

### ASSIGNMENT 3

TEAM ID	PNT2022TMID38230
PROJECT NAME	Smart Fashion Recommender Application
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#### Questions:

1. Create Usertable with user with email, username, roll number, password.

The top screenshot shows the IBM DB2 Cloud interface with the 'Table definition' window open. The table is named 'USERTABLE' in the 'DTP46Q44' schema. The table definition is as follows:

Name	Data Type	Nullable	Length	Scale
USERNAME	CHAR	Y	50	0
ROLLNUMBER	INTEGER	Y	10	0
EMAIL	CHAR	Y	50	0
PASSWORD	VARCHAR	Y	32	0

The bottom screenshot shows the 'USERTABLE' table in the 'DTP46Q44' schema. The table is currently empty, and a message 'There is no data here yet' is displayed.

2. Perform UPDATE,DELETE Queries with user table.

## UPDATE TABLE:-

The screenshot displays the IBM DB2 on Cloud web interface. The top section shows a SQL script editor with the following code:

```
1. INSERT INTO USERTABLE VALUES ('VK','21','VK@gmail.com','1234')
```

Below the editor, the 'History' tab is active, showing a table of executed scripts:

Script	Date	Status	Runtime
Untitled - 3	Oct 28, 2022 12:51:13 PM	Success	0.002 s
INSERT INTO USERTABLE VALUES ('VK','21','VK@gmail.com','1234')		Success	0.002 s

The bottom section shows the 'DTP46044.USERTABLE' table with the following data:

USERNAME	ROLLNO	EMAIL	PASSWORD
VK	21	VK@gmail.com	1234

## DELETE TABLE:-

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DTP46044.USERTABLE

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USERNAME	ROLLNO	EMAIL	PASSWORD
ANANDH	21	Vij@gmail.com	1234
SR	22	Vij@gmail.com	1234

IBM DB2 on Cloud

Data objects My script

Filter objects

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History

Find history

Script	Date	Status	Summary
CREATE TABLE DTP46044.USERTABLE (	2024-11-11 11:11:11 AM	Success	0.000 s
INSERT INTO DTP46044.USERTABLE VALUES ('ANANDH', 21, 'Vij@gmail.com', '1234');	2024-11-11 11:11:11 AM	Success	0.000 s
INSERT INTO DTP46044.USERTABLE VALUES ('SR', 22, 'Vij@gmail.com', '1234');	2024-11-11 11:11:11 AM	Success	0.000 s

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USERNAME	ROLLNO	EMAIL	PASSWORD
ANANDH	21	Vij@gmail.com	1234

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

```
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=fbd88901-ebdb-4a4f-a32e-
9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32731;USERNAM
E=ntp46044;PASSWORD=95soX0sZGhb4ToUj;SECURITY=SSL;SSLSERVERCERTIFICATE=DigiCer
tGlobalRootCA.crt;", "", "")

@app.route("/", methods=['GET', 'POST'])
def register():
    msg = ''
    if request.method == 'POST':
        username = request.form['username']
```

```
        email = request.form['email']
        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]+@[a-zA-Z0-9]+\.[a-zA-Z]+$', email):
            msg = 'Invalid email address !'
        elif not re.match(r'^[A-Za-z0-9]+$', username):
            msg = 'name must contain only characters and numbers
!' else:
            insert_sql = "INSERT INTO users VALUES (?, ?, ?)"
            prep_stmt = ibm_db.prepare(conn, insert_sql)
            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)
```

```
@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', port=80) #
    app.run(debug=True)

```

Register.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>Smart Fashion 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/font-
awesome/4.7.0/css/font-awesome.css">
  <!-- css stylesheet -->
<link rel="stylesheet" href="/static/css/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="email" class="form-control"
name="email" placeholder="Enter Your Email ID" id="email"
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>Smart Fashion Login</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/favicon-
32x32.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/font
awesome/4.7.0/css/font-awesome.css">

```

```

<!-- css stylesheet -->
<link rel="stylesheet" href="/static/css/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">
<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"

</button>

    </body>

</html>
class="btn btn-primary"> Login

href="/">register! </a> </p> </div>
</form>
</div>

Register form -->
<p> Don't have an account yet? Click here
to <a

```

#### Style.css

```

* {
    margin: 0;
    padding: 0;
}

body {
    background-color: aqua;
    !important; display: flex;
    flex-direction: column;
    align-items: center;
    justify-content:

```



```

        center;
    }

    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;
    }

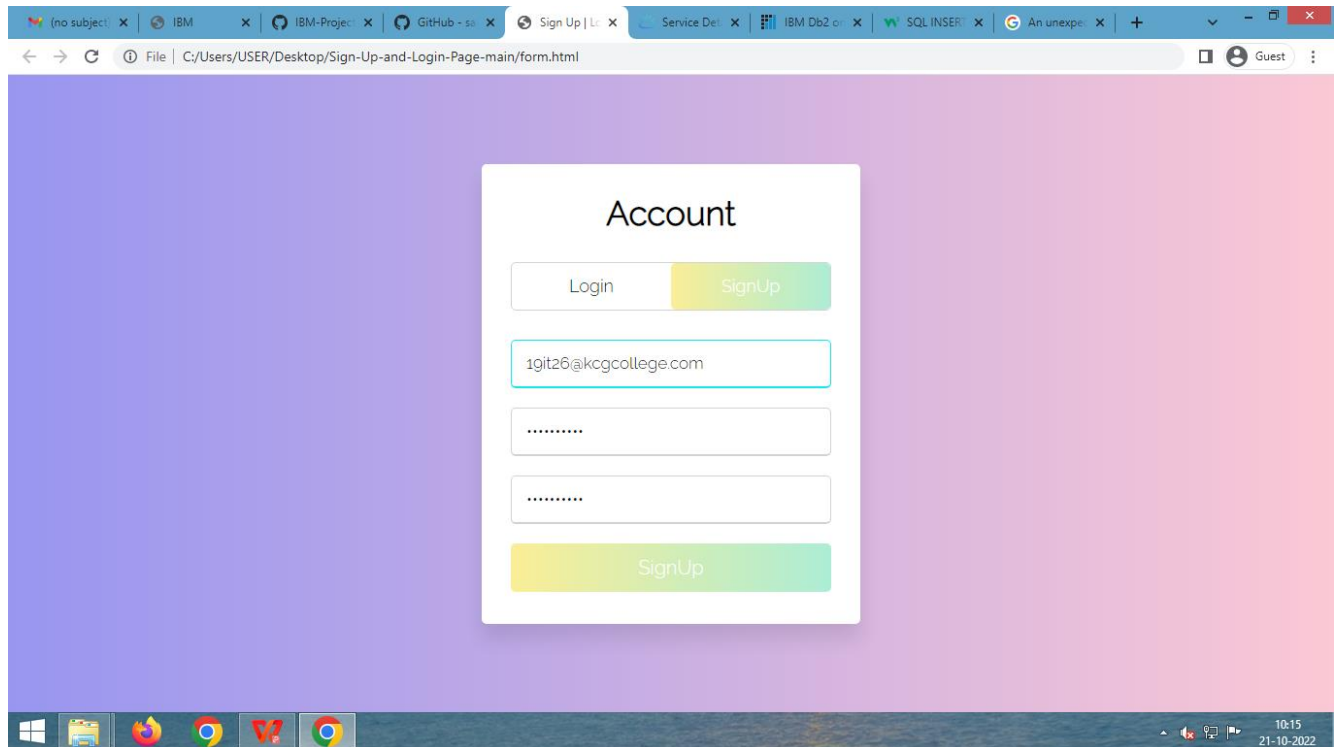
    div {
        display: flex;
        align-items: center;
        justify-content:
            center; flex-direction:
            column; width: 90%;
    }

    .form-text-vk {
        font-size: small;
        padding-bottom: 10px;
    }

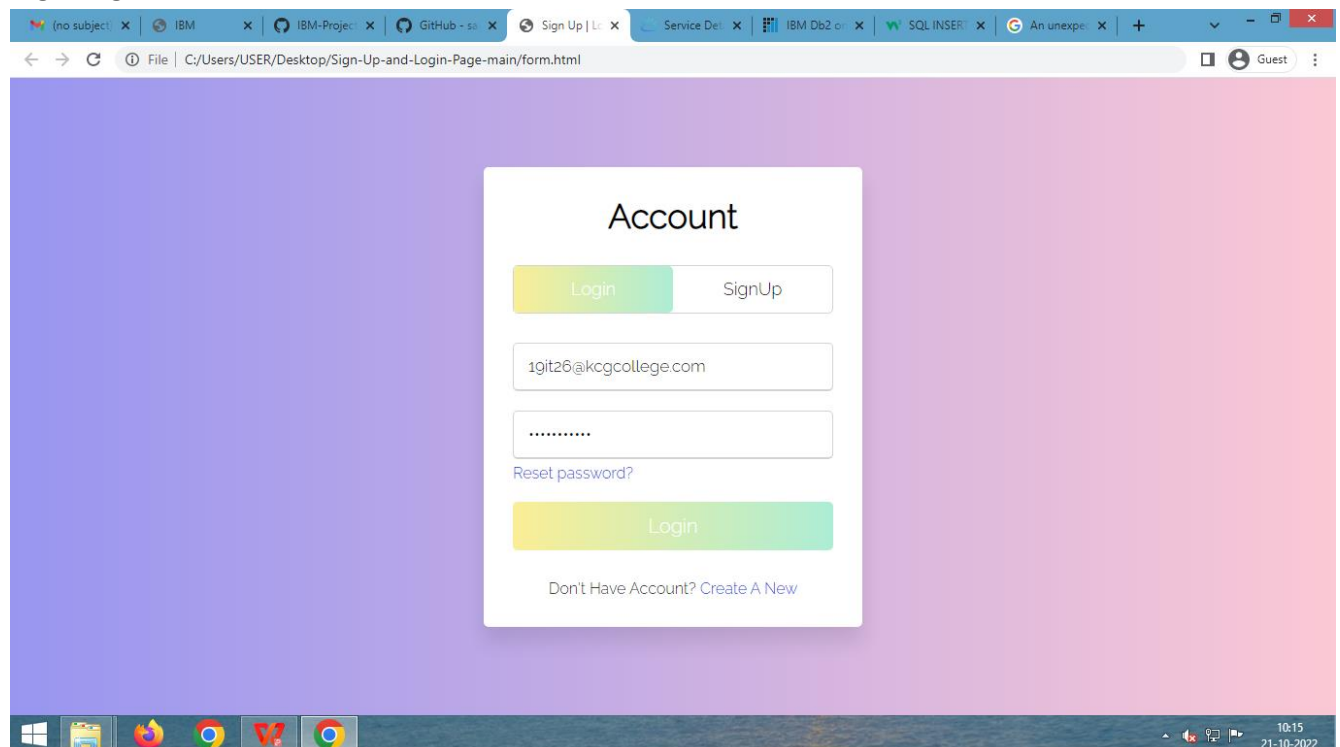
    .form-text-h2 {
        font-size: x-large;
        padding-top:
            10px;
    }

```

**Output:-**  
**registration page:-**



### Login Page:-



### Data Base Table :-

IBM Db2 on Cloud

Load Data Load History **Tables** Views Indexes Aliases MQTs Sequences Application objects

ZCR94730.USER Back

Export to CSV


USERNAME	PASSWORD	MAILID
MARK	1234567	19it28@kcgcollege.com.

10:15 21-10-2022

IBM Db2 on Cloud

Load Data Load History **Tables** Views Indexes Aliases MQTs Sequences Application objects

ZCR94730.USER Back

USERNAME	PASSWORD	MAILID
 <p>There is no data here yet</p>		

09:54 21-10-2022