Movie Recommendation System

- **Get movie recommendations** based on genre, minimum rating, and release year.
- **Add movies to a personal favorites list**, while avoiding duplicates.
- **View their favorite movies** at any time.
- **Get a random movie suggestion** for a surprise recommendation.

Recommend Movies filtered based on

1 **Genre**

Filter by genre (Sci-Fi, Action, Comedy, Romance, Horror).

2 **Rating**

Set a minimum rating (0-10).

3 **Year**

Specify a minimum release year.

```python
import random


favorite_movies = ["Inception", "Interstellar", "The Matrix", "The Dark Knight"]


movies = [
    {"title": "Inception", "genre": "Sci-Fi", "year": 2010, "rating": 8.8},
    {"title": "Interstellar", "genre": "Sci-Fi", "year": 2014, "rating": 9.6},
    {"title": "The Matrix", "genre": "Sci-Fi", "year": 1999, "rating": 8.7},

    {"title": "Mad Max: Fury Road", "genre": "Action", "year": 2015, "rating": 8.1},
    {"title": "John Wick", "genre": "Action", "year": 2014, "rating": 7.4},
    {"title": "The Dark Knight", "genre": "Action", "year": 2008, "rating": 9.0},

    {"title": "The Grand Budapest Hotel", "genre": "Comedy", "year": 2014, "rating": 8.1},
    {"title": "Superbad", "genre": "Comedy", "year": 2007, "rating": 7.6},
    {"title": "Step Brothers", "genre": "Comedy", "year": 2008, "rating": 8.9},

    {"title": "La La Land", "genre": "Romance", "year": 2016, "rating": 8.0},
    {"title": "The Notebook", "genre": "Romance", "year": 2004, "rating": 7.9},
    {"title": "Titanic", "genre": "Romance", "year": 1997, "rating": 8.8},

    {"title": "A Quiet Place", "genre": "Horror", "year": 2018, "rating": 9.5},
    {"title": "Get Out", "genre": "Horror", "year": 2017, "rating": 9.7},
    {"title": "The Conjuring", "genre": "Horror", "year": 2013, "rating": 7.5},

]

def recommend_movies():
    genre = input("Enter the genre you want to watch: ").strip()
    min_rating = input("Enter the minimum rating (0-10) [optional]: ").strip()
```

```
30  def recommend_movies():
33      min_year = input("Enter the minimum year [optional]: ").strip()
34
35
36      recommendations = movies
37
38
39      if genre:
40          recommendations = [movie for movie in recommendations if movie['genre'].lower() == ge
41
42
43      if min_rating:
44          try:
45              min_rating = float(min_rating)
46              recommendations = [movie for movie in recommendations if movie['rating'] >= min_r
47          except ValueError:
48              print("Invalid rating input. Ignoring rating filter.")
49
50
51      if min_year:
52          try:
53              min_year = int(min_year)
54              recommendations = [movie for movie in recommendations if movie['year'] >= min_yea
55          except ValueError:
56              print("Invalid year input. Ignoring year filter.")
57
58
59      if recommendations:
60          print("\nRecommended Movies:")
61          for movie in recommendations:
62              print(f"- {movie['title']} (Genre: {movie['genre']}, Rating: {movie['rating']}, Y
```

```
def recommend_movies():
    else:
        print("No movies found based on your preferences.")

def add_to_favorites():
    movie = input("Enter the movie title to add to your favorites: ").strip()
    if any(movie.lower() == fav.lower() for fav in favorite_movies):
        print(f"'{movie}' is already in your favorite movies!")
    else:
        favorite_movies.append(movie)
        print(f"'{movie}' has been added to your favorite movies!")

def view_favorites():
    print("\nYour Favorite Movies:")
    if favorite_movies:
        for movie in favorite_movies:
            print(f"- {movie}")
    else:
        print("You have no favorite movies yet.")

def random_movie():

    movie = random.choice(movies)
    print(f"\nRandom Movie Recommendation: {movie['title']} (Genre: {movie['genre']}, Rating:

def main_menu():
    while True:
        print("\n--- Movie Recommendation System ---")
        print("1. Recommend Movies")
        print("2. Add to Favorite Movies")
        print("3. View Favorite Movies")
        print("4. Random Movie Recommendation")
```

```
        print(f"\nRandom Movie Recommendation: {movie['title']} (Genre: {movie['genre']}, Rating:

def main_menu():
    while True:
        print("\n--- Movie Recommendation System ---")
        print("1. Recommend Movies")
        print("2. Add to Favorite Movies")
        print("3. View Favorite Movies")
        print("4. Random Movie Recommendation")
        print("5. Exit")

        choice = input("Enter your choice (1-5): ")

        if choice == '1':
            recommend_movies()
        elif choice == '2':
            add_to_favorites()
        elif choice == '3':
            view_favorites()
        elif choice == '4':
            random_movie()
        elif choice == '5':
            print("Thank you for using the Movie Recommendation System!")
            break
        else:
            print("Invalid choice. Please try again.")


main_menu()
```

Output