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

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=764264db-9824-4b7c-82df-40d1b13897c2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=32536;SECURITY=SSL;SSLServerCertificate=abc.crt;UID=gnq12618;PWD=0glS4tFaR2ciK8fB",'','')
print(conn)
print("connection successful...")
app = Flask(__name__)

@app.route('/home')
def home():
    return render_template("home.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)
        role = str()
        requests = []
        if dic:
            role = dic['ROLE']
            sql = "select * from user where blood_group=?"
            stmt = ibm_db.prepare(conn, sql)
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            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 jsonify(
                username=username,
                role=role,
                donors = requests
            )



        else:
            return redirect(url_for('login'))
        return redirect(url_for('home'))
    elif request.method=='GET':
        return render_template('login.html')

@app.route('/signup',methods=['POST','GET'])
def signup():
    if request.method=='POST':
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        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(prep_stmt,1,username)
        ibm_db.bind_param(prep_stmt,2,email)
        ibm_db.bind_param(prep_stmt,3,password)
        ibm_db.bind_param(prep_stmt,4,roll_no)
        ibm_db.bind_param(prep_stmt,5,sex)
        ibm_db.bind_param(prep_stmt,6, age)
        ibm_db.bind_param(prep_stmt,7, "USER")
        ibm_db.bind_param(prep_stmt,8, address)
        ibm_db.bind_param(prep_stmt,9, blood_group)
        ibm_db.execute(prep_stmt)
        #db post operation
        return redirect(url_for('login'))
    elif request.method=='GET':
        return render_template('signup.html')

@app.route('/toggle',methods=['PUT'])
def toggle_user():
    username = request.form['username']
    role = request.form['role']
    sql = "update user set role=? where username=?"
    prep_stmt = ibm_db.prepare(conn, sql)
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    ibm_db.bind_param(prep_stmt, 1, role)
    ibm_db.bind_param(prep_stmt, 2, username)
    ibm_db.execute(prep_stmt)
    return jsonify(
        status = "success",
        role = role
    )

@app.route('/requestPalsma',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(prep_stmt, 1, username)
    ibm_db.bind_param(prep_stmt, 2, name)
    ibm_db.bind_param(prep_stmt, 3, age)
    ibm_db.bind_param(prep_stmt, 4, sex)
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    ibm_db.bind_param(prep_stmt, 5, blood_type)
    ibm_db.execute(prep_stmt)

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

@app.route('/getrequests',methods=['POST'])
def getBloodRequests():
    username = request.form['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(type(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)
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    return jsonify(
        username = username,
        requests = requests
    )



if __name__=='__main__':
    app.run(debug = True)
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