

Providing recommendation solutions for movie streaming platforms.

#### **Meet the Movie Recommenders:**

- Thato Bogopane
- Morgan Ndlovu
- Keletso Pule
- Heperlot Pontso

### **Supervisor:**

Zintle Faltein-Maqubela



# The Client





#### Overview

- 1. Introduction
- 2. Problem statement
- 3. Exploratory Data Analysis
- 4. Machine Learning Models
- 5. Streamlit App
- 6. Conclusion
- 7. Credits
- 8. Q&A

#### **Introduction:**



- Too much time taken searching through the movies
- People have problem in selecting alternative items(eg.movies)
- Expand Cognitive resources
- Need large data set of movie collection.

#### **Problem Statement:**



- To engage with users
- Build a model that can recommend movies to users
- Deploy the model using an App
- Drive Traffic
- Deliver relevant content
- Increase order value

#### **Exploratory Data Analysis**



Analyse datasets using visuals

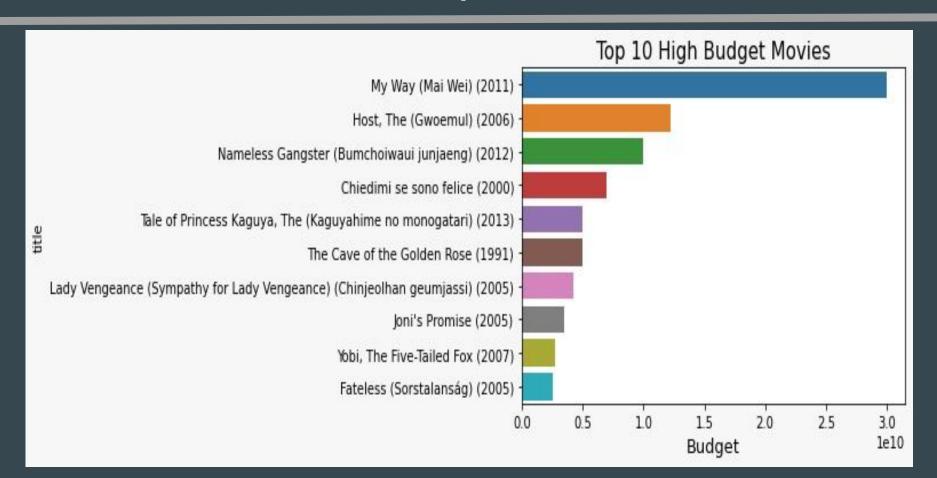
#### **Movie Budget Analysis**

#### Elements of a movie budget:

- Story rights
- Screenplay
- Producers
- Director
- Cast
- Production costs
- Visual effects
- Music



## What were the most expensive movies made?



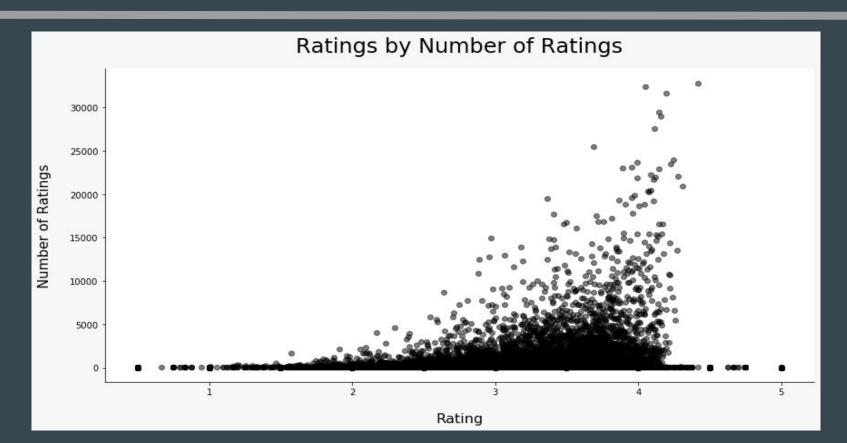
#### **Analysis of the ratings**

- How does the Movies ratings change as more people rate the movie?
- Ratings Distribution

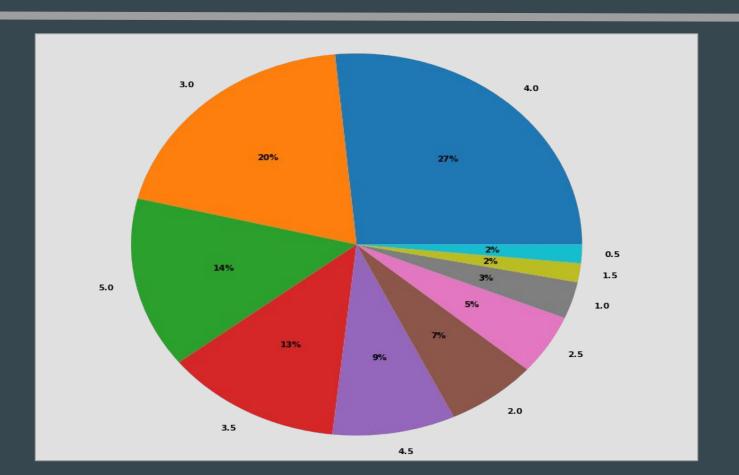
 Most popular movies based on their ratings



# How does the Movies ratings change as more people rate the movie?



## How are the ratings distributed throughout the dataset?



# Popular Cast:



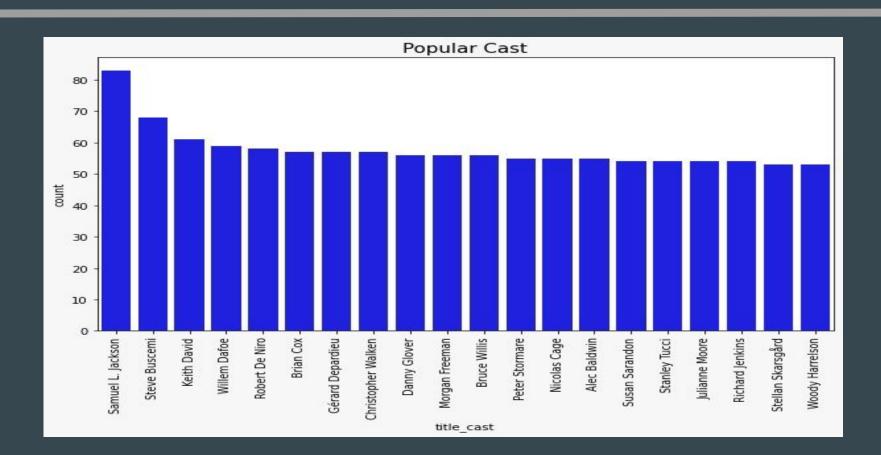








### Who are the most popular actors?

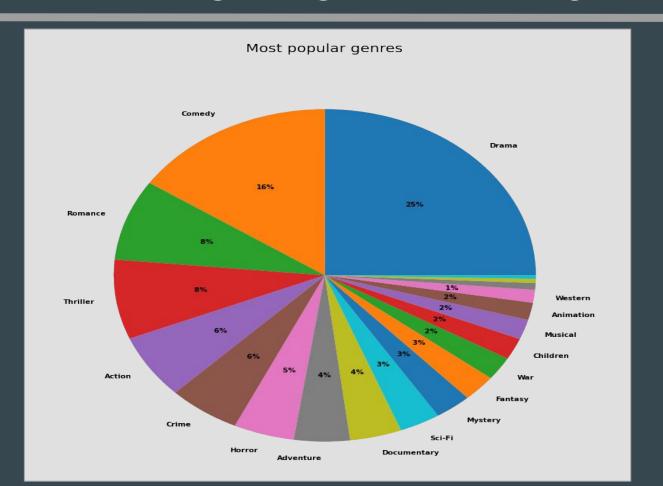


#### Which genres are found in our dataset?

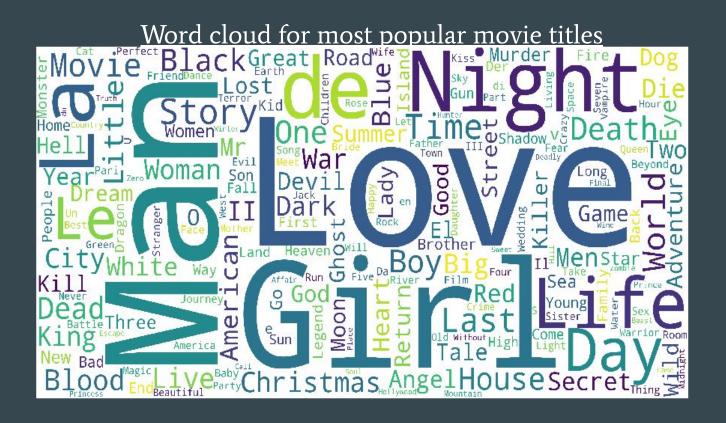
#### Word Cloud of Genres



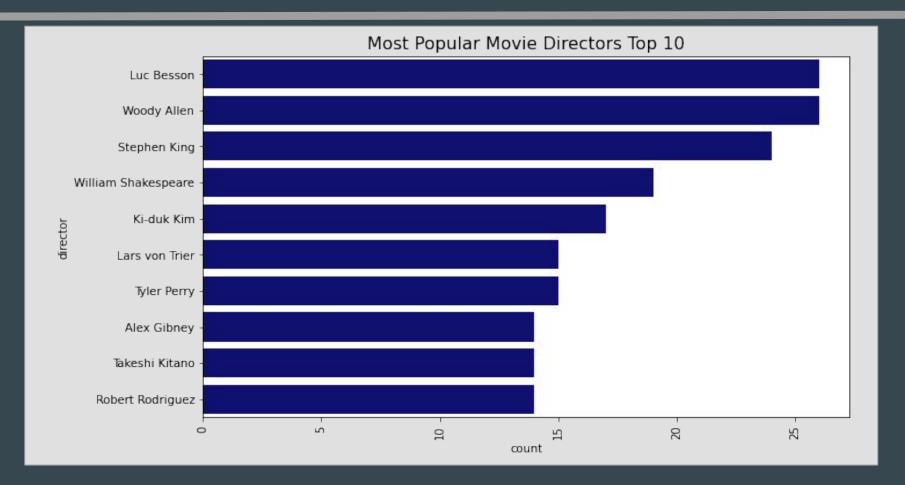
### Which genres get the best ratings?



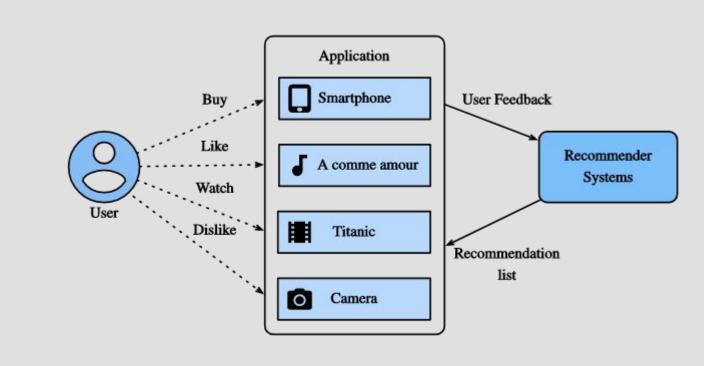
#### What are the most popular words used in movie titles?



## Who are the top 10 movie directors?

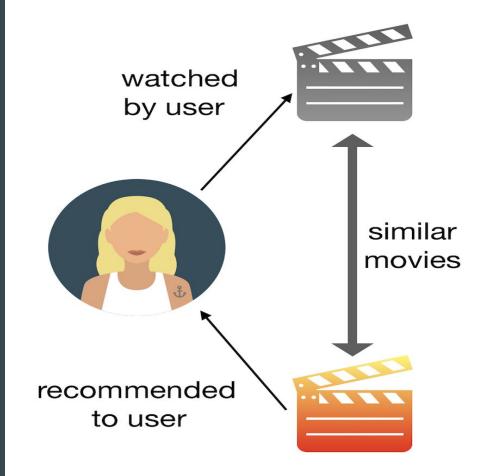


### Recommender Systems



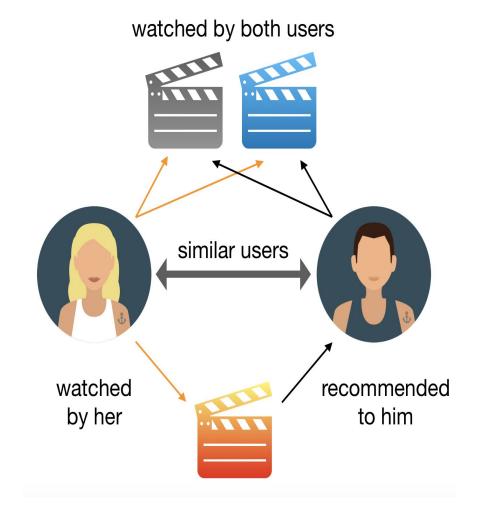
#### Content based filtering

Content based recommender uses item features to recommend other items similar to what the user likes, based on their previous action or explicit feedback

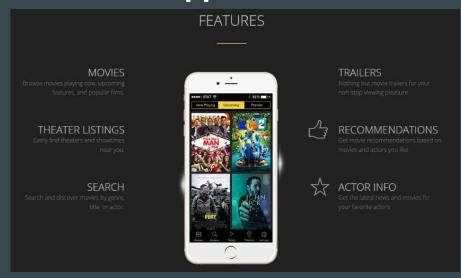


# Collaborative based filtering

Collaborative filtering is a method of making automatic predictions(filtering) about the interest of a user by collecting preferences or taste information from many users(collaborating)



# App Demo...



#### **Conclusion:**



Grab your popcorn.... ITS MOVIE TIME!!!

#### **Credits**:

Special thanks to Zintle, our supervisor for her guidance and support throughout this project.



"If you can't explain it simply, you don't understand it well enough."------Albert Einstein

#### **Questions?**

