

## Assignment - 2

Assignment Date	16 October 2022
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Student Roll Number	142219106017
Maximum Marks	2 Marks

### 1.Create User Table with user email username,roll number,password.

```
CREATE TABLE USER
(EMAIL VARCHAR(30) NOT NULL,
 USERNAME VARCHAR(24) NOT NULL,
 ROLLNO CHAR(3) NOT NULL,
 PASSWORD VARCHAR(6) NOT NULL)
IN DATABASE DSN8D11A
VALIDPROC DSN8EAPR;
```

### 2.Perform UPDATE,DELETE Queries with user table

Delete:

```
EXEC SQL DELETE FROM USER
WHERE USERNAME = 'E11' OR USERNAME = 'D21';
```

Update:

```
UPDATE USER
SET ROLLNO='3565'
WHERE USERNAME='000190';
```

### 3. Connect python code to db2.

```
import ibm_db
conn = ibm_db.connect("database","username","password")
```

### 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 the

**database and navigate to the login page to authenticate user username and password. If the user is valid show the welcome page**

```
# Store this code in 'app.py' file
```

```
from flask import Flask, render_template, request, redirect, url_for, session
from flask_mysql import MySQL
import MySQLdb.cursors
import re
```

```
app = Flask(__name__)
```

```
app.secret_key = 'your secret key'
```

```
app.config['MYSQL_HOST'] = 'localhost'
app.config['MYSQL_USER'] = 'root'
app.config['MYSQL_PASSWORD'] = 'your password'
app.config['MYSQL_DB'] = 'geeklogin'
```

```
mysql = MySQL(app)
```

```
@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']
        cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)
        cursor.execute('SELECT * FROM accounts WHERE username = %s AND password = %s', (username, password, ))
        account = cursor.fetchone()
        if account:
            session['loggedin'] = True
            session['id'] = account['id']
            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']
        cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)
        cursor.execute('SELECT * FROM accounts WHERE username = % s',
(username, ))
        account = cursor.fetchone()
        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:
            cursor.execute('INSERT INTO accounts VALUES (NULL, % s, % s, %
s)', (username, password, email, ))
            mysql.connection.commit()
            msg = 'You have successfully registered !'
    elif request.method == 'POST':
        msg = 'Please fill out the form !'
    return render_template('register.html', msg = msg)

```

