| Project Name | Smart Fashion Recommender Application |  |  |
|--------------|---------------------------------------|--|--|
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## **Create IBM DB2 And Connect With Python**

This is simple flask authentication file used for the connection of IBM DB2

```
from flask import Blueprint, render_template, request, redirect, flash, url_for
from werkzeug.security import generate password hash, check password hash
from src.services import dbServices,otpServices
from src.constants import emailconstant
from . import home
from datetime import datetime
import ibm db
import re
#IBM Db2 initiated
conn = dbServices.conn
print(conn)
auth = Blueprint('auth',__name__)
@auth.route("otpGenerate/<fullname>/<mobileNumber>/<email>/<generate>/<sno>")
def otpGenerate(fullname, mobileNumber, email, generate, sno):
    get otp = otpServices.verifyOTP("+91"+mobileNumber)
    return
redirect(url for('auth.processOTP',fullname=fullname,mobileNumber=mobileNumber,email=ema
il,generate=generate,get_otp=get_otp,sno=sno))
@auth.route("signup/",methods=['GET','POST'])
def signup():
    if request.method == 'POST':
        fullname = request.form['name']
        mobileNumber = request.form['phone number']
        email = request.form['email']
        password = request.form['password']
        confirm password = request.form['cpassword']
        generate = generate password hash(password,method='sha256')
        if confirm password != password:
            flash('Password is not matched', category='error')
        elif(not re.fullmatch(emailconstant.emailChecker,email)):
            flash('Invalid email format', category='error')
        else:
            check exist ="SELECT * FROM CUSTOMERDETAILS WHERE MOBILE NUMBER=? OR
EMAIL=?"
            Prep_select = ibm_db.prepare(conn,check_exist)
            ibm_db.bind_param(Prep_select,1,mobileNumber)
            ibm_db.bind_param(Prep_select,2,email)
            ibm db.execute(Prep select)
            verify=ibm_db.fetch_assoc(Prep_select)
            if verify:
                flash('Account already exist!', category='error')
            else:
                print(verify['EMAIL'])
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return
redirect(url_for('auth.otpGenerate',fullname=fullname,mobileNumber=mobileNumber,email=em
ail,generate=generate,sno=verify["SNO"]))
    return render_template("sign-up.html")
@auth.route("processOTP/<fullname>/<mobileNumber>/<email>/<generate>/<get_otp>/<sno>",me
thods=['POST','GET'])
def processOTP(fullname, mobileNumber, email, generate, get otp, sno):
    if request.method == 'POST':
        if request.form['otp'] == get otp:
            try:
                flash('Account Created!','success')
                insert_sql ="INSERT INTO
CUSTOMERDETAILS(USERNAME, MOBILE NUMBER, EMAIL, PASSWORD, REGISTERED_ON, LAST_VISITED_AT)
VALUES(?,?,?,?,?,?);"
                prep stmt = ibm db.prepare(conn,insert sql)
                ibm db.bind param(prep stmt,1,fullname)
                ibm db.bind param(prep stmt,2,mobileNumber)
                ibm_db.bind_param(prep_stmt,3,email)
                ibm_db.bind_param(prep_stmt,4,generate)
                ibm_db.bind_param(prep_stmt,5,str(datetime.now()))
                ibm_db.bind_param(prep_stmt,6,str(datetime.now()))
                ibm db.execute(prep stmt)
            except Exception as e:
                print(e)
                return redirect(url for('auth.signup'))
            return
redirect(url for('home.user',username=fullname,email=email,mobile=mobileNumber,sno=sno))
        else:
            flash('OTP is not matched','error')
render_template("otp.html",fullname=fullname,mobileNumber=mobileNumber,email=email,gener
ate=generate)
@auth.route("signin/",methods=['GET','POST'])
def signin():
    if request.method=='POST':
        uname=request.form['email']
        password=request.form['password']
        if(uname.isdigit()):
            if(len(uname)==10):
                checkpass = "SELECT * FROM CUSTOMERDETAILS WHERE MOBILE_NUMBER=?"
                check_password = ibm_db.prepare(conn,checkpass)
                ibm db.bind param(check password,1,uname)
                ibm db.execute(check password)
                verifyPass = ibm db.fetch assoc(check password)
                if verifyPass:
                    if check password hash(verifyPass["PASSWORD"],password):
                        flash('Welcome {0}'.format(verifyPass["USERNAME"]),'success')
                        update_sql ="UPDATE CUSTOMERDETAILS SET LAST_VISITED_AT=? WHERE
MOBILE_NUMBER=? AND PASSWORD=?"
                        prep_stmt = ibm_db.prepare(conn,update_sql)
                        ibm db.bind param(prep stmt,1,datetime.now())
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ibm_db.bind_param(prep_stmt,2,verifyPass["MOBILE_NUMBER"])
                        ibm_db.bind_param(prep_stmt,3,verifyPass["PASSWORD"])
                        ibm_db.execute(prep_stmt)
                        return
redirect(url_for("home.user",username=verifyPass["USERNAME"],email=verifyPass["EMAIL"],m
obile=verifyPass["MOBILE NUMBER"],sno=verifyPass["SNO"]))
                    else:
                        flash('Invalid Password!',category='error')
                else:
                    flash('Invalid Mobile number!',category='error')
            else:
                flash('Invalid Mobile number!',category='error')
        elif(re.fullmatch(emailconstant.emailChecker.uname)):
            checkpass = "SELECT * FROM CUSTOMERDETAILS WHERE EMAIL=?"
            check password = ibm db.prepare(conn,checkpass)
            ibm db.bind param(check password,1,uname)
            ibm db.execute(check password)
            verifyPass = ibm db.fetch assoc(check password)
            if verifyPass:
                if check password hash(verifyPass["PASSWORD"],password):
                    flash('Welcome {0}'.format(verifyPass["USERNAME"]),'success')
                    update sql ="UPDATE CUSTOMERDETAILS SET LAST VISITED AT=? WHERE
EMAIL=? AND PASSWORD=?"
                    prep stmt = ibm db.prepare(conn,update sql)
                    ibm db.bind param(prep stmt,1,datetime.now())
                    ibm db.bind param(prep stmt,2,verifyPass["EMAIL"])
                    ibm db.bind param(prep stmt,3,verifyPass["PASSWORD"])
                    ibm db.execute(prep stmt)
                    return
redirect(url_for("home.user",username=verifyPass["USERNAME"],email=verifyPass["EMAIL"],m
obile=verifyPass["MOBILE_NUMBER"],sno=verifyPass["SNO"]))
                else:
                    flash('Invalid Password!',category='error')
            else:
                flash('Invalid Email address!',category='error')
        else:
             flash('Invalid email and password!',category='error')
    return render_template("sign-in.html")
@auth.route("forget/",methods=['POST','GET'])
def forget():
    if request.method == "POST":
        uname = request.form['email']
        if(uname.isdigit()):
            if(len(uname)==10):
                checkpass = "SELECT * FROM CUSTOMERDETAILS WHERE MOBILE NUMBER=?"
                check password = ibm db.prepare(conn,checkpass)
                ibm db.bind param(check password,1,uname)
                ibm db.execute(check password)
                verifyPass = ibm db.fetch assoc(check password)
                if verifyPass:
                    return
redirect(url_for("auth.change",mobilenumber=verifyPass["MOBILE_NUMBER"]))
                else:
```

```
flash("Account doesn't exist", category='error')
            else:
                flash('Invalid Mobile number!',category='error')
        else:
            flash('Invalid Mobile number!',category='error')
    return render template("forget.html")
    #balance work in authenticaiton:
        #visible icon ok
        #session
        #cookie
@auth.route("change/<mobilenumber>",methods=['POST','GET'])
def change(mobilenumber):
    if request.method == "POST":
        new password = request.form['new password']
        c password = request.form['c password']
        if(new password == c password):
            get otp = otpServices.verifyOTP("+91"+mobilenumber)
            return
redirect(url_for("auth.processOTP_FORGET",mobileNumber=mobilenumber,get_otp=get_otp,pass
word=new password))
        else:
            flash('Password is not matched',category='error')
    return render template("change.html", msg="none")
@auth.route("processFORGET/<mobileNumber>/<get otp>/<password>",methods=['POST','GET'])
def processOTP FORGET(password,mobileNumber,get otp):
    if request.method == 'POST':
        if request.form['otp'] == get_otp:
            try:
                flash('Password Changed!','success')
                update sql ="UPDATE CUSTOMERDETAILS SET PASSWORD = ? WHERE
MOBILE NUMBER= ?"
                prep stmt = ibm db.prepare(conn,update sql)
                ibm db.bind param(prep stmt,1,generate password hash(password,method='sh
a256'))
                ibm db.bind param(prep stmt,2,mobileNumber)
                ibm db.execute(prep stmt)
                return render_template('change.html',msg="success")
            except:
                flash('Problem with internal system')
        else:
            flash('OTP is not matched','error')
    return render_template("otp.html")
@auth.route("logout/")
def logout():
    return redirect(url for("home.index"))
```