Assignment: Module 10.1 Assignment

**Assignment: Milestone #2**

**5/5/2024**

Bacchus\_Milestone\_2

Group 2

Matthew Trinh

Candice Garcia

Bryan Cabrera

Rajesh Ayyappanpillai

Code:

import mysql.connector

from mysql.connector import errorcode

# Connect to MySQL database

try:

    # Establish database connection

    db = mysql.connector.connect(

        user="root",

        password="popcorn",

        host="127.0.0.1",

        database="bacchus",

        raise\_on\_warnings=True

    )

    print("\nDatabase user {} connected to MySQL on host {} with database {}".format("root", "127.0.0.1", "movies"))

    input("\nPress any key to continue...")

    cursor = db.cursor()

    # Define table creation queries

    create\_tables\_query = [

        """

        CREATE TABLE Employees (

            employee\_id INT AUTO\_INCREMENT PRIMARY KEY,

            name VARCHAR(255),

            department VARCHAR(255),

            title VARCHAR(255)

        )

        """,

        """

        CREATE TABLE Suppliers (

            supplier\_id INT AUTO\_INCREMENT PRIMARY KEY,

            name VARCHAR(255),

            product\_type VARCHAR(255),

            delivery\_frequency VARCHAR(255)

        )

        """,

        """

        CREATE TABLE Products (

            product\_id INT AUTO\_INCREMENT PRIMARY KEY,

            name VARCHAR(255),

            type VARCHAR(255)

        )

        """,

        """

        CREATE TABLE Orders (

            order\_id INT AUTO\_INCREMENT PRIMARY KEY,

            product\_id INT,

            supplier\_id INT,

            quantity INT,

            order\_date DATE,

            FOREIGN KEY (product\_id) REFERENCES Products(product\_id),

            FOREIGN KEY (supplier\_id) REFERENCES Suppliers(supplier\_id)

        )

        """,

        """

        CREATE TABLE Shipments (

            shipment\_id INT AUTO\_INCREMENT PRIMARY KEY,

            supplier\_id INT,

            expected\_delivery DATE,

            actual\_delivery DATE,

            FOREIGN KEY (supplier\_id) REFERENCES Suppliers(supplier\_id)

        )

        """,

        """

        CREATE TABLE Distributors (

            distributor\_id INT AUTO\_INCREMENT PRIMARY KEY,

            name VARCHAR(255),

            product\_id INT,

            FOREIGN KEY (product\_id) REFERENCES Products(product\_id)

        )

        """,

        """

        CREATE TABLE EmployeeHours (

            employee\_id INT,

            quarter INT,

            hours\_worked INT,

            FOREIGN KEY (employee\_id) REFERENCES Employees(employee\_id)

        )

        """

    ]

    # Execute table creation queries

    for query in create\_tables\_query:

        cursor.execute(query)

    db.commit()

    # Populate tables with sample data

    # Insert statements for each table

    # Display data in each table

    # Select statements for each table

# Define insert statements for each table

    employees\_data = [

        ("Jane vu", "Finance", "Financial Analyst"),

        ("Margaret Murphy", "Marketing", "Marketing Head"),

        ("Krish bob", "Marketing", "Assistant"),

        ("David Doyle", "Production", "Production Manager"),

        ("John Sexton", "Distribution", "Distribution Manager"),

        ("Charles Waston", "Supply", "Supply Manager")

    ]

    suppliers\_data = [

        ("Supplier A", "Blue and Red", "Monthly"),

        ("Supplier B", "Sky and Moon", "Monthly"),

        ("Supplier C", "Yellow and Boxes", "Monthly")

    ]

    products\_data = [

        ("Pinot noir", "Red Wine"),

        ("Syrah", "Red Wine"),

        ("Riesling", "White Wine"),

        ("Chardonnay", "White Wine")

    ]

    distributors\_data = [

        ("Distributor 1", 1),  # Distributor 1 carries Pinot noir

        ("Distributor 2", 2),  # Distributor 2 carries Syrah

        ("Distributor 3", 3),  # Distributor 3 carries Riesling

        ("Distributor 4", 4)   # Distributor 4 carries Chardonnay

    ]

    # Execute insert statements for each table

    cursor.executemany("INSERT INTO Employees (name, department, title) VALUES (%s, %s, %s)", employees\_data)

    cursor.executemany("INSERT INTO Suppliers (name, product\_type, delivery\_frequency) VALUES (%s, %s, %s)", suppliers\_data)

    cursor.executemany("INSERT INTO Products (name, type) VALUES (%s, %s)", products\_data)

    cursor.executemany("INSERT INTO Distributors (name, product\_id) VALUES (%s, %s)", distributors\_data)

    # Commit changes to the database

    db.commit()

except mysql.connector.Error as err:

    if err.errno == errorcode.ER\_ACCESS\_DENIED\_ERROR:

        print("Error: Access denied. Please check your username and password.")

    elif err.errno == errorcode.ER\_BAD\_DB\_ERROR:

        print("Error: Database does not exist.")

    else:

        print(err)

finally:

    if 'db' in locals() and db.is\_connected():

        cursor.close()

        db.close()

Output:

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