

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 displays the IBM Db2 on Cloud web interface. The browser address bar shows the URL: `bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions...`. The interface includes a top navigation bar with tabs for 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is active, showing a search bar and a table list. The table list contains one entry: 'USER' in schema 'ZCR94730'. The 'Table definition' panel on the right shows the structure of the 'USER' table:

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

At the bottom of the interface, the Windows taskbar is visible with icons for Windows, File Explorer, Google Chrome, Microsoft Edge, and Word. The system clock shows 12:15 PM on 10/26/2022.

2. Perform UPDATE,DELETE Queries with user table.

UPDATE TABLE:-

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

```
1 INSERT INTO USER (USERNAME, PASSWORD, MAILID)
2 VALUES ('VENKATESH', '5678', '19IT41@kcgcollege.com')
```

Below the editor, a 'History' table is visible, showing the execution history of the query:

Script	Date	Status	Runtime
Untitled - 1	Oct 29, 2022 2:16:24 PM	✓ 1	0.006 s
INSERT INTO USER (USERNAME, PASSWORD, MAILID) VALUES ('VENKATESH', '5678', '19IT41@kcgcollege.com')		✓	0.006 s
Untitled - 1	Oct 29, 2022 2:14:42 PM	✓ 1	0.007 s
INSERT INTO USER (USERNAME, PASSWORD, MAILID) VALUES ('GOKUL', '5678', '19IT41@kcgcollege.com')		✓	0.007 s

The screenshot shows the IBM Db2 on Cloud console with the 'Tables' tab selected. The table 'ZCR94730.USER' is displayed, showing the following data:

USERNAME	PASSWORD	MAILID
VENKATESH	5678	19IT41@kcgcollege.com

The console also shows a 'Back' button and an 'Export to CSV' button.

DELETE TABLE:-

The screenshot shows the IBM Db2 on Cloud console interface. The top navigation bar includes tabs for 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is selected, and the table 'ZCR94730.USER' is displayed. The table structure is as follows:

USERNAME	PASSWORD	MAILID
VENKATESH	5678	19IT41@kcgcollege.com

Additional UI elements include a 'Back' button in the top right corner of the table view and an 'Export to CSV' button with a download icon. The left sidebar contains icons for various database operations like 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The bottom of the image shows a Windows taskbar with various application icons and a system clock indicating 14:16 on 29-10-2022.

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;
}

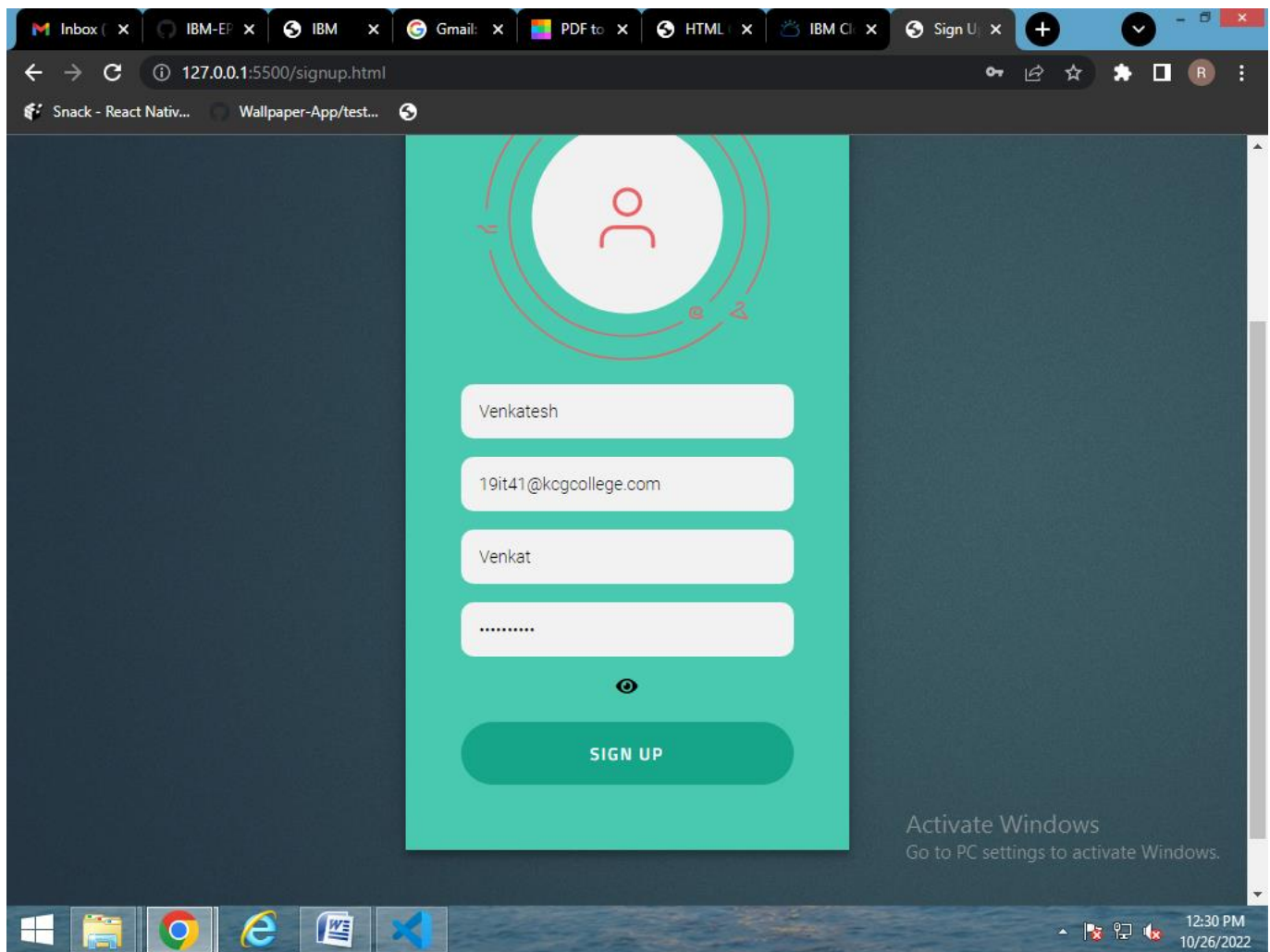
div {
  display: flex;
  align-items:
  center; justify-
  content:
  center; flex-
```

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

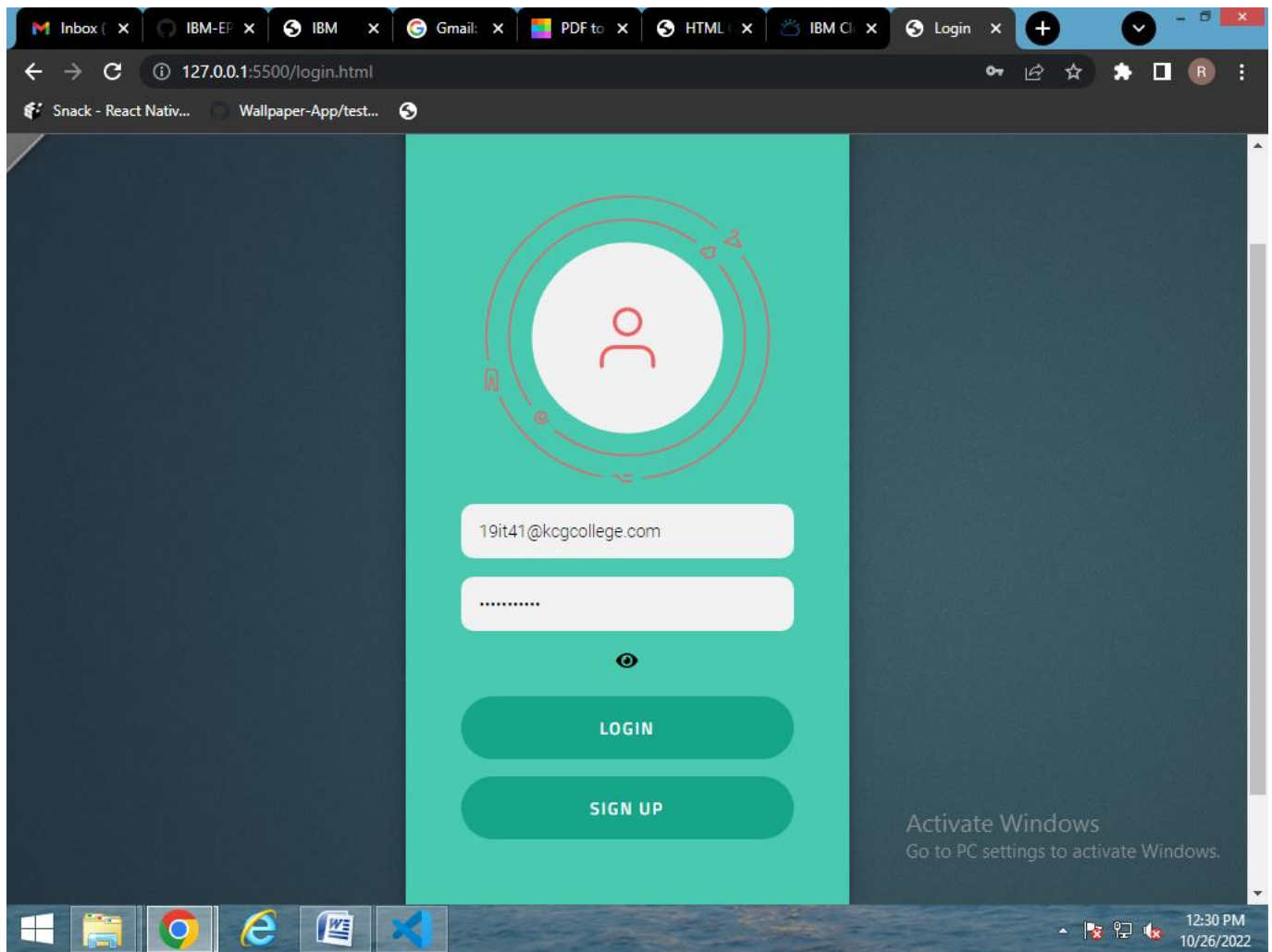
```
.form-text-vk {
    font-size: small;
    padding-bottom:
    10px;
}
```

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

Output:-
registration
page:-



Login Page:-



Welcome Page:-

Data Base Table :-

The screenshot shows the IBM Db2 on Cloud console interface. The browser tabs include 'Sent Mail - 19it35@kcg', 'IBM', 'GitHub - IBM-EPBL/IBM', 'Service Details - IBM', and 'IBM Db2 on Cloud'. The URL bar shows a long alphanumeric string. The console header is 'IBM Db2 on Cloud'. The left sidebar has icons for 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The main content area displays a table named 'ZCR94730.USER'. The table has three columns: 'USERNAME', 'PASSWORD', and 'MAILID'. One row is visible with the values 'VENKATESH', '5678', and '19IT41@kcgcollege.com'. There are buttons for 'Back' and 'Export to CSV'.

USERNAME	PASSWORD	MAILID
VENKATESH	5678	19IT41@kcgcollege.com