

Introduction

I will use tmdb data set from [Kaggle](#) to the second project in the Nano degree program. The aim of this study:

- Compare independent variables that are potentially affecting the revenue.
- Identify the most common genre in the movies using a word cloud

During this

- I will clean the dataset and select the independent variables that will use for the analysis.
- Extracting initial insights using descriptive statistics.
- Visualize my outcomes to deliver the conclusions

Data Cleaning:

Select the dependent and independent variables for this analysis: The aim of this analysis is to test three independent variables 'budget', 'popularity', 'genres' to determine which of them is most effective on the revenue of the movie.

Exploratory Data Analysis

Research Question 1

Creating pairplot to take an overview and detect the potential relation between variables visually
Using corr() method to detect it numerically

Initial notes:

- The Higher budges makes more profits for the movies.
- The revenue is not affected with runtime.
- The popularity has positive moderate correlation with the revenue.

Research Question 2

What is the most common genre?

To answer this question I will use word cloud to detect the most repeated word in genre column

Conclusions

For the 1st question:

- The most correlated variables that increase the profit is the budget.
- Higher budget does not always mean higher profit

For The second question:

The most popular genres are:

- Science Fiction.
- Comedy Drama
- Drama Thriller
- Drama Romance