

IMPLEMENTING WEB APPLICATION

CREATE IBM DB2 AND CONNECT WITH PYTHON

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Team ID	PNT2022TMID54054
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.

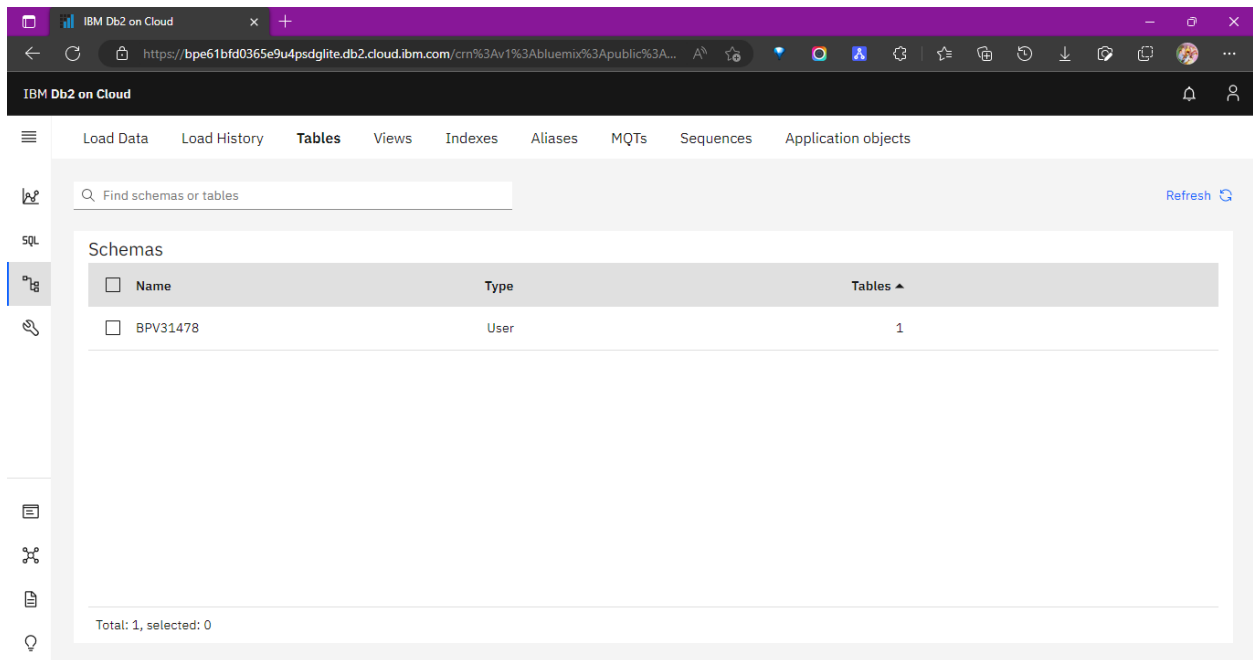
STEP 1: Create IBM DB2

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

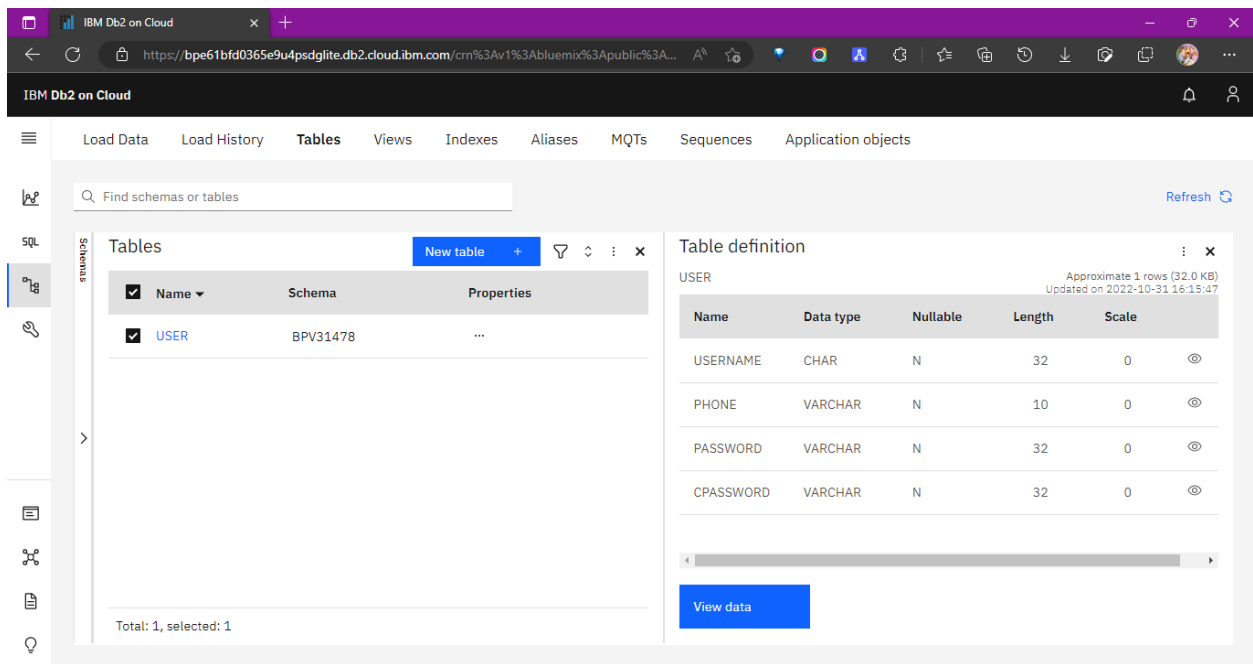


The screenshot shows the IBM Db2 on Cloud web interface. The top navigation bar includes links for Load Data, Load History, Tables, Views, Indexes, Aliases, MQTs, Sequences, and Application objects. The main content area displays the 'Schemas' page with a search bar and a 'Refresh' button. A table lists the schemas, with one entry visible:

Name	Type	Tables
BPV31478	User	1

At the bottom of the table, it indicates 'Total: 1, selected: 0'.

DB PIC 2: TABLE ATTRIBUTES



The screenshot shows the IBM Db2 on Cloud web interface with the 'Tables' page selected. The 'Table definition' panel for the 'USER' table is open, displaying the following attributes:

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

The table definition panel also shows 'Approximate 1 rows (32.0 KB)' and 'Updated on 2022-10-31 16:15:47'. A 'View data' button is visible at the bottom of the panel.

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.clogj3sd0tgu0lqde00.databases.appdomain.cloud"
5 dsn_uid = "bpu31478" # e.g. "abc12345"
6 dsn_pwd = "zXP1m4d4R2uf5Rg1" # e.g. "7d8Z3hdt9X06j00j"
7 dsn_driver = "(IBMDBZCL1)"
8 dsn_database = "ibmdb"
9 dsn_port = "32734" # 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         stmt5 = ibm_db.exec_immediate(conn, query)
35         row = ibm_db.fetch_tuple(stmt5)
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="....."/>

PAGE 2: Login

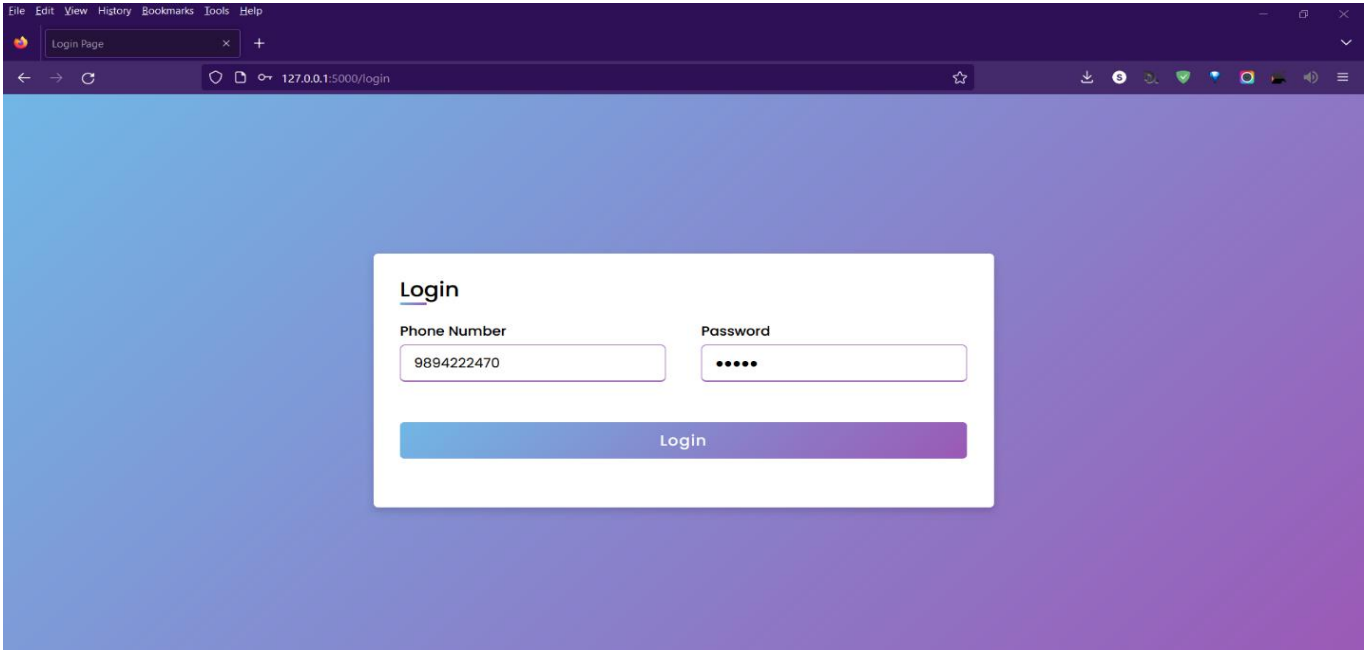


TABLE: DATABASE TABLE

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'. The table structure is as follows:

USERNAME	PHONE	PASSWORD	CPASSWORD
Shayu	9894222470	jmk7	jmk7

The console also features a left sidebar with icons for SQL, a database icon, and other tools. A 'Back' button is in the top right, and an 'Export to CSV' button is in the bottom right.

DASHBOARD: Directed to PURPLE SPARKS

