

### Assignment-3

<b>Team id</b>	PNT2022TMID30808
<b>PROJECT NAME</b>	PERSONAL EXPENSE TRACKER APPLICATION
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1. Create User table with user with email, username, roll number, password.

```
CREATE TABLE user(email varchar(50) not null, username
                    varchar(20) not null, roll_number int
                    not null, password varchar(20) not
                    null)
```

```
INSERT INTO user(email, username, roll_number, password)
VALUES('jeffrey@gmail.com','jeffrey12','4017','jeffrey')
```

2. Perform UPDATE, DELETE Queries with user table

```
UPDATE user SET username='jeffrey' WHERE email= 'jeffrey@gmail.com'
DELETE FROM user WHERE username = 'jeffrey'
```

3. Connect python code to db2.

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=54a2f15b-5c0f-46df-
8954-
7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32733;Secur
ity=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=hgm40493;PWD=M
yVIfYf5WrLQF6tG;",",")
```

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>

    <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">{{ 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=54a2f15b-5c0f-46df-8954-
7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32733;Security=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=hgm40493;PWD=MyVIfYf5WrL
QF6tG;","",")

@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'^[a-zA-Z0-9]+@[a-zA-Z0-9]+\.[a-zA-Z0-9]+', 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(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)


if __name__ == '__main__':
    app.debug = True
    app.run(host='0.0.0.0',port=8080)
```

**Output:**

Not secure | 192.168.43.2:8080/register

Register

Please fill out the form !

jeffrey

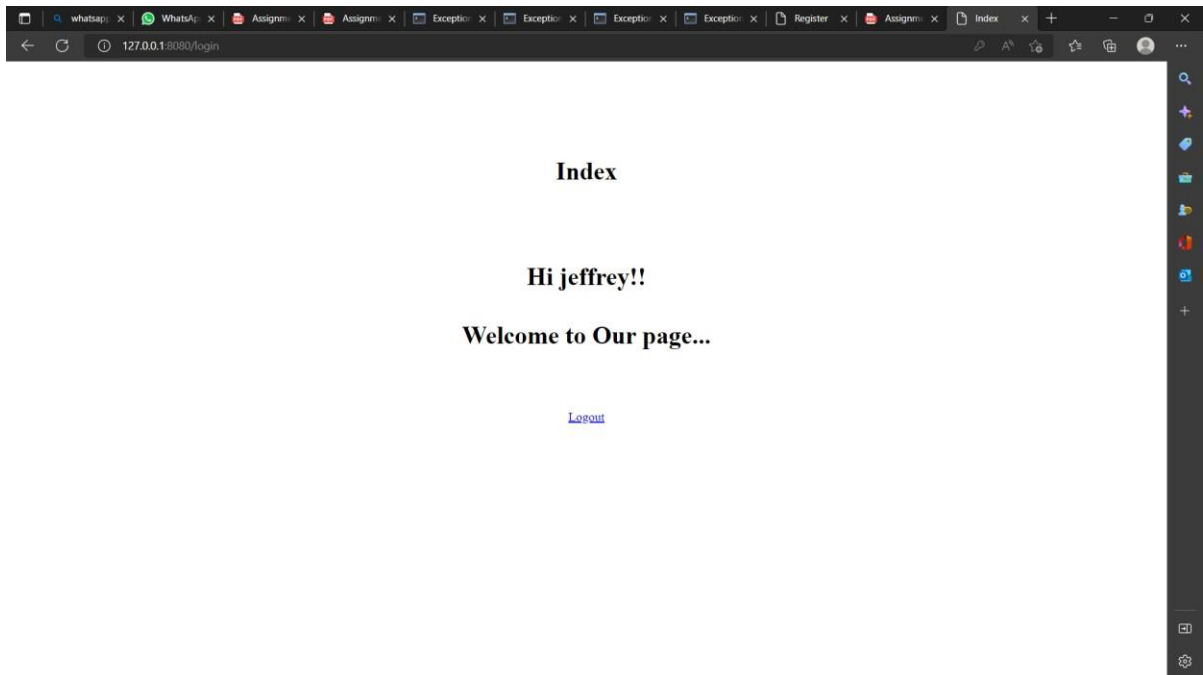
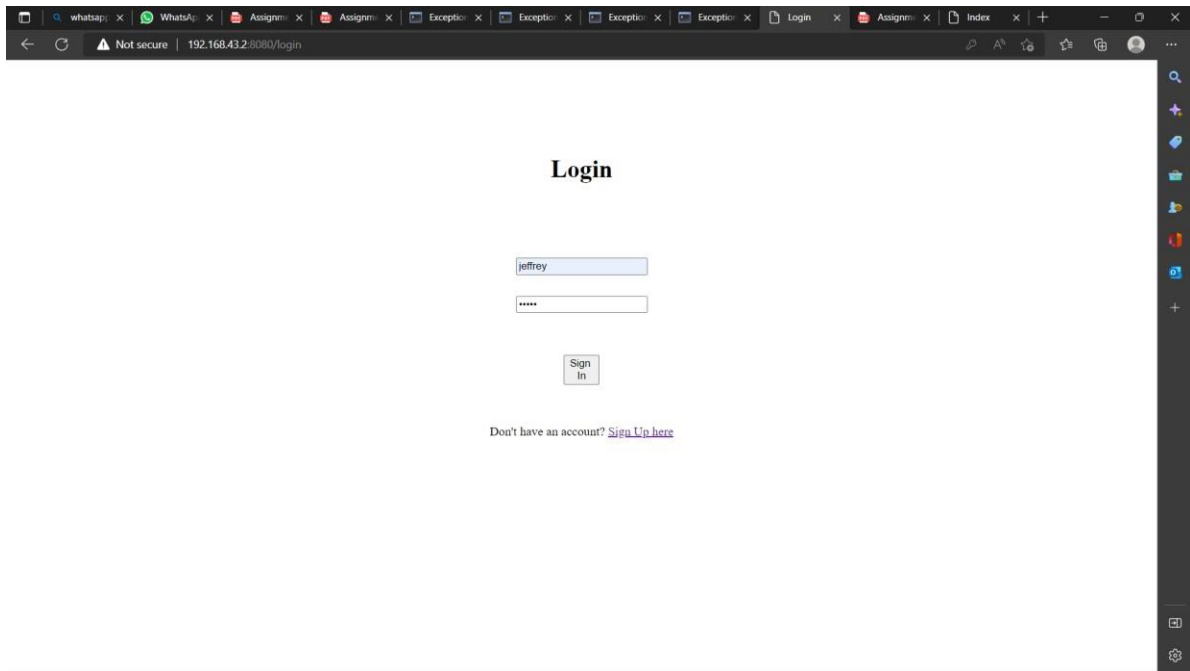
\*\*\*\*\*

jeffreylvictor@gmail.com

Sign Up

Already have an account? [Sign In here](#)





IBM Db2 on Cloud

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

Find schemas or tables Refresh

Tables

Name	Schema	Properties
USERS	HGM40493	---
USER	HGM40493	---

Total: 2, selected: 0

Table definition

USERS

Name	Data type	Nullable	Length	Scale
USERNAME	VARCHAR	N	20	0
EMAIL	VARCHAR	N	50	0
PASSWORD	VARCHAR	N	20	0

View data

IBM Db2 on Cloud

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

HGM40493.USERS Back

Export to CSV

USERNAME	EMAIL	PASSWORD
jeffrey	jeffreydvictor@gmail.com	12345