

ASSIGNMENT 2

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DOMAIN : CLOUD APPLICATION DEVELOPMENT

QUESTION: WORK ON SAMPLE JOB PORTAL APPLICATION CREATED

SOLUTION:

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'
```

#CONNECTION STATEMENT WITH IBM DB2 CLOUD

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=54a2f15b-5c0f-46df-
8954-
7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32733;S
ECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=bsb19147
;PWD=M8Q6aCGQuLHwiHkU",",")
```

#ROUTING FUNCTION WITH RENDER TEMPLATE

```
@app.route('/')
def homer():
    return render_template('home.html')
```

ROUTING FUNCTION WITH GET AND POST METHODS FOR LOGIN-PAGE

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

```
def login():
```

```
    global userid
```

```
    msg = ''
```

```
    if request.method == 'POST' :
```

```
        username = request.form['username']
```

```
        password = request.form['password']
```

```
        sql = "SELECT * FROM users WHERE username=? AND password=?"
```

```
        stmt = ibm_db.prepare(conn, sql)
```

```
        ibm_db.bind_param(stmt,1,username)
```

```
        ibm_db.bind_param(stmt,2,password)
```

```
        ibm_db.execute(stmt)
```

```
        account = ibm_db.fetch_assoc(stmt)
```

```
        print (account)
```

```
        if account:
```

```
            session['loggedin'] = True
```

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

```
            userid= account['USERNAME']
```

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

```
            msg = 'Logged in successfully !'
```

```
            return render_template('dashboard.html', msg = msg)
```

```
        else:
```

```
            msg = 'Incorrect username / password !'
```

```
    return render_template('login.html', msg = msg)
```

#REGISTER PAGE

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

def registet():

msg = "

if request.method == 'POST' :

username = request.form['username']

email = request.form['email']

password = request.form['password']

sql = "SELECT * FROM users WHERE username =?"

stmt = ibm_db.prepare(conn, sql)

ibm_db.bind_param(stmt,1,username)

ibm_db.execute(stmt)

account = ibm_db.fetch_assoc(stmt)

print(account)

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 = 'name must contain only characters and numbers !'

else:

```
insert_sql = "INSERT INTO users VALUES (?, ?, ?)"
prep_stmt = ibm_db.prepare(conn, insert_sql)
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)
```

```
@app.route('/dashboard')
```

```
def dash():
```

```
    return render_template('dashboard.html')
```

```
#JOB SEARCH
```

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

```
def apply():
```

```
    msg = "
```

```
    if request.method == 'POST' :
```

```
        username = request.form['username']
```

```
        email = request.form['email']
```

```
        qualification= request.form['qualification']
```

```
skills = request.form['skills']
jobs = request.form['s']
sql = "SELECT * FROM users WHERE username =?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt,1,username)
ibm_db.execute(stmt)
account = ibm_db.fetch_assoc(stmt)
print(account)
if account:
    msg = 'there is only 1 job position! for you'
    return render_template('apply.html', msg = msg)
```

#INSERTING DATA TO IBM DB2

```
insert_sql = "INSERT INTO job VALUES (?, ?, ?, ?, ?)"
prep_stmt = ibm_db.prepare(conn, insert_sql)
ibm_db.bind_param(prepare_stmt, 1, username)
ibm_db.bind_param(prepare_stmt, 2, email)
ibm_db.bind_param(prepare_stmt, 3, qualification)
ibm_db.bind_param(prepare_stmt, 4, skills)
ibm_db.bind_param(prepare_stmt, 5, jobs)
ibm_db.execute(prepare_stmt)
msg = 'You have successfully applied for job !'
session['loggedin'] = True
```

```
TEXT = "Hello Thirunilainayagi ,a new appliaction for job position"  
+jobs+"is requested"
```

```
#sendmail(TEXT,"thirunilai01@gmail.com")  
sendgridmail(" thirunilai01@gmail.com",TEXT)
```

```
elif request.method == 'POST':  
    msg = 'Please fill out the form !'  
    return render_template('apply.html', msg = msg)
```

```
@app.route('/display')
```

```
def display():
```

```
    print(session["username"],session['id'])
```

```
    cursor = mysql.connection.cursor()
```

```
    cursor.execute('SELECT * FROM job WHERE userid = % s', (session['id'],))
```

```
    account = cursor.fetchone()
```

```
    print("accountdislay",account)
```

```
    return render_template('display.html',account = account)
```

```
@app.route('/logout')
```

```
def logout():
```

```
    session.pop('loggedin', None)
```

```
    session.pop('id', None)
```

```
    session.pop('username', None)
```

```
    return render_template('home.html')
```

```
    #default line similar to main method
```

```
if __name__ == '__main__':
```

```
    app.run(host='0.0.0.0')
```

The main purpose for which the assignment was given is to get practiced with Flask connection with IBM DB2. So I understood the logic behind it and the flask code. For assignment purpose I have included the app.py file by changing the portions which could be with my understanding.