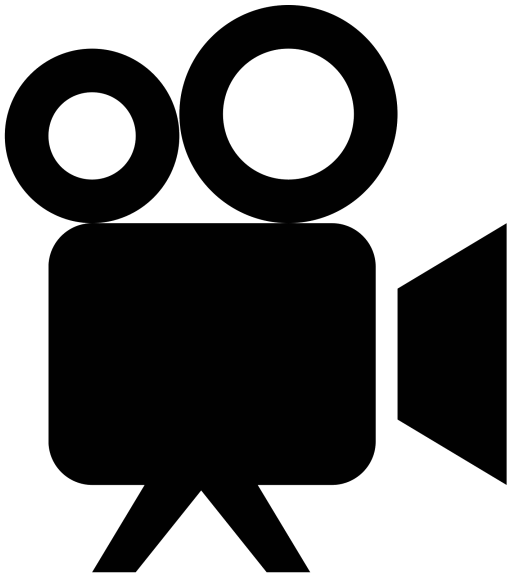
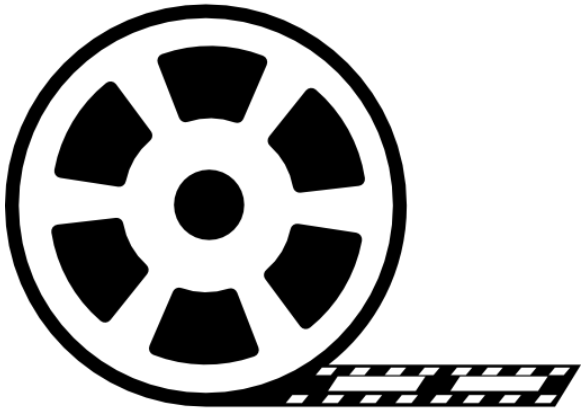


# Movie Recommender



# Introduction

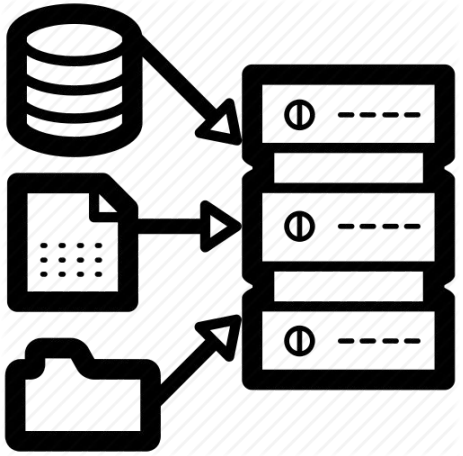
- Do you sometimes feel like you are being listened to?
- Does a Google search result in weeks of similar product suggestions?
- You are not alone!
- Targeted suggestions are a result of a predictive algorithm known as recommender systems

# Objective

- Recommender Systems aren’t always creepy
- They can be useful
- Power of goodness example: movie recommendation
- Only watch movies with similar rating to your favourite movie! HELLLLOOO MACHINE LEARNING!

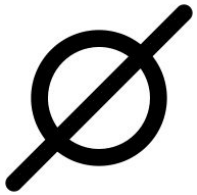
# Dataset

- Obtained from MovieLens
- 27,753,444 ratings by 283,228 users a cross 58098 movies
- Data collection between January 1995 - September 2018
- Data Inputs
  - userId
  - movieId
  - rating
  - movieId
  - title
  - genres

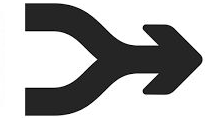


# Data Preparation

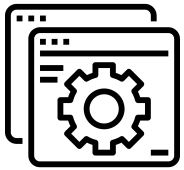
- Clean the Data
  - Checked for null values



- Merge Data Sets
  - Movies + Ratings on User ID

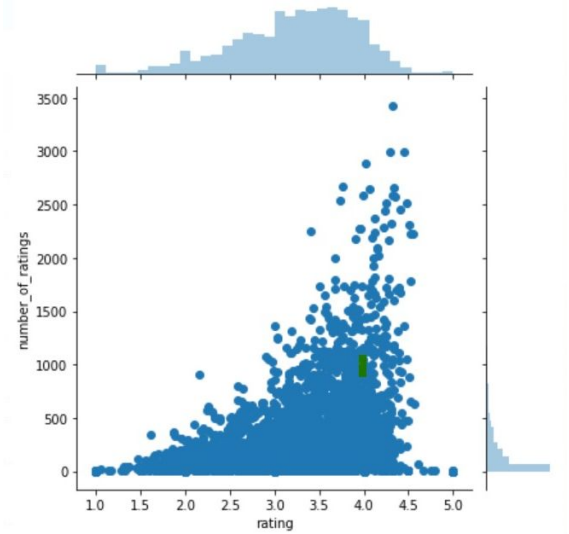


- Feature Engineering
  - Created a dataframe for each movie and the number of ratings in order to calculate the correlation



# Modelling

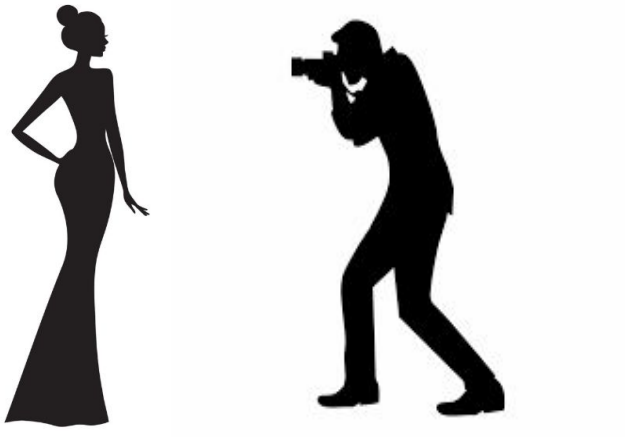
- Used seaborn plot to validate if the average rating is higher if the number of ratings is higher. A positive correlation was observed.




# Modelling

- A movie rating matrix was created logging users against the movie titles using the pandas pivot table functions.

- Searched for our movie of interest = Pulp Fiction (1994)



# Modelling

- Using the Corrwith() function, we looked for a correlation between Pulp Fiction ratings and the rating of the other movies in the dataset
- It was hard to observe if movies with a high correlation rate (1.0) were actually good movies, so we looked at the correlation rate and the number of ratings
- Highly correlated movies may have a low number of ratings

# Conclusion

- Look at highly correlated movies that also had a high number of ratings and the result was more popular movies similar to Pulp Fiction

- If you enjoy Home Alone but want a new holiday movie, we got your back!

**CAST**

| | |
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| DIALOGUE EDITOR | **MARSILINO BILATOS** |
| PROCESS EFFECTS | **SABINA MARTIN** |
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