

```
from flask import Flask,redirect,url_for,render_template,request,make_response,jsonify,request
import ibm_db

from flask import request

import json

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=764264db-9824-4b7c-82df-
40d1b13897c2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=32536;SECURITY=SSL;SSLS
erverCertificate=abc.crt;UID=gnq12618;PWD=0glS4tFaR2ciK8fB",",")

print(conn)

print("connection successful...")

app = Flask(__name__,template_folder='template')
```

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

def home():

    return render_template("landing.html")

@app.route('/home')

def dash():

    return render_template("dashboard.html")

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

def login():
```

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

        username = request.form['username']

        password = request.form['password']

        sql = "select * from user 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)
```

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

```
print(dic)
```

```
requests = []
```

```
if dic:
```

```
    role = dic['ROLE']
```

```
    # sql = "select * from user where blood_group=?"
```

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

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

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

```
    # dic = ibm_db.fetch_assoc(stmt)
```

```
    # while dic != False:
```

```
        # single_request = {
```

```
            # 'name': dic['NAME'],
```

```
            # 'age': dic['AGE'],
```

```
            # 'sex': dic['SEX'],
```

```
            # 'blood_type': dic['BLOOD_TYPE']
```

```
        # }
```

```
        # print(single_request)
```

```
        # requests.append(single_request)
```

```
        # dic = ibm_db.fetch_assoc(stmt)
```

```
    return render_template('dashboard.html',username=username,role=role)
```

```
else:
```

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

```

        return redirect(url_for('home'))
else:
    print("else")
    return render_template('login.html')

@app.route('/signup',methods=['POST','GET'])
def signup():
    if request.method=='POST':
        username = request.form['username']
        email = request.form['email']
        password = request.form['password']
        roll_no = request.form['roll_no']
        sex = request.form['sex']
        age = request.form['age']
        address = request.form['address']
        blood_group = request.form['blood_group']
        sql = "insert into user values(?,?,?,?,?,?,?,?,?)"
        prep_stmt = ibm_db.prepare(conn,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.bind_param(prepare_stmt,4,roll_no)
        ibm_db.bind_param(prepare_stmt,5,sex)
        ibm_db.bind_param(prepare_stmt,6, age)
        ibm_db.bind_param(prepare_stmt,7, "USER")
        ibm_db.bind_param(prepare_stmt,8, address)
        ibm_db.bind_param(prepare_stmt,9, blood_group)
        ibm_db.execute(prepare_stmt)
        #db post operation
        return redirect(url_for('login'))
    elif request.method=='GET':

```

```

        return render_template('signup.html')

@app.route('/toggle',methods=['POST'])
def toggle_user():

    data = request.get_json(force=True)

    username =data['username']
    role = data['role']
    print(username)
    print(role)
    sql = "update user set role=? where username=?"
    prep_stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(prepare_stmt, 1, role)
    ibm_db.bind_param(prepare_stmt, 2, username)
    ibm_db.execute(prepare_stmt)
    return jsonify(
        status = "success",
        role = role
    )

@app.route('/requestPlasma',methods=['POST'])
def requestBloodPlasma():
    #fetch mail address of the donors
    username = request.form['username']
    name = request.form['name']
    age = request.form['age']
    sex = request.form['sex']
    blood_type = request.form['bloodtype']
    sql = "select email from user where blood_group=?"

```

```

stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, blood_type)
ibm_db.execute(stmt)
dic = ibm_db.fetch_assoc(stmt)
while dic!=False:
    print(dic['email'])
#send mail
#insert data into requests table
sql = "insert into bloodrequests(username,name,age,sex,blood_type) values (?, ?, ?, ?, ?)"
prep_stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(prepare_stmt, 1, username)
ibm_db.bind_param(prepare_stmt, 2, name)
ibm_db.bind_param(prepare_stmt, 3, age)
ibm_db.bind_param(prepare_stmt, 4, sex)
ibm_db.bind_param(prepare_stmt, 5, blood_type)
ibm_db.execute(prepare_stmt)

return jsonify(
    name = name,
    age = age,
    sex = sex,
    bloodtype = blood_type,
    status = "yes"
)

@app.route('/getrequests',methods=['POST'])
def getBloodRequests():
    data = request.get_json(force=True)

    username =data['username']
    sql = "select * from bloodrequests where username=?"

```

```
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, username)
ibm_db.execute(stmt)
dic = ibm_db.fetch_assoc(stmt)
requests = []
print(dic)
while dic != False:
    single_request = {
        'name':dic['NAME'],
        'age':dic['AGE'],
        'sex':dic['SEX'],
        'blood_type':dic['BLOOD_TYPE']
    }
    print(single_request)
    requests.append(single_request)
    dic = ibm_db.fetch_assoc(stmt)
return jsonify(
    username = username,
    requests = requests
)
```

```
if __name__ == '__main__':
    app.run(host="0.0.0.0",debug = True)
```