

Cinema-Goers

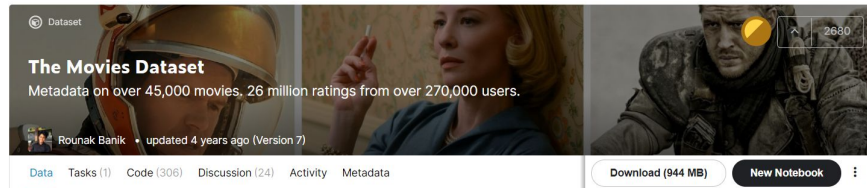
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Data Analysis

- We used the dataset : [The Movies Dataset](#) that contains information on 45,000 movies featured in the Full MovieLens dataset.
- We only considered those with a budget higher than 0 (8903 movies).
- The dataset contains numerous movie-related metadata, among which we use:
 - Budget
 - Genres
 - Original Language
 - Spoken Languages
 - Title
 - Overview
 - Popularity
 - Production Companies
 - Production Countries
 - Release Date
 - Revenue
 - Director (throw the Cast data)



Users and Context of Utilization

- In an era in which more and more movies are released and are increasingly easy to access and “cinematic universes” are created, we believe that the application will have a wide range of users.
- The users in mind for the application could be normal people curious about movies that occasionally want to know details about a certain movie.
- But we expect that the main users of the application will consist of [Cinephiles](#).

cinephile

noun [C]

UK  /ˈsɪn.i.faɪl/ US  /ˈsɪn.i.faɪl/



a person who is very interested in and enthusiastic about cinema as an art form, and knows a lot about films:

• *There are movie fans; there are film lovers; and then there are cinephiles.*





Main Questions

- Most popular movies?
- Where are movies produced?
- What is the most spoken language in movies?
- Is there any relationship between budget and popularity?
- In which movies Production Companies worked together to make it?
- Production Companies that produced the most movies on a certain year?
- Relation of film language and revenue obtained?
- Director speciality regarding the gender of the movies?
- What are the great centers of cinema and how have they changed over time?





Visualization Techniques

The following visualization techniques were chosen taking into consideration first its functional factor and then its visual and appealing factor:

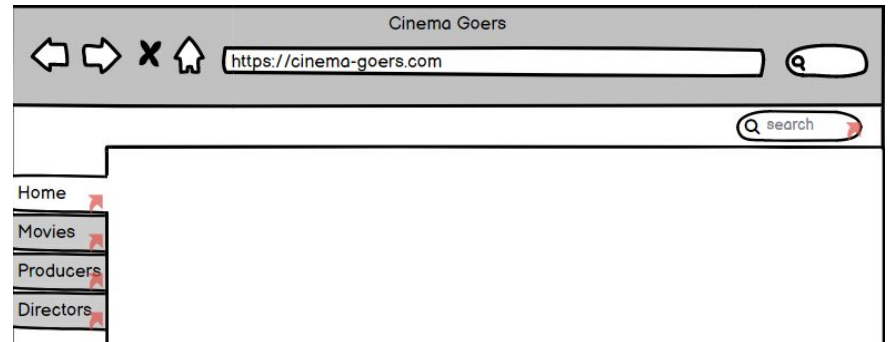
- Choropleth Map
- Treemap
- Stacked area chart
- Spider chart
- Scatterplot
- Network graph





Low Fidelity Prototype - User Feedback

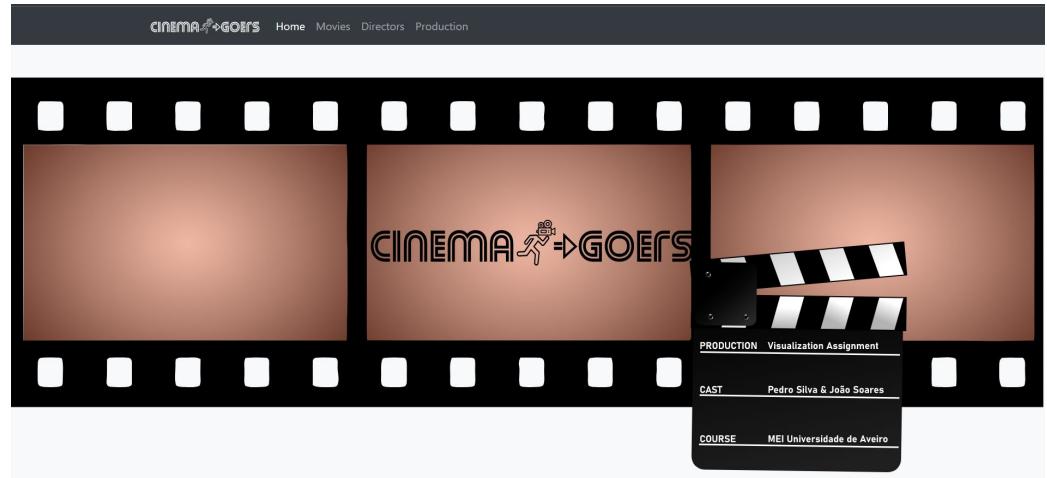
- Compress more information and visualization options in the different views to reduce the number of them.
- Instead of having a simple *Treemap*, we could implement something of a *Hierarchical Treemap* , thus benefiting from a greater clarity in the data visualization.





Prototype

<https://cinema-goers.netlify.app/>





Usability Test

- 10 sets of questions to be answered using the prototype.
- A set of questions to collect data about the profile of the user.
- A set of questions about the experience with the prototype.
- Opinion on the prototype through a standard usability questionnaire (SUS- System Usability Scale).

Usability test

Prototype of the platform "Cinema-Goers" for the course of Information Visualization



Usability Test - Results

- Overall good results with the participants being able to use the prototype throughout the Usability Test and answering correctly to the set of questions.
- Some of the most common indications provided by the users were added to the prototype previously presented:
 - Add an indication of “what color is the director” when comparing the genres of a Director in the *SpiderChart* Graph.
 - Add an indication of what color corresponded to what language/studio and make the scale end in 2020 in the *Stack Area* Chart.
 - In the *Tree Map* scaled the “rectangles” to improve the visualization, improved the “Go Back” button and added a tooltip to make it clear to the user, that to filter by language the user had to click in the “rectangle” of the language.
 - Add hover effects to improve, (and help to distinct), the visualization of the movies made by a production company and tooltips throughout the *Network Graph* to make it easier to know how many movies a production company produced.



Future Work

- Possibility to select different range of years in the *Choropleth* Map, not just decades.
- Filter by more than one Production Company in the *Scatterplot* Visualization.
- In the *SpiderChart* add the option of suggestive Search rather than the select options.
- To avoid performance issues in the Network Graph when searching for large movie companies will add the option to only render a certain amount of items indicated by the user.