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C204

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Finals Lab Task 5. CRUD CLI using Python and MySQL

Source Code

```python
import mysql.connector

def connect_db():  6 usages

    return mysql.connector.connect(
        host="localhost",
        user="test_user",
        password="asdf",
        database="moviesDB")

def add_movie():  1 usage
    conn = connect_db()
    cursor = conn.cursor()

    title = input("Enter movie title: ")
    main_actor = input("Enter main actor: ")
    director = input("Enter director: ")
    genre = input("Enter genre: ")
    gross_sales = float(input("Enter gross sales: "))
    ratings = input("Enter ratings (G, PG, R13, R16, X): ")

    cursor.execute(""" INSERT INTO movies (title, main_actor, director, genre, gross_sales, ratings)
                       VALUES (%s, %s, %s, %s, %s, %s) """, (title, main_actor, director, genre, gross_sales, ratings))
    conn.commit()
    print("Movie Added Successfully!\n")
    conn.close()
```

```python
def view_movies():  1 usage
    conn = connect_db()

    cursor = conn.cursor()
    cursor.execute("SELECT * FROM movies")
    rows = cursor.fetchall()

    if rows:
        print("\nMovies List:")

        for row in rows:
            print(row)
    else:
        print("\nNo Movies Found.")
    conn.close()
```

```python
def update_movie():  1 usage
    conn = connect_db()
    cursor = conn.cursor()

    movie_id = int(input("Enter movie ID to update: "))
    title = input("Enter new title: ")
    main_actor = input("Enter new main actor: ")
    director = input("Enter new director: ")
    genre = input("Enter new genre: ")
    gross_sales = float(input("Enter new gross sales: "))
    ratings = input("Enter new ratings (G, PG, R13, R16, X): ")

    cursor.execute(""" UPDATE movies SET title=%s, main_actor=%s, director=%s, genre=%s, gross_sales=%s, ratings=%s
                       WHERE movie_id=%s """, (title, main_actor, director, genre, gross_sales, ratings, movie_id))
    conn.commit()
    print("Movie Updated Successfully!\n")
    conn.close()
```

```python
def delete_movie():  1 usage
    conn = connect_db()
    cursor = conn.cursor()

    movie_id = int(input("Enter movie ID to delete: "))
    cursor.execute("DELETE FROM movies WHERE movie_id=%s", (movie_id,))
    conn.commit()
    print("Movie Deleted Successfully!\n")
    conn.close()

def search_movie():  1 usage
    conn = connect_db()
    cursor = conn.cursor()

    search_term = input("Enter movie title to search: ")
    cursor.execute("SELECT * FROM movies WHERE title LIKE %s", ('%' + search_term + '%',))
    rows = cursor.fetchall()

    if rows:
        print("\nSearch Results:")
        for row in rows:
            print(row)
    else:
        print("\nNo Matching Movies Found.")
    conn.close()
```

```python
def total_movies():  1 usage
    conn = connect_db()
    cursor = conn.cursor()
    cursor.execute("SELECT COUNT(*) FROM movies")
    result = cursor.fetchone()
    print(f"\nTotal Number of Movies: {result[0]}")
    conn.close()
```

```python
def menu():  1 usage
    while True:
        print("\n------MOVIE DATABASE CRUD APP------")
        print("1- Add Movie: ")
        print("2- View All Movies: ")
        print("3- Update Movie: ")
        print("4- Delete a Movie: ")
        print("5- Search a Movie: ")
        print("6- Display Total Number of Records: ")
        print("7- Exit")
        choice = input("Enter your choice from (1-6): ")

        if choice == '1':
            add_movie()
        elif choice == '2':
            view_movies()
        elif choice == '3':
            update_movie()
        elif choice == '4':
            delete_movie()
        elif choice == '5':
            search_movie()
        elif choice == '6':
            total_movies()
        elif choice == '7':
            print("Exiting.....")
            break
        else:
            print("Invalid Input!")

if __name__ == '__main__':
    menu()
```