

ASSIGNMENT 3

TEAM ID	PNT2022TMID27406
PROJECT NAME	NEWS TRACKER APPLICATION
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Questions:

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

The screenshot shows the IBM Db2 on Cloud console interface. The 'Tables' tab is selected, displaying a list of tables. The 'USER' table is selected, and its definition is shown on the right. The table has three columns: USERNAME, PASSWORD, and MAILID, all of type VARCHAR with a length of 32 and are nullable.

Name	Data type	Nullable	Length
USERNAME	VARCHAR	Y	32
PASSWORD	VARCHAR	Y	32
MAILID	VARCHAR	Y	32

2. Perform UPDATE,DELETE Queries with user table.

UPDATE TABLE:-

The screenshot shows the IBM Db2 on Cloud console interface. On the left, the 'Data objects' tab is selected, showing a list of objects including 'ZCR94730'. The main area displays a SQL editor with the following query:

```
1 INSERT INTO USER (USERNAME, PASSWORD, MAILID, ROLLNO)
2 VALUES ('MITHWIN', '1234', '19IT27@kcgcollege.com', '19IT27')
```

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

Script	Date	Status	Runtime
Untitled - 1	Oct 28, 2022 11:22:02 AM	✓ 1	0.008 s
INSERT INTO USER (USERNAME, PASSWORD, MAILID, ROLLNO) VALUES ('MIT...		✓	0.008 s
Untitled - 1	Oct 28, 2022 11:21:31 AM	✗ 1	0.014 s
INSERT INTO USER (USERNAME, PASSWORD, MAILID, ROLLNO) VALUES ('MITH...		✗	0.014 s

The screenshot shows the IBM Db2 on Cloud console interface, specifically the 'Tables' tab. The table 'ZCR94730.USER' is displayed with the following columns: USERNAME, PASSWORD, MAILID, and ROLLNO. The table contains one row of data:

USERNAME	PASSWORD	MAILID	ROLLNO
MITHWIN	1234	19IT27@kcgcollege.com	19IT27

Buttons for 'Back' and 'Export to CSV' are visible in the top right corner of the table view.

DELETE TABLE:-

The screenshot shows the IBM Db2 on Cloud console interface. The browser tabs include 'Sent Mail - 19it35@kcgcollege.co...', 'IBM', 'Service Details - IBM Cloud', and 'IBM Db2 on Cloud'. The address bar shows a long URL. The console header is 'IBM Db2 on Cloud' with a user profile icon. The navigation menu includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' section is active, displaying a table named 'ZCR94730.USER'. The table has four columns: 'USERNAME', 'PASSWORD', 'MAILID', and 'ROLLNO'. It contains one row of data: 'MITHWIN', '1234', '19IT27@kcgcollege.com', and '19IT27'. There are 'Back' and 'Export to CSV' buttons. The Windows taskbar at the bottom shows the time as 11:22 on 28-10-2022.

USERNAME	PASSWORD	MAILID	ROLLNO
MITHWIN	1234	19IT27@kcgcollege.com	19IT27

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

Answer

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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'^[^\@]+\@[^\@]+\.[^\@]+',
    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') #
    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+VmmDGMN5t9
UJ0Z" 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" value="Login" class="btn btn-primary">Login</button>

        </form>
    </div>

    <div class="text-center">
        <a href="/">register! </a>
    </div>
</body>

</html>

```

```
<button
type="submit"
id="button"
class="btn btn-
primary"> Login
```

```
<div class="note mt-3
text-center">
  <!--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:
  bold;
}

input {
  width: 80% !important;
}

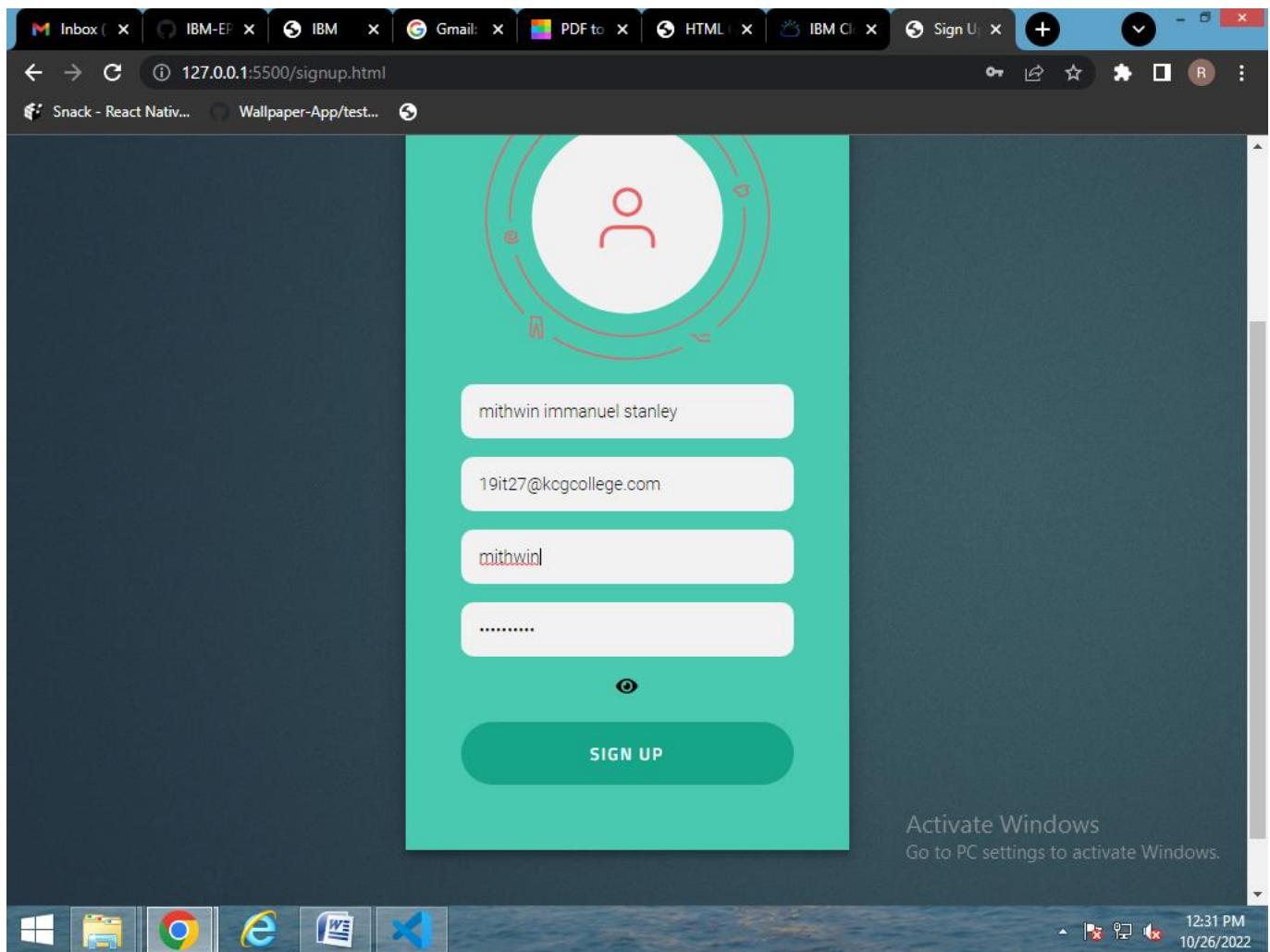
div {
  display: flex;
  align-items:
  center; justify-
  content:
  center; flex-
```

```
    direction: column;
    width: 90%;
}
```

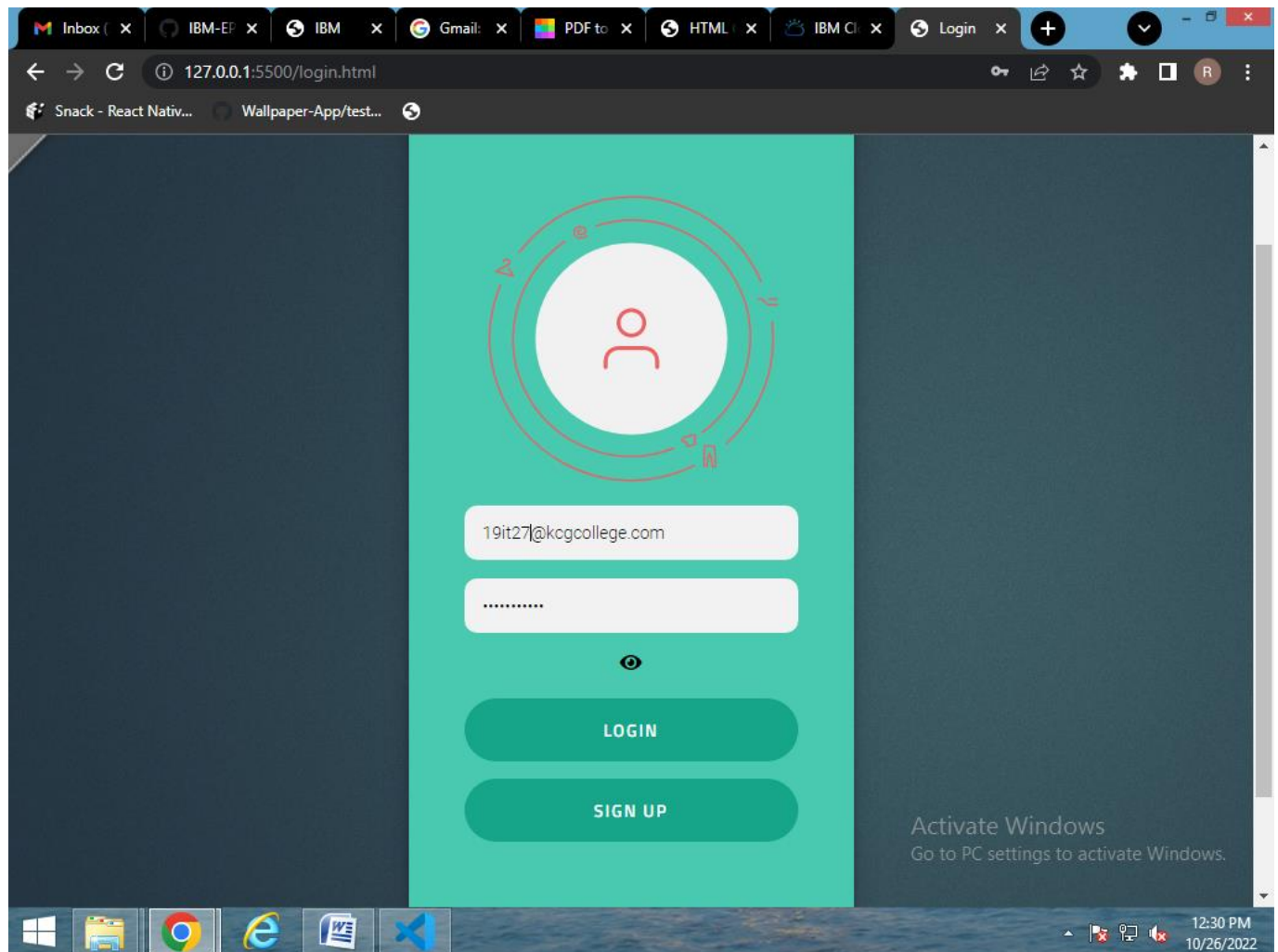
```
.form-text-vk {
    font-size: small;
    padding-bottom:
    10px;
}
```

```
}  
  
.form-text-h2 {  
font-size: x-large;  
padding-top:  
18px;  
}
```

Output:-
registration
page:-



Login Page:-



Welcome Page:-

Data Base Table :-

The screenshot displays the IBM Db2 on Cloud web interface. The top navigation bar includes links for Load Data, Load History, Tables, Views, Indexes, Aliases, MQTs, Sequences, and Application objects. The left sidebar contains icons for SQL, Tables, Views, Indexes, Aliases, MQTs, Sequences, and Application objects. The main content area shows a table named ZCR94730.USER. The table has four columns: USERNAME, PASSWORD, MAILID, and ROLLNO. One row is visible with values MITHWIN, 1234, 19IT27@kcgcollege.com, and 19IT27. The interface also includes a 'Back' button and an 'Export to CSV' button.

USERNAME	PASSWORD	MAILID	ROLLNO
MITHWIN	1234	19IT27@kcgcollege.com	19IT27