

Create IBM DB2 and Connect with Python

Team ID	PNT2022TMID25168
Project Name	Smart Fashion Recommender Application

Code:

```
import Flask, render_template, request, redirect, url_for, session

import ibm_db
import bcrypt
conn =
ibm_db.connect("DATABASE=bludb;HOSTNAME=;PORT=;SECURITY=SSL;SSLServerCertificate=
DigiCertGlobalRootCA.crt;UID=;PWD=",',','')

# url_for('static', filename='style.css')

app = Flask(__name__)
app.secret_key = b'_5#y2L"F4Q8z\n\xec]/'

@app.route("/",methods=['GET'])
def home():
    if 'email' not in session:
        return redirect(url_for('login'))
    return render_template('home.html',name='Home')

@app.route("/register",methods=['GET','POST'])
def register():
    if request.method == 'POST':
        email = request.form['email']
        username = request.form['username']
        rollNo = request.form['rollNo']
        password = request.form['password']

        if not email or not username or not rollNo or not password:
            return render_template('register.html',error='Please fill all fields')

        hash=bcrypt.hashpw(password.encode('utf-8'),bcrypt.gensalt())

        query = "SELECT * FROM USER WHERE email=? OR rollNo=?"
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stmt = ibm_db.prepare(conn, query)
ibm_db.bind_param(stmt,1,email)
ibm_db.bind_param(stmt,2,rollNo)
ibm_db.execute(stmt)
isUser = ibm_db.fetch_assoc(stmt)

if not isUser:
    insert_sql = "INSERT INTO User(username,email,PASSWORD,rollNo) VALUES
(?,?,?,?)"
    prep_stmt = ibm_db.prepare(conn, insert_sql)
    ibm_db.bind_param(prep_stmt, 1, username)
    ibm_db.bind_param(prep_stmt, 2, email)
    ibm_db.bind_param(prep_stmt, 3, hash)
    ibm_db.bind_param(prep_stmt, 4, rollNo)
    ibm_db.execute(prep_stmt)
    return render_template('register.html',success="You can login")
else:
    return render_template('register.html',error='Invalid Credentials')

return render_template('register.html',name='Home')

@app.route("/login",methods=['GET','POST'])
def login():
    if request.method == 'POST':
        email = request.form['email']
        password = request.form['password']

        if not email or not password:
            return render_template('login.html',error='Please fill all fields')
        query = "SELECT * FROM USER WHERE email=?"
        stmt = ibm_db.prepare(conn, query)
        ibm_db.bind_param(stmt,1,email)
        ibm_db.execute(stmt)
        isUser = ibm_db.fetch_assoc(stmt)
        print(isUser,password)

        if not isUser:
            return render_template('login.html',error='Invalid Credentials')

        isPasswordMatch = bcrypt.checkpw(password.encode('utf-8'),isUser['PASSWORD'].encode('utf-8'))

        if not isPasswordMatch:
            return render_template('login.html',error='Invalid Credentials')

```

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    session['email'] = isUser['EMAIL']
    return redirect(url_for('home'))

    return render_template('login.html',name='Home')

@app.route('/logout')
def logout():
    session.pop('email', None)
    return redirect(url_for('login'))

```

Outputs:

The screenshot shows the IBM Cloud console interface. The top navigation bar includes the IBM Cloud logo, a search bar, and user account information. The main content area displays the 'Service credentials' page for the 'Db2-Job-Recommend-App' resource, which is in an 'Active' state. The page includes a sidebar with navigation links: 'Manage', 'Getting started', 'Service credentials' (selected), and 'Connections'. The main content area has a heading 'Service credentials' and a subheading 'You can generate a new set of credentials for cases where you want to manually connect an app or external consumer to an IBM Cloud service. Learn more'. Below this is a search bar and a 'New credential' button. A table lists the existing credentials:

Key name	Date created
Service credentials-Admin	2022-10-30 3:24 PM

The bottom of the screen shows the Windows taskbar with various application icons and the system clock indicating 12:22 PM on 13-11-2022.

IBM Cloud

Search resources and products...

Catalog / Db2

A fully managed, high-performance relational data store running the enterprise-class Db2 database engine.

Create

About

Typical Service

Provider IBM

Last updated 11/10/2022

Category Databases

Compliance

EU Supported

HIPAA Enabled

IAP-enabled

Location

Sydney

Frankfurt

London

Dallas

Sao Paulo

Toronto

Tokyo

Milan 01

Montreal 01

Washington DC

Related links

API docs

Docs

Terms

Select a location

Dallas (us-south)

Select a pricing plan

Displayed prices do not include tax. Monthly prices shown for country or location: [United States](#)

Plan	Features	Pricing
Lite	200 MB of data storage 5 simultaneous connections Shared multi-tenant system	Free
Standard	Instance with flexible scaling of compute and storage Base instance starts at 8 GB RAM x 20 GB Storage <div>HIPAA Enabled</div>	<div>\$0.136 USD/Instance-Hour</div> <div>\$0.00027 USD/Storage-Hour</div> <div>\$0.0097 USD/Virtual-Processor-Core-Hour</div> <div>\$0.00031 USD/Backup-Usage-MINUTE_HOURS</div> <div>\$0.0999 USD/SERVICE_ENDPOINT_INSTANCE_HOURS</div>
Enterprise	Dedicated instance with flexible scaling of compute and storage Base instance starts at 4 vCPU x 16 GB RAM x 20 GB Storage	<div>\$3.30 USD/Instance-Hour</div> <div>\$0.00027 USD/Storage-Hour</div>

The starting configuration provides one SQL database per service instance residing on shared compute slices, with 2 shorable vCPUs (8 GB of memory), and 20 GB of storage for data and logs. All database deployed across multi-tenant compute infrastructure. Scale your database up to 16 vCPUs (64 GB of memory) and 4 TB of storage for data and logs. Standard offers a high availability option that includes one database running on three shared virtual servers. Each HA node is billed separately. The high availability virtual servers are provisioned across multiple availability zones in IBM Cloud regions that support it. Scale your compute and storage independently to achieve the perfect price/performance fit. Each plan includes up to 100 GB of backup storage, stored for 14 days.

Summary

Db2

Estimate costs

Location: Dallas

Plan: Standard

Service name: Db2-gv

Resource group: Default

This paid plan cannot be added to an IBM Cloud trial account.

You can add a credit card to create a Pay-As-You-Go account. If a free plan for this service is available, you can choose to add it.

☐ I have read and agree to the following license agreements:

Terms

Upgrade

Add to estimate

The screenshot displays the IBM Db2 on Cloud console interface. The top navigation bar includes tabs for 'Service Details - IBM Cloud', 'IBM Db2 on Cloud', and a browser tab for 'tpe61bf02355eb44psdgyte.db2.cloud.ibm.com'. The left sidebar contains a menu with 'Dashboard' (selected), 'Run SQL', 'Data', 'Administration', 'About', 'APIs', 'Documentation', and 'Support'. The main content area is titled 'IBM Db2 on Cloud' and features a sub-header with tabs for 'Overview', 'In-flight executions', 'Connections', and 'Table performance'. The 'Overview' tab is active, showing a 'Resource usage' section. This section includes a line graph titled 'Storage I/O (KB)' for the 'current.svc' instance, covering the 'Last 1 hour'. The y-axis represents 'Storage usage (KB)' from 0 to 100, and the x-axis represents 'Time' from 11:55 AM to 12:25 PM. The graph shows a flat line at 0 KB. The bottom of the image shows a Windows taskbar with various application icons and a system clock indicating 10:18 PM on 13-10-2022.