Assignment -2
IBM CLOUD DB2

Assignment Date	29 September 2022
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Maximum Marks	2 Marks

Questions:

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

2. Perform UPDATE,DELETE Queries with user table.

UPDATE TABLE:-

DELETE TABLE:-

3.CONNECT PYTHON CODE TO DB2.
NOTE:- Question 4 contains Question 3 answer
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

Answers

App.py
```python
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=Db2New;HOSTNAME=19af6446-6171-4641-8aba-
9dcff8e1b6ff.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30699;USERNAM
E=kgb92696;PASSWORD=3IlWyGYU3bMIvwnX;SECURITY=SSL;SSLSERVERCERTIFICATE=DigiCer
tGlobalRootCA.crt;", "", "")

@app.route("/", methods=['GET',
'POST']) def register():      msg = ''
if request.method == 'POST':
        username = request.form['username']
password = request.form['password']      sql =
"SELECT * FROM users WHERE username =?"      stmt
= ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, username)
ibm_db.execute(stmt)
        account =
ibm_db.fetch_assoc(stmt)
print(account)        if account:
        msg = 'Account already exists !'
elif not re.match(r'[A-Za-z0-9]+', username):
        msg = 'name must contain only characters and numbers !'
```

```python
        else:
            insert_sql = "INSERT INTO  users VALUES (?, ?, ?)"
prep_stmt = ibm_db.prepare(conn, insert_sql)
ibm_db.bind_param(prep_stmt, 1, username)
ibm_db.bind_param(prep_stmt, 2, 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)


@app.route('/login', methods=['GET', 'POST'])
def login():     global userid     msg = ''
    if request.method ==
'POST':
        username = request.form['username']         password =
request.form['password']         sql = "SELECT * FROM users WHERE
username =? AND password=?"         stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, username)         ibm_db.bind_param(stmt,
2, password)         ibm_db.execute(stmt)         account =
ibm_db.fetch_assoc(stmt)         print(account)         if account:
            session['loggedin'] = True
session['id'] = account['USERNAME']
userid = account['USERNAME']
session['username'] = account['USERNAME']
msg = 'Logged in successfully !'

        msg = 'Logged in successfully !'
return render_template('dashboard.html', msg=msg)
else:
        msg = 'Incorrect username / password !'
return render_template('login.html', msg=msg)


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

Register.html

```html
<!DOCTYPE html>
```

```html
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Skill and Job Recommender register</title>


    <!-- bootstrap css cdn -->       <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css
"
      integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/fontawesome/4.7.0/css/font-
awesome.css">
    <!-- css stylesheet -->
    <link rel="stylesheet" href="style.css">
    <!-- font styles cdn -->
    <link rel="preconnect" href="https://fonts.gstatic.com">
    <link
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">
    <link
href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=swap"
rel="stylesheet">
</head>

<body>
    <!-- bootstrap navbar -->
    <!-- navbar ends -->
    <!-- Login form -->
    <div class="login text-center mt-5">
        <form action="/" method="post">
            <h2 class="form-text-h2"> Register Form </h2>
            <div class="msg">{{ msg }}</div>
            <input type="text" class="form-control" name="username"
placeholder="Enter Your Username" id="username"
required>

            <input type="password" class="form-control" name="password"
placeholder="Enter Your Password" id="password"
required>
            <button type="submit" id="button" class="btn btn-primary">
Register </button>
```

```
            <div class="note mt-3 text-center">
                <!--Register form -->
                <p>    already    have    an    account    ?    please    login    <a
href="/login">login! </a> </p>

            </div>
        </form>

    </div>


</body>
</html>
```

Login.html

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Skill and Job RecommenderLogin</title>
    <!-- favicon -->
    <!--    <link    rel="shortcut    icon"    href="/assets/img/favicon.ico"
type="image/x-icon"> -->
    <!-- <link rel="icon" href="/assets/img/favicon.ico" type="image/x-icon">
-->
    <link           rel="icon"           type="image/png"           sizes="16x16"
href="/assets/img/favicon32x32.png">
    <!-- bootstrap css cdn -->
<link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css
"
      integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/fontawesome/4.7.0/css/font-
awesome.css">
    <!-- css stylesheet -->
    <link rel="stylesheet" href="style2.css">
    <!-- font styles cdn -->
    <link rel="preconnect" href="https://fonts.gstatic.com">
    <link
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">
```

```html
    <link
href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=swap"
rel="stylesheet">
</head>

<body>

    <div class="login text-center mt-5">

        <form action="/login" method="post">
            <h2 class="form-text-h2"> Login Form </h2>
            <div class="msg">{{ msg }}</div>
            <div class="form-group mb-3">
                <label class="label" for="username">Username</label>
                <input type="text" class="form-control" placeholder="Username"
name="username" required>
            </div>
            <div class="form-group mb-3">
                <label class="label" for="password">Password</label>
                <input type="password" class="form-control"
placeholder="Password" name="password" required>
            </div>

            <button type="submit" id="button" class="btn btn-primary"> Login
</button>
            <div class="note mt-3 text-center">
                <!--Register form -->
                <p> Don't have an account yet? Click here to
<a href="/">register! </a> </p>                </div>
        </form>
    </div>


</body>
</html>
```
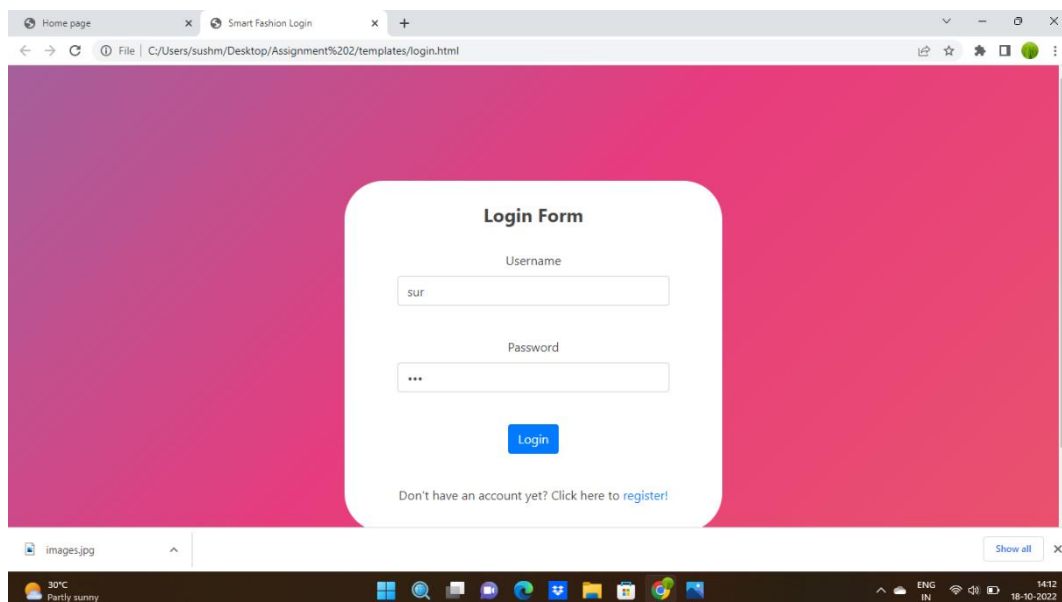
Style.css

```css
* {
    margin: 0;
padding: 0;
}
body
{
    color: #444444;      background:linear-gradient(-45deg, #EE7752,
#E73C7E, #23A6D5, #23D5AB);      background-size: 400% 400%;      position:
relative;      display: flex;      flex-direction: column;



align-items: center; justify-content:
center; animation: anime 10s ease-in-out
infinite;
}
@keyframes anime{
0%{ background-position:
0 50%;
} 50%{ background
position: 100% 50%; } 100%{
background-position: 0 50%;
} } form { display:
flex; flex-direction:
column; align-items:
center; justify
content: center;
background-color: white;
width: 40%; height:
450px; border-radius:
50px; margin: 100px;
gap: 25px;
} h2 { font-size:
large; font-weight:
bolder;
} input { width: 80%
!important;
} div { display: flex;
align-items: center;
justify-content: center;
flex-direction: column;
width: 90%;
}
.form-text-vk { font
size: small;
```
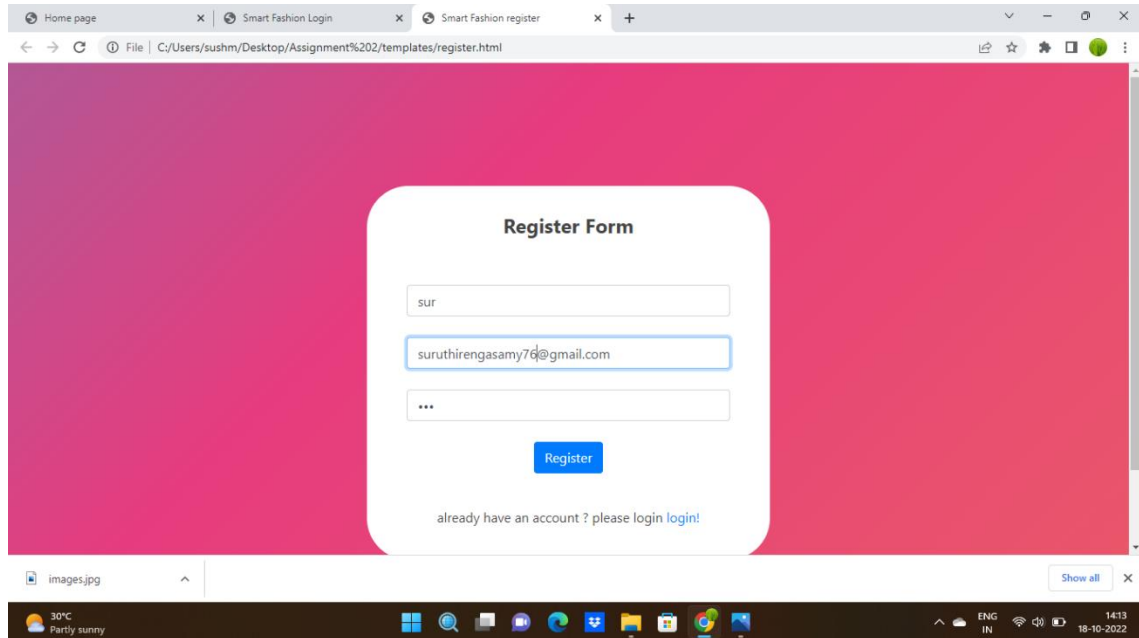
```css
    padding-bottom: 10px;
}

.form-text-h2 {      font-size: x-large;      padding-top: 10px;
```

```
}
```

OUTPUT:- REGISTRATION PAGE:-

LOGIN PAGE:-

WELCOME PAGE:-