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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__)

import os

from sendgrid import SendGridAPIClient

from sendgrid.helpers.mail import Mail


@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']

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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)

    # 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)

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else:

    return redirect(url_for('login'))

    return redirect(url_for('home'))

elif request.method == 'GET':

    return render_template('login.html')
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@app.route('/signup', methods=['POST', 'GET'])
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def signup():
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    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
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        return redirect(url_for('login'))
    elif request.method == 'GET':
        return render_template('signup.html')
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@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
    )
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@app.route('/requestPlasma', methods=['POST'])
def requestBloodPlasma():
    # fetch mail address of the donors
    data = request.get_json(force=True)
    username = data['username']
    name = data['name']
    age = data['age']
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sex = data['sex']
blood_type = data['bloodtype']
phone_number = data['phone_num']
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)
email_list = []
while dic != False:
    email_list.append(dic['EMAIL'])
    print(dic['EMAIL'])
    dic = ibm_db.fetch_assoc(stmt)
# send mail

message = Mail(
    from_email='eshwaran.s.2019.cse@rajalakshmi.edu.in',
    to_emails=email_list,
    subject='Sending with Twilio SendGrid is Fun',
    html_content='<h1>Need Of Blood</h1><table><tr><th>Name</th><th>' + name +
'</th></tr><tr><th>Age</th><th>' + age + '</th></tr><tr><th>Sex</th><th>' + sex +
'</th></tr><tr><th>Blood Group</th><th>' + blood_type + '</th></tr><tr><th>Phone
Number</th><th>' + phone_number + '</th></tr></table>'
)
try:
    sg = SendGridAPIClient("SG.3iBLSgAYTEuVbfSHu9dCPA.-
nrnikWJvaRINLMONA04_CuKAyPeV69c46vPAh3vUX0")
    response = sg.send(message)
    print(response.status_code)
    print(response.body)
    print(response.headers)
except Exception as e:

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        print(e.message)

# 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"
)

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@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(type(dic))

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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

)
```

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if __name__ == '__main__':

    app.run(host="0.0.0.0", debug=True)
```