

Dataset loaded successfully.

Shape: (7419, 5)

	movies id		title	year
0	872906		Jawan	2023.0
1	554600	Uri: The Surgical Strike		2019.0
2	781732		Animal	2023.0
3	975533		The Archies	2023.0
4	734253		Adipurush	2023.0

	genres
0	Action Adventure Documentary
1	Crime
2	Action Horror Comedy
3	Thriller Animation
4	Adventure Documentary Crime

Null values:

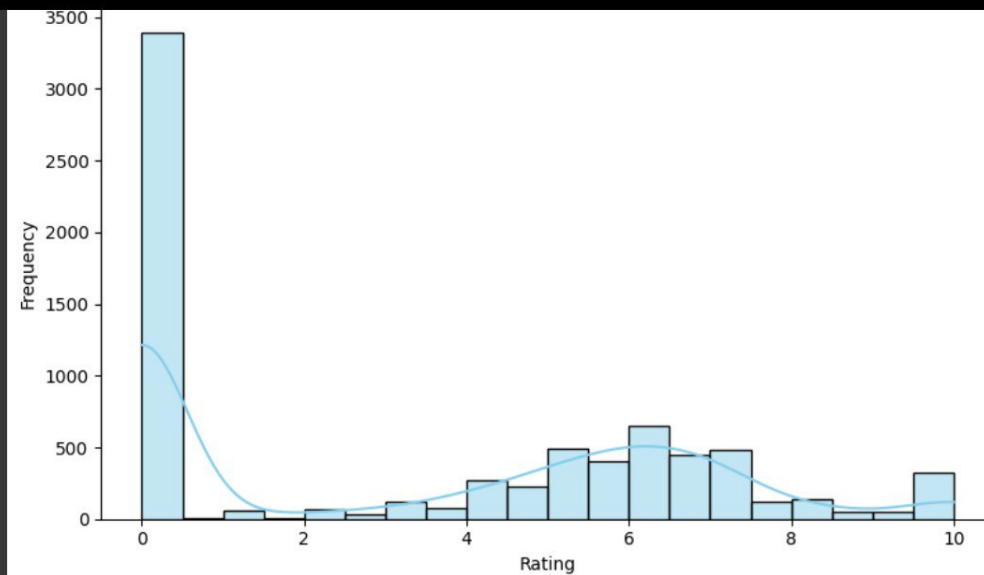
movies id	0
title	0
year	353
rating	0
genres	0

dtype: int64

Preprocessing complete. Cleaned data preview:

	movies id		title	year
0	872906		Jawan	2023.0
1	554600	Uri: The Surgical Strike		2019.0
2	781732		Animal	2023.0
3	975533		The Archies	2023.0
4	734253		Adipurush	2023.0

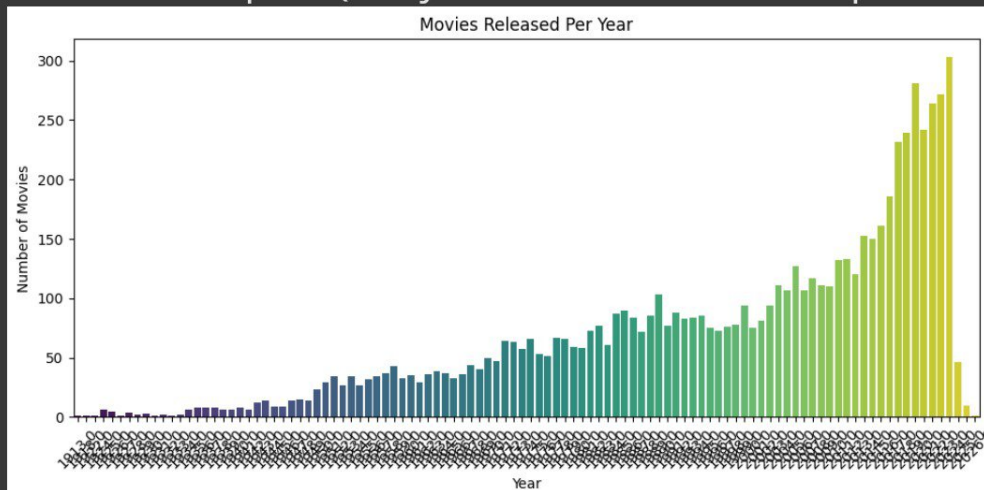
	genres	scaled_rating
0	Action Adventure Documentary	0.73
1	Crime	0.72
2	Action Horror Comedy	0.74
3	Thriller Animation	0.71
4	Adventure Documentary Crime	0.53



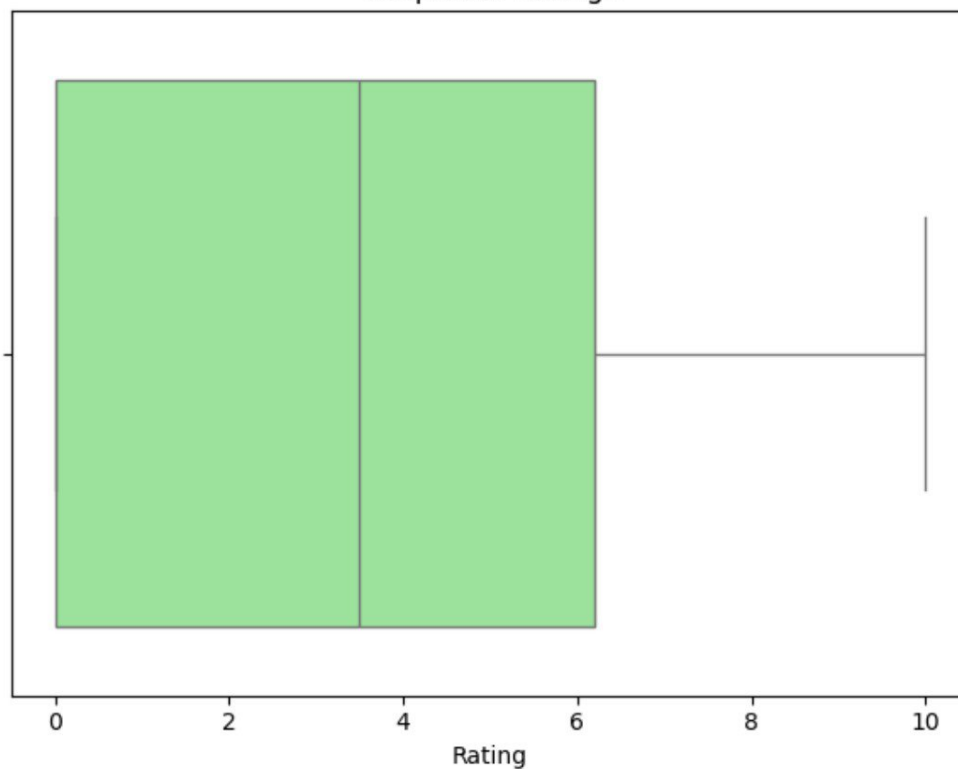
```
<ipython-input-5-d965b4cb0c97>:24: FutureWarni
```

Passing `palette` without assigning `hue` is d

```
sns.countplot(x='year', data=movies, palette
```



Boxplot of Ratings



Feature engineering complete. Saved as 'feature_engineered_movies.csv'.

	movies id	title	year	rating	genres	scaled_rating	movie_age	age_group	age
0	872906	Jawan	2023.0	7.3	Action Adventure Documentary	0.73	2	New	
1	554600	Uri: The Surgical Strike	2019.0	7.2	Crime	0.72	6	Modern	
2	781732	Animal	2023.0	7.4	Action Horror Comedy	0.74	2	New	
3	975533	The Archies	2023.0	7.1	Thriller Animation	0.71	2	New	
4	734253	Adipurush	2023.0	5.3	Adventure Documentary Crime	0.53	2	New	

Model built and deployment files saved successfully.

User-User Similarity Matrix:

userId	1	2	3	4
userId				
1	1.00	0.66	0.00	0.50
2	0.66	1.00	0.29	0.66
3	0.00	0.29	1.00	0.44
4	0.50	0.66	0.44	1.00

Predicted ratings for User 1:

Movie 104: 2.00

Movie 105: 3.00

