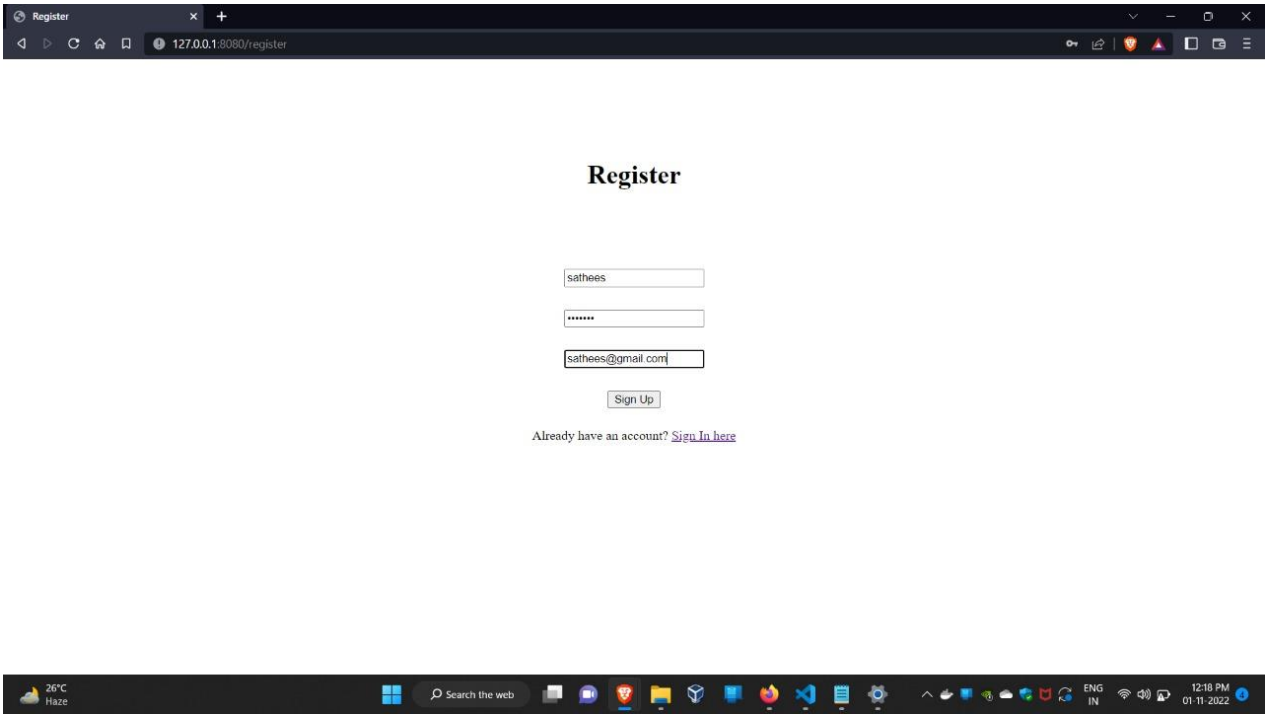
app.py:

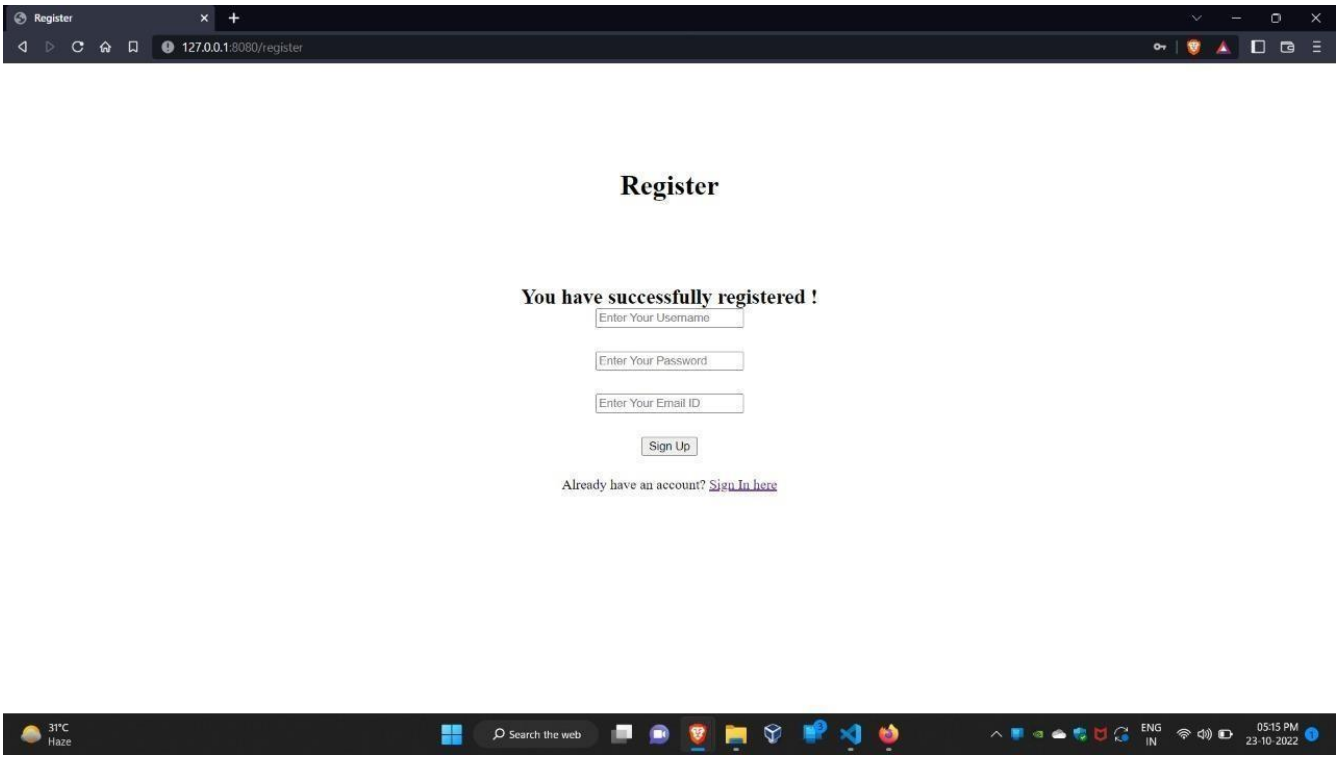
```
from flask import Flask, render_template, request, redirect, url_for, session
import ibm_db
import re


app = Flask(_name_)
app.secret_key = 'a'
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=b70af05b-76e4-4bca-a1f5-23dbb4c6a74e.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 !'
```

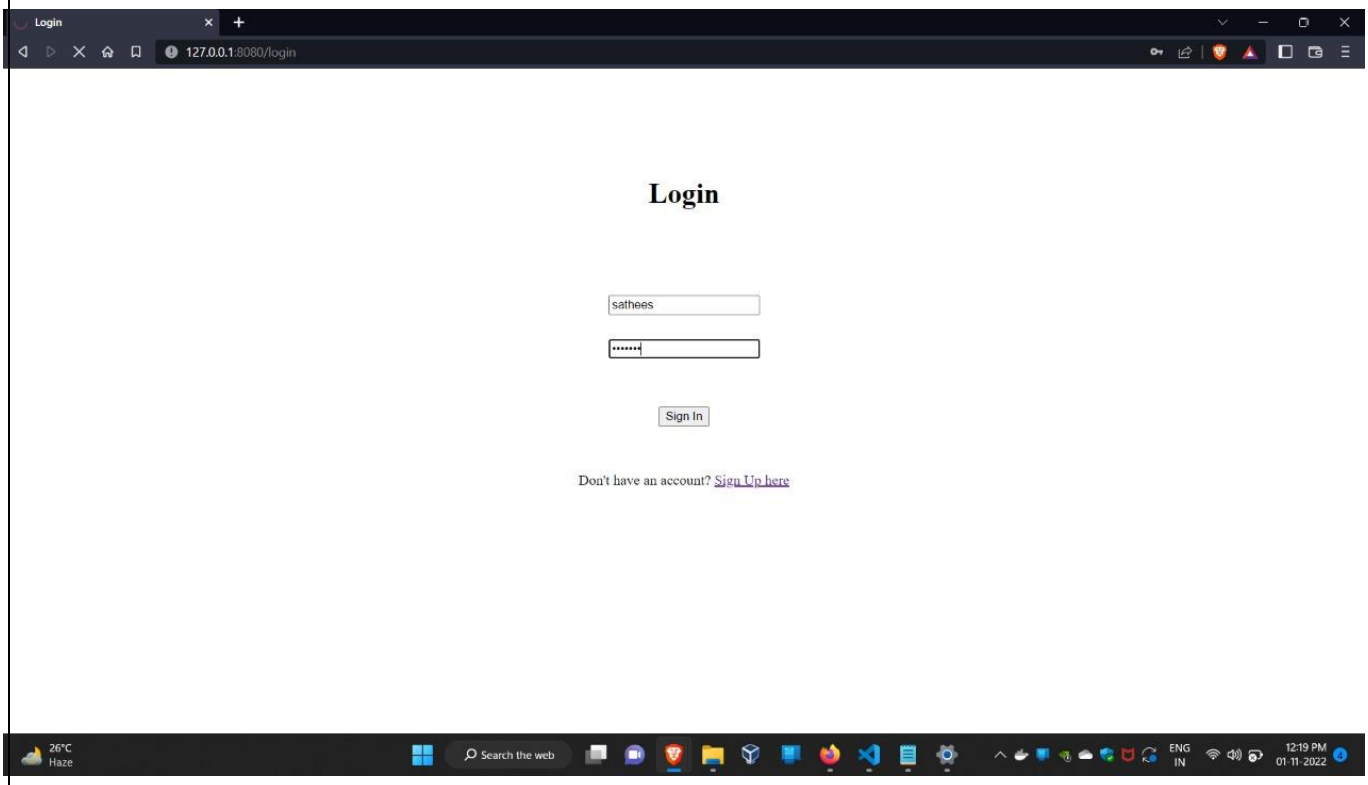
```
    return render_template('login.html', msg = msg)


@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(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:




Register
127.0.0.1:8080/register
Register
You have successfully registered !
Enter Your Username
Enter Your Password
Enter Your Email ID
Sign Up
Already have an account? Sign In here
31°C
Haze
Search the web
ENG
IN
05:15 PM
23-10-2022

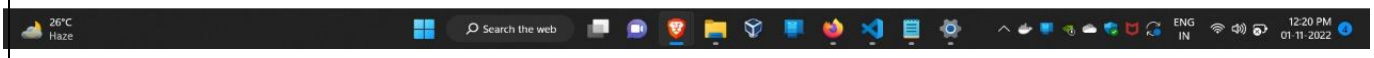

Login
127.0.0.1:8080/login
Login
sathees
Sign In
Don't have an account? Sign Up here
26°C
Haze
Search the web
ENG
IN
12:19 PM
01-11-2022

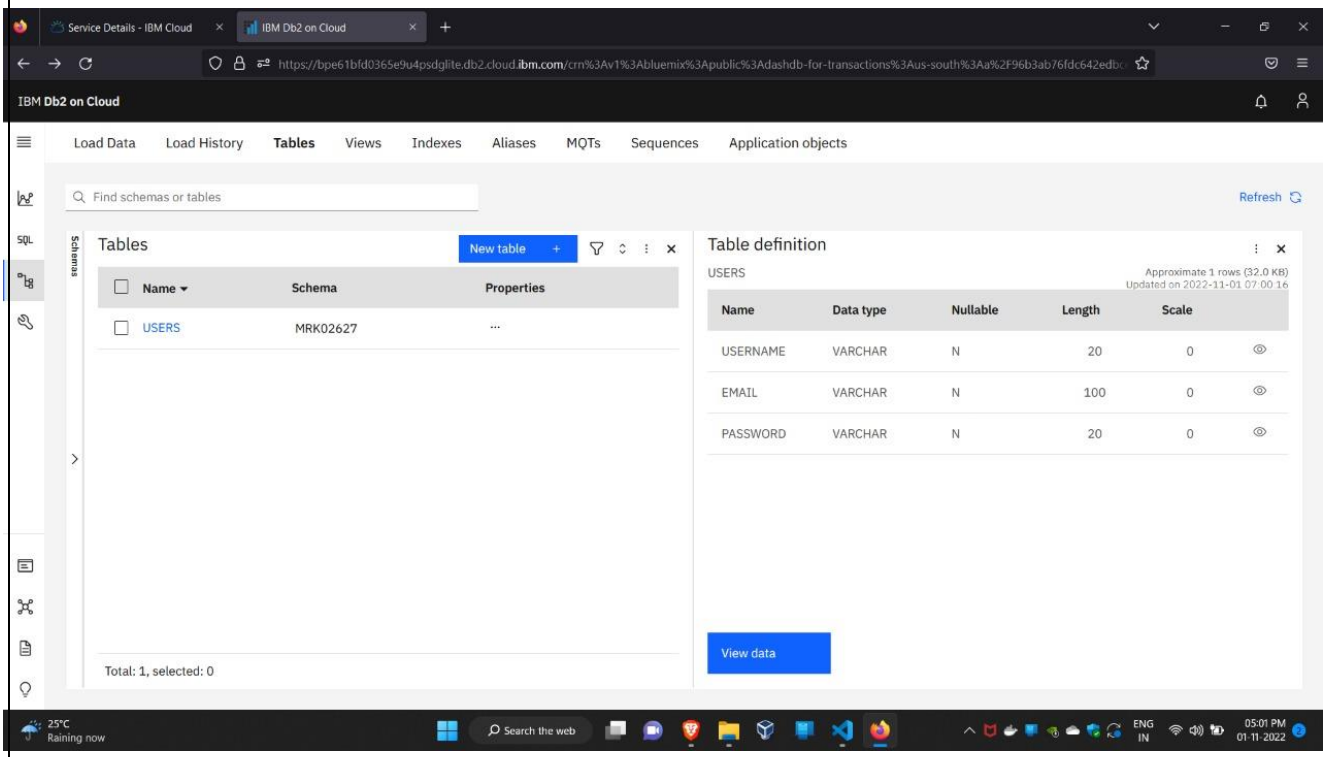
Index

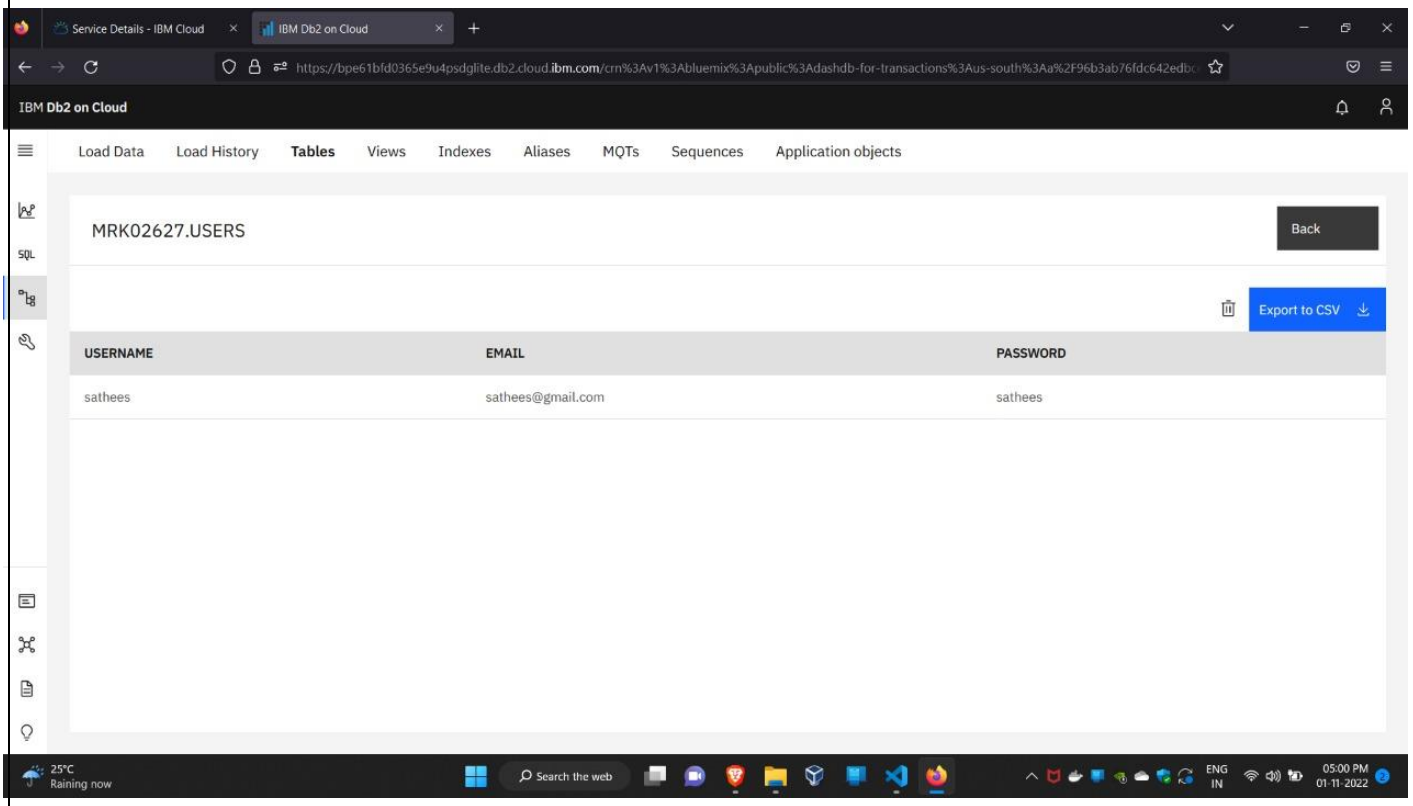
Hi sathees!!

Welcome to Our page...

Logout






Service Details - IBM Cloud
IBM Db2 on Cloud
IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
MRK02627.USERS
Back
Export to CSV
USERNAME
EMAIL
PASSWORD
sathees
sathees@gmail.com
sathees
25°C
Raining now
Search the web
ENG
IN
05:00 PM
01-11-2022