

Assignment-2

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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.c1ogj3sd0tgtu0lqde00.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:

The screenshot displays a web browser window with the address bar showing `127.0.0.1:8080/register`. The browser has several tabs open, including 'IBM', '(9) WhatsApp', 'Service Details - IBM', 'IBM Db2 on Cloud', and 'Register'. The main content area shows a registration form with a pink 'Register' header. The form contains three input fields: a username field with 'Hamthan1', a password field with masked characters '.....', and an email field with 'hamthan12@gmail.com'. Below these fields is a blue 'Sign Up' button. At the bottom of the form, there is a link that says 'Already have an account? [Sign In here](#)'. The Windows taskbar at the bottom shows the search bar, task view, and various application icons. The system tray on the right indicates the temperature is 32°C, it is cloudy, and the time is 2:38 PM on 11/9/2022.

Register

Hamthan1

.....

hamthan12@gmail.com

Sign Up

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

Activate Windows
Go to Settings to activate Windows.

Type here to search

32°C Cloudy 2:38 PM 11/9/2022

Register

You have successfully registered !

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

Activate Windows
Go to Settings to activate Windows.

Login

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

Activate Windows
Go to Settings to activate Windows.

Index

Hi Hamthan1!!

Welcome to the index page...

[Logout](#)

Activate Windows
Go to Settings to activate Windows.

Load DataLoad History**Tables**ViewsIndexesAliasesMQTsSequencesApplication objects

SQL

Export to CSV

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

