

Data Science Barbie

Case Study: Chick Flicks and Data Tricks

Date: May 08, 2024

Instructors: Mary Ellen Schuster

Project Title: Predicting Movie Ratings Using AI Sentiment Analysis

Welcome to a challenge where your analytical prowess can shine through to the world of cinema. You will step into the shoes of a data scientist tasked with a project that blends pop culture with powerful predictive technology. Your mission is to predict how well the 2023 film *Barbie* will fare on IMDB based on the sentiments expressed in public reviews.

Context & Motivation

Barbie, directed by the renowned Greta Gerwig, has stirred conversations with its bold narrative and underlying political messages. Public opinion is divided, and deciphering this division through data is your goal. You will use VADER, a cutting-edge AI tool, to gauge sentiments of an audience of thousands of IMDB reviews.

Your Deliverable

As the lead analyst in this project, you are entrusted with using sentiment analysis to predict the movie's average rating. By understanding public sentiment, you will not only forecast the movie's success but also explore how sentiment analysis can transform marketing strategies in the film industry and beyond.

Create an analysis that connects the dots between raw sentiment data and actual movie ratings. Your findings will guide future marketing campaigns and content creation, making this task an opportunity to showcase the impact of data science in real-world applications.

Why This Matters

This project is more than just about predicting numbers; it's about understanding human emotions and opinions at scale. It's your chance to see and to show how data science can directly influence media and entertainment, providing insights that go beyond traditional statistics. Let the analysis begin!

