

## IMPLEMENTING WEB APPLICATION

### CREATE IBM DB2 AND CONNECT WITH PYTHON

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Team ID	PNT2022TMID34574
Project Name	Smart Fashion Recommender Application
Maximum Marks	2 Marks

#### CREATE IBM DB2 AND CONNECT WITH PYTHON:

Create the IBM Db2 service in the IBM cloud and connect the python code with DB.

STEP 1: Create IBM DB2

STEP 2: Connect Python Code with DB2

STEP 3: Database Table of Register / Login Details

STEP 4: Directed to the Home Page

## DB PIC 1: TABLE CREATED IN IBM-DB2

The screenshot shows the IBM Db2 on Cloud web interface. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is selected. Below the navigation bar is a search bar labeled 'Find schemas or tables' and a 'Refresh' button. The main content area displays a table titled 'Schemas' with columns 'Name', 'Type', and 'Tables'. A single row is visible: 'BPV31478' of type 'User' with 1 table. The bottom status bar indicates 'Total: 1, selected: 0'.

Name	Type	Tables
BPV31478	User	1

## DB PIC 2: TABLE ATTRIBUTES

The screenshot shows the IBM Db2 on Cloud web interface with the 'Tables' tab selected. A 'New table' button is visible. The 'Tables' list on the left shows 'USER' in schema 'BPV31478'. The 'Table definition' panel on the right displays the attributes for the 'USER' table. The table has approximately 1 row (32.0 KB) and was updated on 2022-10-31 16:15:47. The attributes are listed in a table with columns: Name, Data type, Nullable, Length, and Scale. A 'View data' button is at the bottom.

Name	Data type	Nullable	Length	Scale
USERNAME	CHAR	N	32	0
PHONE	VARCHAR	N	10	0
PASSWORD	VARCHAR	N	32	0
CPASSWORD	VARCHAR	N	32	0

## PYTHON FILE: APP.PY

```
1 from flask import Flask, render_template, request, redirect, url_for
2 import ibm_db
3
4 dsn_hostname = "b1bc1829-6f45-4cd4-bef4-10cf081900bf.cloud.ibm.com:30000"
5 dsn_uid = "hpe31478" # e.g. "abc12345"
6 dsn_pwd = "2XpWm4d0ZuFsRgI" # e.g. "7d0Z3hlt9XN6s001"
7 dsn_driver = "iDBDR2CL1"
8 dsn_database = "bludb" # e.g. "BLUDB"
9 dsn_port = "32304" # e.g. "32733"
10 dsn_protocol = "TCPIP" # i.e. "TCPIP"
11 dsn_security = "SSL" # i.e. "SSL"
12 dsn_cert = "DigiCertGlobalRootCA.crt"
13 dsn = ("DRIVER={0};" "DATABASE={1};" "HOSTNAME={2};" "PORT={3};" "PROTOCOL={4};" "UID={5};" "PWD={6};" "SECURITY={7};" "SSLServerCertificate={8};").format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn_protocol, dsn_uid, dsn_pwd, dsn_security, dsn_cert)
14 conn = ibm_db.connect(dsn, "", "")
15 app = Flask(__name__)
16 @app.route("/", methods=['GET', 'POST'])
17 def regpage():
18     if request.method == 'POST':
19         USERNAME = request.form['username']
20         PHONE = request.form['phone']
21         PASSWORD = request.form['password']
22         CPASSWORD = request.form['cpassword']
23         insertQuery = "INSERT INTO USER VALUES ('"+USERNAME+"', '"+PHONE+"', '"+PASSWORD+"', '"+CPASSWORD+"')"
24         insertStmt = ibm_db.prepare(conn, insertQuery)
25         ibm_db.execute(insertStmt)
26         return redirect(url_for('loginpage'))
27     return render_template("register.html")
28 @app.route("/login", methods=['GET', 'POST'])
29 def loginpage():
30     if request.method == 'POST':
31         phone = request.form['phone']
32         password = request.form['password']
33         query = "select COUNT(*) from user where phone='"+phone+"' and password='"+password+"'"
34         stat5 = ibm_db.exec_immediate(conn, query)
35         row = ibm_db.fetch_tuple(stat5)
36         if(row[0] == 1):
37             return redirect(url_for('home_page'))
38         return render_template("login.html")
39 def home_page():
40     return render_template("dashboard.html")
41 if __name__ == '__main__':
42     app.run()
```

## PAGE 1: Registration

Registration page

127.0.0.1:5000

### Registration

Username	Phone Number
<input type="text" value="Shayu"/>	<input type="text" value="9894222470"/>
Password	Confirm Password
<input type="password" value="....."/>	<input type="password" value="....."/>

Register

PAGE 2: Login

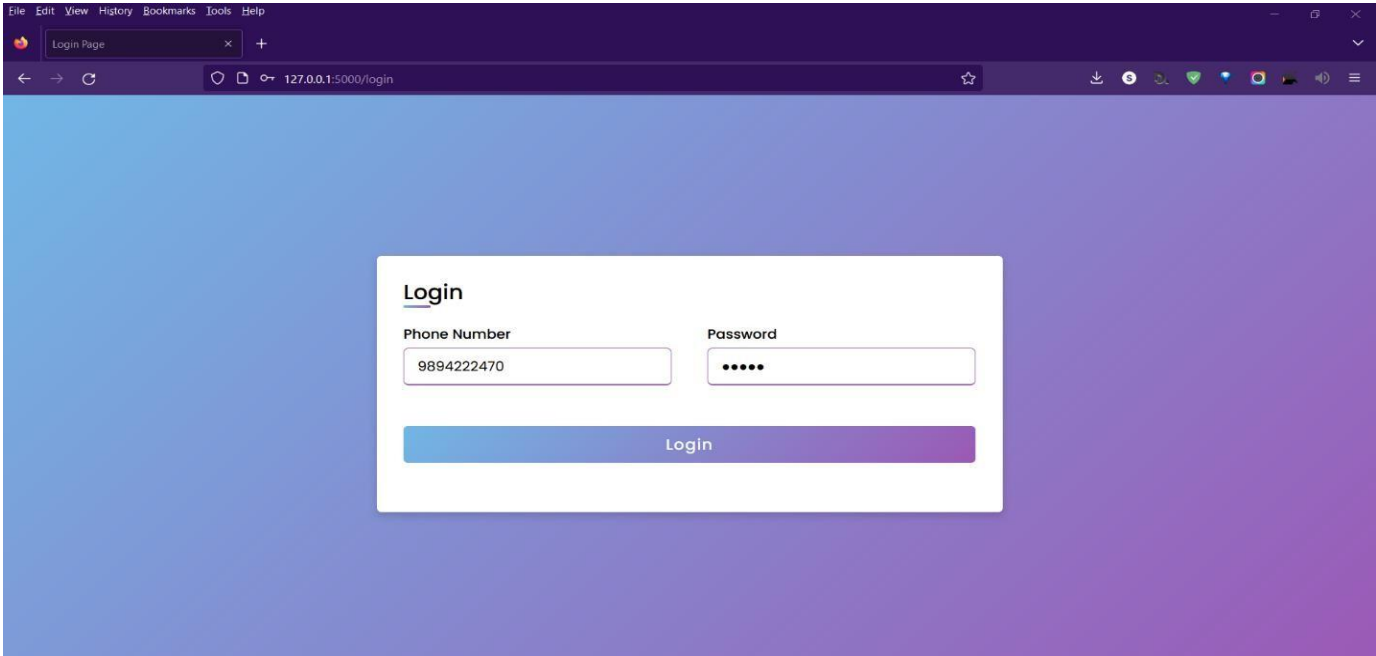


TABLE: DATABASE TABLE

A screenshot of the IBM Db2 on Cloud console. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is selected, showing a table named 'BPV31478.USER'. To the right of the table name are 'Back' and 'Export to CSV' buttons. Below the table name, a table structure is shown with four columns: 'USERNAME', 'PHONE', 'PASSWORD', and 'CPASSWORD'. A single row of data is displayed with the values 'Shayu', '9894222470', 'jmj7', and 'jmj7'.

USERNAME	PHONE	PASSWORD	CPASSWORD
Shayu	9894222470	jmj7	jmj7

## DASHBOARD: Directed to PURPLE SPARKS

