



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.

```
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():
31     # Get user input for minimum year (optional)
32     min_year = input("Enter the minimum year [optional]: ").strip()
33
34     # Initialize recommendations with all movies
35     recommendations = movies
36
37     # Filter by genre
38     if genre:
39         recommendations = [movie for movie in recommendations if movie['genre'].lower() == genre.lower()]
40
41     # Filter by minimum rating
42     if min_rating:
43         try:
44             min_rating = float(min_rating)
45             recommendations = [movie for movie in recommendations if movie['rating'] >= min_rating]
46         except ValueError:
47             print("Invalid rating input. Ignoring rating filter.")
48
49     # Filter by minimum year
50     if min_year:
51         try:
52             min_year = int(min_year)
53             recommendations = [movie for movie in recommendations if movie['year'] >= min_year]
54         except ValueError:
55             print("Invalid year input. Ignoring year filter.")
56
57     # Print recommendations
58     if recommendations:
59         print("\nRecommended Movies:")
60         for movie in recommendations:
61             print(f"- {movie['title']} (Genre: {movie['genre']}, Rating: {movie['rating']}, Year: {movie['year']})")
62     else:
63         print("No movies found matching the criteria.")

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# Example usage
def main():
    genre = input("Enter genre: ")
    min_rating = input("Enter minimum rating: ")
    min_year = input("Enter minimum year: ")

    recommend_movies(genre, min_rating, min_year)

if __name__ == "__main__":
    main()

```

```

30 def recommend_movies():
31     else:
32         print("No movies found based on your preferences.")
33
34 def add_to_favorites():
35     movie = input("Enter the movie title to add to your favorites: ").strip()
36     if any(movie.lower() == fav.lower() for fav in favorite_movies):
37         print(f"'{movie}' is already in your favorite movies!")
38     else:
39         favorite_movies.append(movie)
40         print(f"'{movie}' has been added to your favorite movies!")
41
42 def view_favorites():
43     print("\nYour Favorite Movies:")
44     if favorite_movies:
45         for movie in favorite_movies:
46             print(f"- {movie}")
47     else:
48         print("You have no favorite movies yet.")
49
50 def random_movie():
51
52     movie = random.choice(movies)
53     print(f"\nRandom Movie Recommendation: {movie['title']} (Genre: {movie['genre']}, Rating:
54
55 def main_menu():
56     while True:
57         print("\n--- Movie Recommendation System ---")
58         print("1. Recommend Movies")
59         print("2. Add to Favorite Movies")
60         print("3. View Favorite Movies")
61         print("4. Random Movie Recommendation")

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85 print(f"\nRandom Movie Recommendation: {movie['title']} (Genre: {movie['genre']}, Rating:
86
87 def main_menu():
88     while True:
89         print("\n--- Movie Recommendation System ---")
90         print("1. Recommend Movies")
91         print("2. Add to Favorite Movies")
92         print("3. View Favorite Movies")
93         print("4. Random Movie Recommendation")
94         print("5. Exit")
95
96         choice = input("Enter your choice (1-5): ")
97
98         if choice == '1':
99             recommend_movies()
100         elif choice == '2':
101             add_to_favorites()
102         elif choice == '3':
103             view_favorites()
104         elif choice == '4':
105             random_movie()
106         elif choice == '5':
107             print("Thank you for using the Movie Recommendation System!")
108             break
109         else:
110             print("Invalid choice. Please try again.")
111
112
113 main_menu()

```

```

# Main Menu Function
def main_menu():
    while True:
        # Display Menu
        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")

        # Get User Choice
        choice = input("Enter your choice (1-5): ")

        # Handle Choices
        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.")

# Call the main menu function
main_menu()

```

Output

```
C:\Program Files\WindowsAp  X + v - □ X

1. Recommend Movies
2. Add to Favorite Movies
3. View Favorite Movies
4. Random Movie Recommendation
5. Exit
Enter your choice (1-5): 1
Enter the genre you want to watch: action
Enter the minimum rating (0-10) [optional]: 4
Enter the minimum year [optional]:

Recommended Movies:
- Mad Max: Fury Road (Genre: Action, Rating: 8.1, Year: 2015)
- John Wick (Genre: Action, Rating: 7.4, Year: 2014)
- The Dark Knight (Genre: Action, Rating: 9.0, Year: 2008)

--- Movie Recommendation System ---
1. Recommend Movies
2. Add to Favorite Movies
3. View Favorite Movies
4. Random Movie Recommendation
5. Exit
Enter your choice (1-5): 4

Random Movie Recommendation: Interstellar (Genre: Sci-Fi, Rating: 9.6, Year: 2014)

--- Movie Recommendation System ---
1. Recommend Movies
2. Add to Favorite Movies
3. View Favorite Movies
4. Random Movie Recommendation
```