```
from random import randint
from flask import Flask,render_template,request,url_for,redirect
from flask_mail import *
import ibm_db
dictionaryForEmailDonor={}
def printDonorData(conn):
  sql = "SELECT * FROM donorregistration"
  out = ibm_db.exec_immediate(conn, sql)
  document = ibm_db.fetch_assoc(out)
  while document != False:
    dictionaryForEmailDonor.update({document['EMAIL']:document['PASSWORD']})
    document = ibm_db.fetch_assoc(out)
dictionaryForEmailRecipient={}
def printRecipientData(conn):
  sql = "SELECT * FROM recipientregistration"
  out = ibm_db.exec_immediate(conn, sql)
  document = ibm_db.fetch_assoc(out)
  while document != False:
    dictionaryForEmailRecipient.update({document['EMAIL']:document['PASSWORD']})
    document = ibm_db.fetch_assoc(out)
dictionaryForEmailIncharge={}
def printInchargeData(conn):
  sql = "SELECT * FROM inchargeregistration"
  out = ibm_db.exec_immediate(conn, sql)
  document = ibm_db.fetch_assoc(out)
  while document != False:
    dictionaryForEmailIncharge.update({document['EMAIL']:document['PASSWORD']})
    document = ibm_db.fetch_assoc(out)
```

```
def
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insertDonorData(conn,username,firstname,lastname,age,gender,blood,email,phonenumber,password,district,pincode):

```
sql="INSERT INTO
```

donorregistration(username,firstname,lastname,age,gender,blood,email,phonenumber,password,district,pincode) VALUES

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out = ibm_db.exec_immediate(conn,sql)
print('Number of affected rows : ',ibm_db.num_rows(out),"\n")
```

def

insertRecipientData(conn,username,firstname,lastname,age,gender,blood,email,phonenumber,pass word,district,pincode):

```
sql="INSERT INTO
```

recipientregistration(username,firstname,lastname,age,gender,blood,email,phonenumber,password,district,pincode) VALUES

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out = ibm_db.exec_immediate(conn,sql)
print('Number of affected rows : ',ibm_db.num_rows(out),"\n")
```

def insertInchargeData(conn,hospitalname,email,phonenumber,password,district,address,pincode):

```
sql="INSERT INTO
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out = ibm_db.exec_immediate(conn,sql)
print('Number of affected rows : ',ibm_db.num_rows(out),"\n")
```

def deleteDonorData(conn,email):

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sql = "DELETE FROM donorregistration WHERE email={}".format(email)
out = ibm_db.exec_immediate(conn, sql)
print('Number of affected rows : ', ibm_db.num_rows(out), "\n")
```

def deleteRecipientData(conn,email):

```
sql = "DELETE FROM recipientregistration WHERE email={}".format(email)
  out = ibm_db.exec_immediate(conn, sql)
  print('Number of affected rows : ', ibm_db.num_rows(out), "\n")
def deleteInchargeData(conn,email):
  sql = "DELETE FROM inchargeregistration WHERE email={}".format(email)
  out = ibm_db.exec_immediate(conn, sql)
  print('Number of affected rows : ', ibm_db.num_rows(out), "\n")
try:
  conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=0c77d6f2-5da9-48a9-81f8-
86b520b87518.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=31198;SECURITY=SSL;SSLS
erverCertificate=DigiCertGlobalRootCA.crt;PROTOCOL=TCPIP;UID=bjn03696;PWD=ef96tLJX2VjzaCPX;
", "", "")
  print("Db connected")
except:
  print("Error")
app=Flask(__name__)
app.config['MAIL_SERVER']='smtp.gmail.com'
app.config['MAIL_PORT']=465
app.config['MAIL_USERNAME'] = 'gowrishankarj1110@gmail.com'
app.config['MAIL_PASSWORD'] = 'bfylpfroomoghhxi'
app.config['MAIL_USE_TLS'] = False
app.config['MAIL_USE_SSL'] = True
mail = Mail(app)
otp = randint(000000,9999999)
@app.route("/",methods=['POST','GET'])
def index():
  return render_template("indexpage.html")
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@app.route("/inchargelogin",methods=['POST','GET'])
def inchargelogin():
  if request.method=="POST":
    printInchargeData(conn)
    text=request.form['text']
    password=request.form['password']
    try:
      if dictionaryForEmailIncharge[text] == password:
        return redirect(url_for('inchargehome'))
    except:
      return "invalid email or password"
  return render_template("inchargelogin.html")
@app.route("/inchargeregister",methods=['POST','GET'])
def inchargeregister():
  if request.method=="POST":
    hospitalname = request.form['hospitalname']
    email = request.form['email']
    phonenumber=request.form['phonenumber']
    district=request.form['district']
    pincode=request.form['pincode']
    address=request.form['address']
    password = request.form['password']
    insertInchargeData(conn,hospitalname,email,phonenumber,password,district,address,pincode)
    return redirect(url_for('inchargeauthentication',email=email))
  return render_template('inchargeregister.html')
@app.route("/recipientlogin",methods=['POST','GET'])
def recipientlogin():
  if request.method=="POST":
```

```
printRecipientData(conn)
    text=request.form['text']
    password=request.form['password']
    try:
      if dictionaryForEmailRecipient[text] == password:
        return redirect(url_for('recipienthome'))
    except:
      return "invalid email or password"
  return render_template("recipientlogin.html")
@app.route("/recipientregister",methods=['POST','GET'])
def recipientregister():
  if request.method=="POST":
    username = request.form['username']
    firstname=request.form['firstname']
    lastname=request.form['lastname']
    gender=request.form['gender']
    age=request.form['age']
    blood=request.form['blood']
    email = request.form['email']
    phonenumber=request.form['phonenumber']
    district=request.form['district']
    pincode=request.form['pincode']
    password = request.form['password']
insertRecipientData(conn, username, firstname, lastname, age, gender, blood, email, phonenumber, pass
word, district, pincode)
    return redirect(url_for('recipientauthentication',email=email))
  return render_template('recipientregister.html')
@app.route("/inchargeauthentication/<email>",methods=['GET','POST'])
def inchargeauthentication(email):
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msg = Message('OTP',sender = 'gowrishankarj1110@gmail.com', recipients = [email])
  msg.body = str(otp)
  mail.send(msg)
  return render_template('inchargeauthentication.html',email=email)
@app.route('/inchargevalidate',methods=["POST"])
def inchargevalidate():
  user_otp = request.form['otp']
  email=request.form['email']
  email.lower()
  if otp == int(user_otp):
    return render_template("inchargelogin.html")
  else:
    deleteInchargeData(conn,email)
    return "<h3>failure</h3>"
@app.route("/recipientauthentication/<email>",methods=['GET','POST'])
def recipientauthentication(email):
  msg = Message('OTP',sender = 'gowrishankarj1110@gmail.com', recipients = [email])
  msg.body = str(otp)
  mail.send(msg)
  return render_template('recipientauthentication.html',email=email)
@app.route('/recipientvalidate',methods=["POST"])
def recipientvalidate():
  user_otp = request.form['otp']
  email=request.form['email']
  email.lower()
  if otp == int(user_otp):
    return render_template("recipientlogin.html")
  else:
```

```
deleteRecipientData(conn,email)
    return "<h3>failure</h3>"
@app.route("/donorauthentication/<email>",methods=['GET','POST'])
def donorauthentication(email):
  msg = Message('OTP',sender = 'gowrishankarj1110@gmail.com', recipients = [email])
  msg.body = str(otp)
  mail.send(msg)
  return render_template('donorauthentication.html',email=email)
@app.route('/donorvalidate',methods=["POST"])
def donorvalidate():
  user_otp = request.form['otp']
  email=request.form['email']
  email.lower()
  if otp == int(user_otp):
    return render_template("donorlogin.html")
  else:
    deleteDonorData(conn,email)
    return "<h3>failure</h3>"
@app.route("/donorlogin",methods=['POST','GET'])
def donorlogin():
  if request.method=="POST":
    printDonorData(conn)
    text=request.form['text']
    password=request.form['password']
    try:
      if dictionaryForEmailDonor[text] == password:
        return redirect(url_for('donorhome'))
    except:
```

```
return "invalid email or password"
  return render_template("donorlogin.html")
@app.route("/donorregister",methods=['POST','GET'])
def donorregister():
  if request.method=="POST":
    username = request.form['username']
    firstname=request.form['firstname']
    lastname=request.form['lastname']
    gender=request.form['gender']
    age=request.form['age']
    blood=request.form['blood']
    email = request.form['email']
    phonenumber=request.form['phonenumber']
    district=request.form['district']
    pincode=request.form['pincode']
    password = request.form['password']
insertDonorData(conn,username,firstname,lastname,age,gender,blood,email,phonenumber,passwo
rd, district, pincode)
    return redirect(url_for('donorauthentication',email=email))
  return render_template('donorregister.html')
@app.route("/donorhome")
def donorhome():
  return "donor home page"
@app.route("/recipienthome")
def recipienthome():
  return "recipient home page"
@app.route("/inchargehome")
```

```
def inchargehome():
    return "incharge home page"

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