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| **ROLL NUMBER** | 2019503059 |
| **NAME** | Vignesh Siva P |
| **TEAM ID** | PNT2022TMID35705 |

**ASSIGNMENT 2**

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 user (

username VARCHAR(50) NOT NULL,

email VARCHAR(50) NOT NULL,

roll\_no VARCHAR(50) NOT NULL,

password VARCHAR(50) NOT NULL

);

**INSERT STATEMENT**

INSERT INTO user

VALUES ('Vignesh Siva P', 'vignesh@gmail.com', '2019503059', 'Password@123');

INSERT INTO user

VALUES ('Ragul B', 'ragul@gmail.com', '2019503036', 'Password@123');

INSERT INTO user

VALUES ('Bharath M', 'bharath@gmail.com', '2019503509', 'Password@123');

INSERT INTO user

VALUES ('Shivani R', 'shivani@gmail.com', '2019503049', 'Password@123');

**UPDATE STATEMENT**

UPDATE user SET email = 'vigneshsiva@gmail.com'

where username = 'Vignesh Siva P';

**DELETE STATEMENT**

DELETE FROM user

WHERE email = vigneshsiva@gmail.com';

**CONNECTING PYTHON TO DB2**

import ibm\_db

DATABASE = "bludb"

HOSTNAME = "19af6446-6171-4641-8aba-9dcff8e1b6ff.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud"

PORT = 30699

UID = "ygg32911"

PWD = "kePH8FKY43ESmASQ"

connection = ibm\_db.connect(f"DATABASE={DATABASE};HOSTNAME={HOSTNAME};PORT={PORT};SECURITY=SSL;SSLServerCertificate=DigitCertGlobalRootCA.crt;UID={UID};PWD={PWD}", "", "")

**LOGIN & REGISTER**

from os import stat

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)

    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)

        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)

        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)

            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')

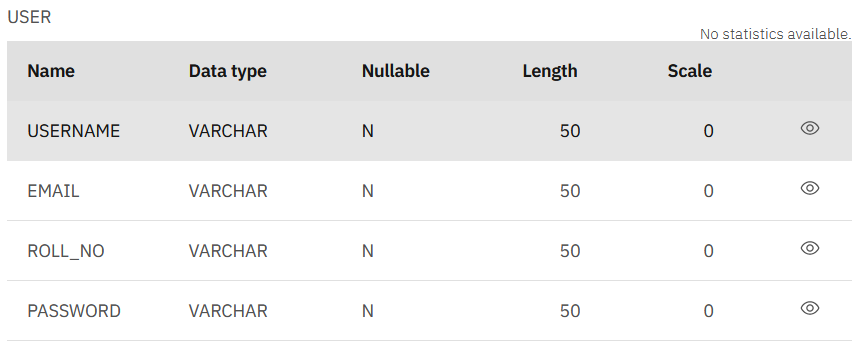
        return render\_template('register.html', message=message, title="Register")

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

    app.run(debug=True)

**OUTPUT**

**USER TABLE**



**RESULT OF INSERT QUERY**



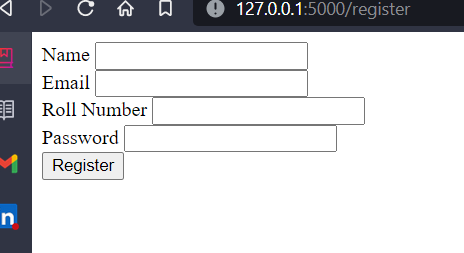
**RESULT OF UPDATE QUERY**

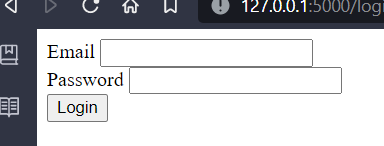


**RESULT OF DELETE QUERY**



**LOGIN & REGISTER**





**RESULT OF SUCCESSFUL LOGIN**

