

### **First idea: Genre Evolution and Cultural Reflection**

This idea seeks to explore the evolution of movie genres over time, examining their connections to cultural shifts, technological advancements, and social trends. Utilizing the CMU Movie Summary Corpus, we will categorize films into various genres such as action, drama, and comedy.

Our analysis will focus on identifying trends in genre popularity in the context of significant societal events. For instance, we will investigate the surge in horror films following 9/11 and the rise of feel-good movies during the COVID-19 pandemic. Additionally, we will analyze how the average box office revenue varies across genres and periods, providing insights into which genres proved to be more commercially viable at different times.

We will also consider how key societal changes, such as cultural movements and technological innovations, have influenced the popularity of specific genres. An example of this is the increase in animated films during the late 1990s and early 2000s, which coincided with advancements in CGI technology.

Moreover, this idea will examine the impact of influential social figures on genre trends, exploring whether the emergence of prominent actors or filmmakers affects the popularity of certain genres. By integrating the influence of societal events and key figures in the film industry, we aim to provide a comprehensive understanding of how cinema reflects and shapes cultural conversations. Ultimately, this analysis will reveal the dynamic interplay between film genres and the broader cultural and economic landscape of the industry.

### **Second idea: The Evolution of Movie Length**

This project aims to analyze the evolution of movie length and its correlation with audience reception and box office success. To begin, we will categorize films from the CMU Movie Summary Corpus by their release decades and calculate the average runtime for each decade. This analysis will allow us to identify trends in film length over time, highlighting any significant increases or decreases. We will examine whether certain genres tend to have longer runtimes and how this may relate to audience engagement and satisfaction.

Additionally, we will explore the relationship between film length and box office performance. By comparing the average box office revenue of films by length category (short films under 90 minutes, medium-length films between 90 and 120 minutes, and long films over 120 minutes), we can assess whether longer films are more successful at the box office or if shorter films capture audience attention more effectively.

### **Third idea: Gender and Ethnicity Representation in Film**

This project aims to explore gender and ethnicity representation in cinema by analyzing the prevalence of male and female leads from diverse ethnic backgrounds using the CMU Movie Summary Corpus. We will examine trends in the portrayal of characters across different genders and ethnicities, focusing on how these representations have evolved over time and whether they reflect broader societal changes. By highlighting the representation of women and underrepresented ethnic groups in film, this research will contribute to ongoing discussions about inclusivity and equity in the industry. Ultimately, the project seeks to deepen our understanding of how gender and ethnicity representation shapes narrative structures and influences audience perceptions in cinema.