

Assignment-2

Team id	PNT2022TMID49642
PROJECT NAME	NUTRITION ASSISTANT APPLICATION
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1. Create User table with user with email, username, roll number, password.

```
CREATE TABLE user(  
    username varchar(20) not null,  
    email varchar(50) not null,  
    password varchar(20) not null)  
  
INSERT INTO user(username, email, password)  
VALUES('Hamthan', 'hamthan@gmail.com', '12345')
```

2. Perform UPDATE,DELETE Queries with user table

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

3. Connect python code to db2.

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=b70af05b-76e4-4bca-a1f5-  
23dbb4c6a74e.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32716;Security=  
SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=pbv90190;PWD=pEihUI0HD05igFYt;",'', '')
```

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></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 the index 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=b70af05b-76e4-4bca-a1f5-
23dbb4c6a74e.clogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32716;Security=
SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=pbv90190;PWD=pEihUI0HD05igFYt;",'', '')

@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 user 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)

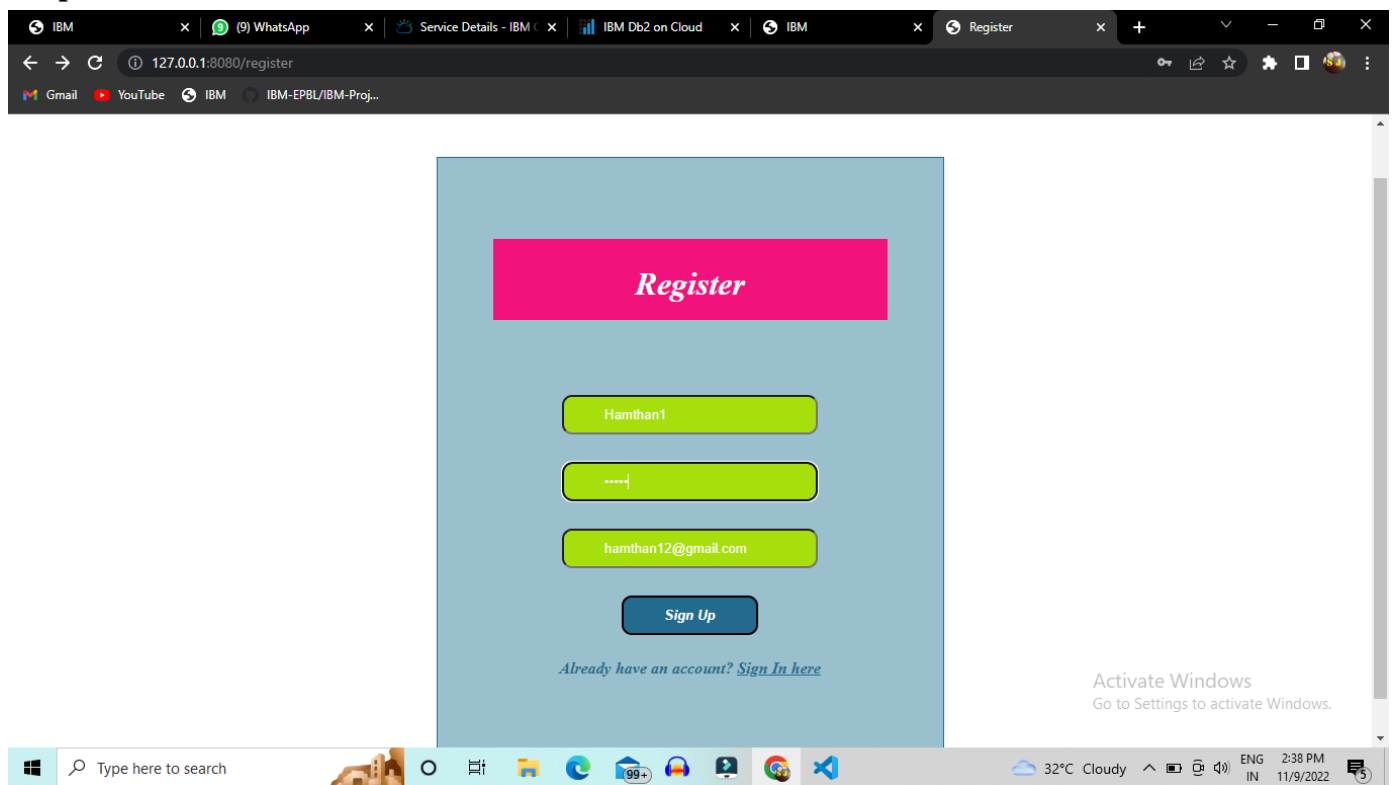
@app.route('/logout')
def logout():
    session.pop('loggedin', None)
    session.pop('id', None)
    session.pop('username', None)
    return redirect(url_for('login'))

@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 user 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'^^@+@[^@]+\.[^@]+', 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 user 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:



Register

You have successfully registered !

Enter Your Username

Enter Your Password

Enter Your Email ID

Sign Up

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

Activate Windows
Go to Settings to activate Windows.

Login

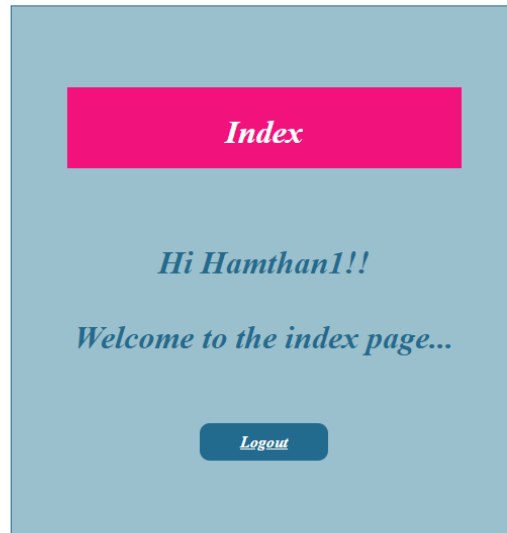
Hamthan1

.....

Sign In

Don't have an account? [Sign Up here](#)

Activate Windows
Go to Settings to activate Windows.



Activate Windows
Go to Settings to activate Windows.

PBV90190.USER

Export to CSV

USERNAME	EMAIL	PASSWORD
Hamthan	hamthan@gmail.com	12345
Hamthan1	hamthan12@gmail.com	54321
sumith	asdf@gmail.com	12345

The screenshot displays the IBM Db2 on Cloud console interface. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is active, showing a list of tables under the 'PBV90190' schema. The 'USER' table is selected, and its definition is displayed on the right. The table definition shows three columns: 'USERNAME' (VARCHAR, 20, NULLABLE), 'EMAIL' (VARCHAR, 50, NULLABLE), and 'PASSWORD' (VARCHAR, 20, NULLABLE). The console also features a 'Load Data' button and a 'View data' button.

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