**ASSIGNMENT 2**

|  |  |
| --- | --- |
| **DATE** | 29th September 2022 |
| **ROLL NUMBER** | 2019503005 |
| **NAME** | AMY MERIN THOMAS |

1. **Create registration page in html with username, email and phone number and by using POST method display it in next html page. Develop a flask program which should contain at least 5 packages used from pypi.org.**

**SOURCE CODE**

main.py

from flask import Flask, request, render\_template

app = Flask(\_\_name\_\_)

@app.route("/", methods=["GET", "POST"])

def registerHandler():

    if request.method == "GET":

        return render\_template("index.html")

    if request.method == "POST":

        data = {}

        data["name"] = request.form.get("name")

        data["email"] = request.form.get("email")

        data["phone-number"] = request.form.get("phone-number")

        return render\_template("success.html", data=data)

if \_\_name\_\_ == '\_\_main\_\_':

    app.run(debug=True)

templates/index.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>Register</title>

</head>

<body>

    <div class="wrapper">

        <form method="POST" action="/">

            <div>

                <label for="name">Name</label>

                <input type="text" id="name" name="name" required>

            </div>

            <div>

                <label for="email">Email</label>

                <input type="email" id="email" name="email" required>

            </div>

            <div>

                <label for="phone-number">Phone Number</label>

                <input type="tel" id="phone-number" name="phone-number" required>

            </div>

            <div>

                <label for="password">Password</label>

                <input type="password" id="password" name="password" required>

            </div>

            <button type="submit">Register</button>

        </form>

    </div>

</body>

</html>

templates/success.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>Success</title>

</head>

<body>

    <div class="wrapper">

        <h1>Registered Successfully</h1>

        <p>Name: {{data['name']}}</p>

        <p>Email: {{data['email']}}</p>

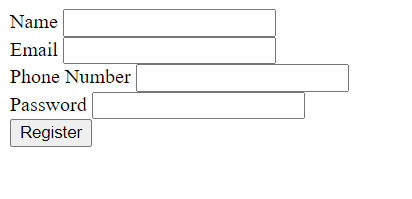
        <p>Phone Number: {{data['phone-number']}}</p>

    </div>

</body>

</html>

**OUTPUT**



1. **Create User table with user with email, username, roll-number, password. Perform UPDATE, DELETE Queries with user table. Connect python code to DB2. 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.**

**SOURCE CODE**

**CREATE STATEMENT**

CREATE TABLE QDP46216.user (

username VARCHAR(50) NOT NULL,

email VARCHAR(50) NOT NULL,

roll\_number VARCHAR(50) NOT NULL,

password VARCHAR(50) NOT NULL

);

**INSERT STATEMENT**

INSERT INTO QDP46216.user

VALUES ('A', 'A@gmail.com', '12345', 'Default@IBM');

**UPDATE STATEMENT**

UPDATE QDP46216.user

SET email = 'B@gmail.com'

WHERE username = 'A';

**DELETE STATEMENT**

DELETE FROM QDP46216.user

WHERE email = 'B@gmail.com';

**CONNECTING PYTHON TO DB2**

import ibm\_db

DATABASE = "bludb"

HOSTNAME = "fbd88901-ebdb-4a4f-a32e-9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud"

PORT = 32731

UID = "qdp46216"

PWD = "MGhHNGxutNYPFPfE"

connection = ibm\_db.connect(

    f"DATABASE={DATABASE};HOSTNAME={HOSTNAME};PORT={PORT};SECURITY=SSL;SSLServerCertificate=DigitCertGlobalRootCA.crt;UID={UID};PWD={PWD}", "", ""

)

**LOGIN & REGISTER**

from flask import Flask, render\_template, request, redirect, url\_for, session

import ibm\_db

import re

app = Flask(\_\_name\_\_)

app.secret\_key = 'Zenik'

DATABASE = "bludb"

HOSTNAME = "fbd88901-ebdb-4a4f-a32e-9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud"

PORT = 32731

UID = "qdp46216"

PWD = "MGhHNGxutNYPFPfE"

connection = ibm\_db.connect(

    f"DATABASE={DATABASE};HOSTNAME={HOSTNAME};PORT={PORT};SECURITY=SSL;SSLServerCertificate=DigitCertGlobalRootCA.crt;UID={UID};PWD={PWD}", "", ""

)

@app.route('/')

@app.route('/home')

def home():

    return render\_template('home.html', title='Home', msg=" ")

@app.route('/dashboard')

def dashboard():

    SQL = "SELECT \* FROM USERS WHERE username = ?"

    statement = ibm\_db.prepare(connection, SQL)

    ibm\_db.bind\_param(statement, 1, session['username'])

    ibm\_db.execute(statement)

    account = ibm\_db.fetch\_assoc(statement)

    return render\_template('dashboard.html', title='Dashboard', account=account)

@app.route('/logout')

def logout():

    session.pop('Loggedin', None)

    session.pop('id', None)

    session.pop('username', None)

    return redirect('/')

@app.route('/login', methods=['GET', 'POST'])

def login():

    message = ""

    global user\_id

    if request.method == "POST":

        username = request.form['username']

        password = request.form['password']

        SQL = "SELECT \* FROM USERS WHERE username =? AND password =?"

        statement = ibm\_db.prepare(connection, SQL)

        ibm\_db.bind\_param(statement, 1, username)

        ibm\_db.bind\_param(statement, 2, password)

        ibm\_db.execute(statement)

        account = ibm\_db.fetch\_assoc(statement)

        if account:

            session['Loggedin'] = True

            session['id'] = account['USERNAME']

            session['username'] = account['USERNAME']

            user\_id = account['USERNAME']

            return redirect('/dashboard')

        else:

            message = "Incorrect login credentials"

            return render\_template('login.html', title='Login', message=message)

@app.route('/register', methods=['GET', 'POST'])

def register():

    message = ""

    if request.method == "POST":

        username = request.form['username']

        email = request.form['email']

        password = request.form['password']

        roll\_number = request.form['roll-number']

        SQL = "SELECT \* FROM USERS WHERE username = ? or email= ?"

        statement = ibm\_db.prepare(connection, SQL)

        ibm\_db.bind\_param(statement, 1, username)

        ibm\_db.bind\_param(statement, 2, email)

        ibm\_db.execute(statement)

        account = ibm\_db.fetch\_assoc(statement)

        if account:

            message = "Account already exists"

        elif not re.match(r'[A-Za-z0-9]+', username):

            message = "Username should be only alphabets and numbers"

        else:

            SQL = "INSERT INTO USERS VALUES (?,?,?,?)"

            statement = ibm\_db.prepare(connection, SQL)

            ibm\_db.bind\_param(statement, 1, username)

            ibm\_db.bind\_param(statement, 2, email)

            ibm\_db.bind\_param(statement, 3, roll\_number)

            ibm\_db.bind\_param(statement, 4, password)

            ibm\_db.execute(statement)

            return redirect('/login')

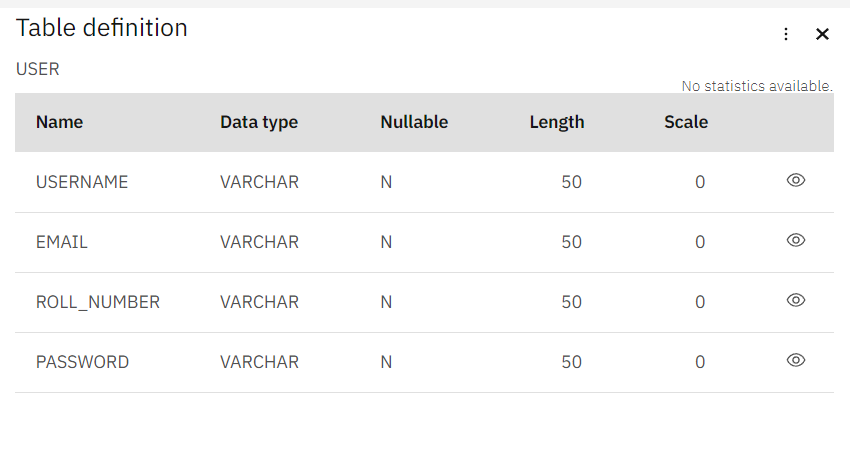
        return render\_template('register.html', message=message, title="Register")

if \_\_name\_\_ == '\_\_main\_\_':

    app.run(debug=True)

**OUTPUT**

USER TABLE



LOGIN & REGISTER

