IMPLEMENTING WEB APPLICATION

Project Date	**September 2022**
Team ID	**PNT2022TMID30533**
Project Name	**Containment zone alerting application**

Create IBM DB2 And Connect With Python Code:

```
#! /usr/bin/python3
#.....# #
NAME:   ibm_db-connect_SERVER.py                    #
#                                                   #
# PURPOSE: This program is designed to illustrate how to use the
ibm_db.connect() API to #
#       establish a connection to a Db2 server.     #
#                                                   #
#       Additional APIs used:                       #
#           ibm_db.close()                          #
#                                                   #
#  USAGE:Log in as a Db2 database instance user (for example, db2inst1) and
issue the #
#       following command from a terminal window:
        ##
        #
#       ./ibm_db-connect_SERVER.py                  #
#                                                   #
#.....#
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```

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of assisting you in the creation of Python applications using the ibm_db library. #

# #

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#.....#

Load The Appropriate Python Modules

import sys # Provides Information About Python Interpreter Constants, Functions, & Methods import ibm_db # Contains The APIs Needed To Work With Db2 Databases

#.....#

```
# Import The ipynb_exit Class Definition, Attributes, And Methods That Have Been
Defined In The  #

# File Named "ipynb_exit.py"; This Class Contains The Programming Logic Needed
To Allow "exit()" #

# Functionality To Work Without Raising An Error Or Stopping The Kernel If The
Application Is        #

# Invoked In A Jupyter Notebook                                    # #----------------------

.....#

from ipynb_exit import exit


# Define And Initialize The Appropriate Variables hostName =

"197.126.80.22"  # IP Address Of Remote Server  portNum = "50000"   #

Port Number That Receives Db2 Connections On The Remote

Server  userID = "db2inst2"     # The Instance User ID At The Remote Server

passWord = "ibmdb2"             # The Password For The Instance User ID At The

Remote Server connectionID = None


# Display A Status Message Indicating An Attempt To Establish A Connection
To A Db2 Server

# Is About To Be Made print("\nConnecting to the \"" + hostName

+ "\' server .. ", end="")


# Construct The String That Will Be Used To Establish A Db2 Server Connection
connString

= "DRIVER={IBM DB2 ODBC DRIVER}"

connString += ";ATTACH=TRUE"    # Attach To A Server; Not A Database

connString += ";DATABASE="      # Ignored When Connecting To A Server

connString += ";HOSTNAME=" + hostName    # Required To Connect To A

Server connString += ";PORT=" + portNum                    # Required To

Connect To A Server connString

+= ";PROTOCOL=TCPIP" # Required To Connect To A Server

connString += ";UID=" + userID connString += ";PWD=" + passWord
```

```
# Attempt To Establish A Connection To The Server
Specified try:
   connectionID = ibm_db.connect(connString, '', '')
except Exception:
   pass

# If A Db2 Server Connection Could Not Be Established, Display An Error
Message And Exit if connectionID is None:
   print("\nERROR: Unable to connect to the \"" + hostName + "\'
server.") print("Connection string used: " + connString + "\n")
   exit(-1)

# Otherwise, Complete The Status
Message else:
   print("Done!\n")



# Add Additional Db2 Server-Related Processing Here ...
# For Example, ibm_db.createdb(), ibm_db.createdbNX(),
ibm_db.recreatedb(), ibm_db.dropdb()
# Attempt To Close The Db2 Server Connection That Was Just
Opened if not connectionID is None:
   print("Disconnecting from the \"" + hostName + "\' server ... ",
   end="") try:
      returnCode = ibm_db.close(connectionID)
                                                excep
t Exception:
      pass

   # If The Db2 Server Connection Was Not Closed, Display An Error
   Message And Exit if returnCode is False:
```

```
        print("\nERROR: Unable to disconnect from the " + hostName + "
        server.") exit(-1)

    # Otherwise, Complete The Status
    Message else:
        print("Done!\n")

# Return Control To The Operating
System exit()
```