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1
2 from __future__ import print_function
3 import mysql.connector
4 from mysql.connector import errorcode
5 from TableData import TABLES, TABLEORDER
6
7 DB_NAME = 'BufGrades'
8
9 class DatabaseSetup(object):
10     def __init__(self):
11         cnx, cursor = self.connect()
12         self.connect_to_and_or_create_database(cnx, cursor)
13         self.create_tables(cursor)
14         print("Created Tables Successfully")
15         self.add_name(cnx, cursor)
16         self.finish(cnx, cursor)
17
18     def connect(self):
19         try:
20             print("Attempting Connection")
21             cnx = mysql.connector.connect(user='root', password='pass', database=
22                 "BufGrades")
23             print("Creating Cursor")
24             cursor = cnx.cursor()
25
26             return cnx, cursor
27         except mysql.connector.Error as err:
28             print("Connection Failed: {} , Attempting to create database".format(err))
29             cnx = mysql.connector.connect(user='root', password='pass')
30             return cnx, cnx.cursor()
31
32     def connect_to_and_or_create_database(self, cnx, cursor):
33         try:
34             cnx.database = DB_NAME
35         except mysql.connector.Error as err:
36             if err.errno == errorcode.ER_BAD_DB_ERROR:
37                 self.create_database(cursor)
38                 cnx.database = DB_NAME
39             else:
40                 print(err)
41                 exit(1)
42
43     def create_database(self, cursor):
44         try:
45             cursor.execute(
46                 "CREATE DATABASE {} DEFAULT CHARACTER SET 'utf8'".format(DB_NAME))
47         except mysql.connector.Error as err:
48             print("Database Creation FAILURE: {}".format(err))
49             exit(1)
50
51     def create_tables(self, cursor):
52         for name in TABLEORDER:
53             ddl = TABLES[name]
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53         try:
54             print("Creating table {}: ".format(name), end='')
55             cursor.execute(ddl)
56         except mysql.connector.Error as err:
57             if err.errno == errorcode.ER_TABLE_EXISTS_ERROR:
58                 print("already exists.")
59             else:
60                 print(err.msg)
61     else:
62         print("All set")
63
64     def add_name(self, cnx, cursor):
65         try:
66             user = raw_input("\n Please enter your desired username ")
67             first = raw_input("\n Please enter your first name ")
68             last = raw_input("\n please enter your last name ")
69
70             addName_Data = (user, first, last)
71
72             addName = ("INSERT INTO personal_info"
73                       "(userName, firstName, lastName) "
74                       "VALUES (%s, %s, %s)")
75
76             cursor.execute(addName, addName_Data)
77             cnx.commit()
78             exit(1)
79         except mysql.connector.Error as err:
80             print(err.msg)
81
82     def finish(self, cnx, cursor):
83         cursor.close()
84         cnx.close()
85         print("Database setup complete.")
86
87 if __name__ == '__main__':
88     DatabaseSetup()
89
```