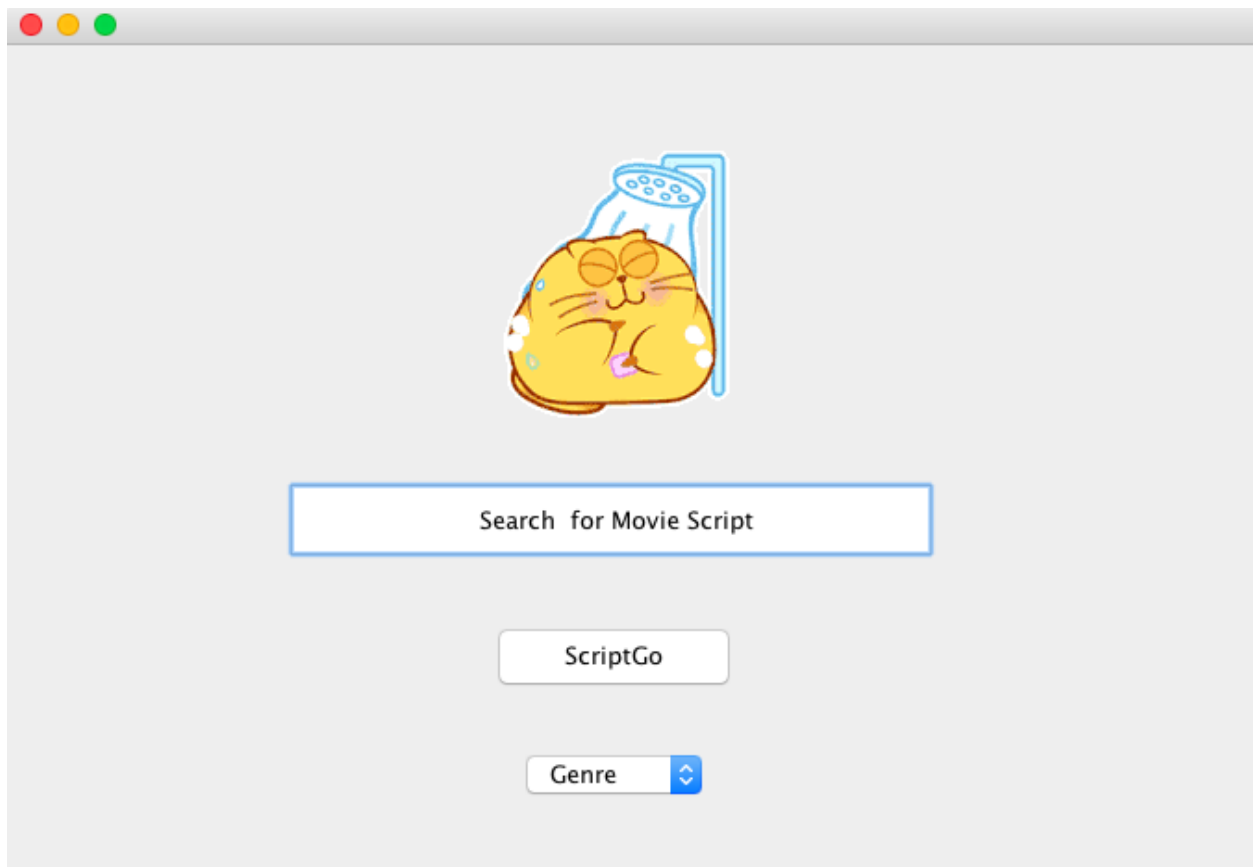


Movie Script Visualization Application User Manual

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USER'S MANUAL

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1.0 GENERAL INFORMATION

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1.1 Project Overview

This project is a movie script visualization application. An user interface is provided for users to search for movies. After a user searched a movie, at most three movies with available scripts will display on the screen for users to choose from. The chosen script is then analyzed from backend. Various features of the movie will be visualized and displayed on a website upon finishing analysis.

These features include:

1. Overall sentiment, and categories of the script.
2. 60 keywords of the script.
3. Relationship between characters
4. Top 10 characters with their occurrences.
5. Top 8 main characters in the movie with their profile pictures.
6. Emotional fluctuations of the top 3 main characters.
7. Personality report of the protagonist.

2.0 SYSTEM SUMMARY

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2.1 System Configuration

In order to run the program, user should install Java. As Chrome browser no longer supports opening html from local files, one would also need to use Firefox browser to see all visualization features. If you have not installed [Java](#) or [Firefox](#) browser, you can download them here by clicking the links.

Once Java is installed, make sure you have downloaded our project (either from GitHub or Canvas).

3.0 USING THE APPLICATION

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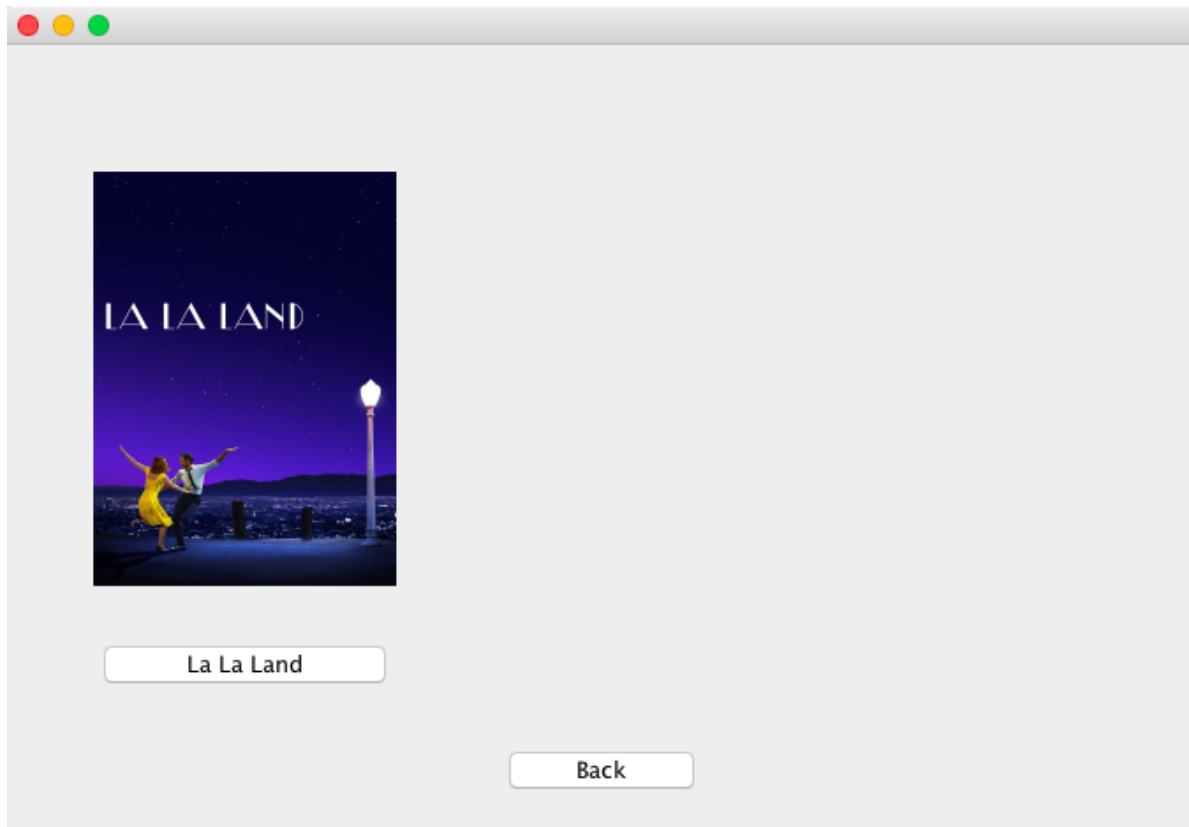
3.1 Search Screen

Below is the searching interface of the application. You can either search by typing in a movie's name (partially or accurately), or by choosing the genre through the dropdown menu. Genre needs to be set to "Genre" in order to use search box.




3.2 Movie Poster Screen

After clicking the search button, the movie's poster and name will be displayed. Then, by clicking the button under the poster, (in the following example, click on “La La Land”), the program will begin analyze the script and the whole process takes about half an hour depending on length of the script. Once analysis is done, you will be led to the next graph visualization choosing frame.






Click the “Back” button to get back to the previous frame. Make another search as you wish. If you cannot recall the exact name of a movie in your mind, simply make a partial search, and our program will match with you three most relevant movies, each displayed with associated poster.



girl

ScriptGo

Genre



His Girl Friday

Other Boleyn Girl, The

Supergirl

Back

3.3 Choosing Screen

Below is a sample choosing screen. You can either click the “Back” button to go back to the search page, or the “Visualize” button to view the final visualization. If FireFox is your default browser, the website will pop out in FireFox automatically. If not, you may go to the folder data and use Firefox to open the html file script.html.

3.4 Visualization Webpage

The final visualization of the movie will all be shown on two separate webpages. All natural language understanding, personality insights and tone analysis are supported by IBM WatsonAPI.

titanic

Header

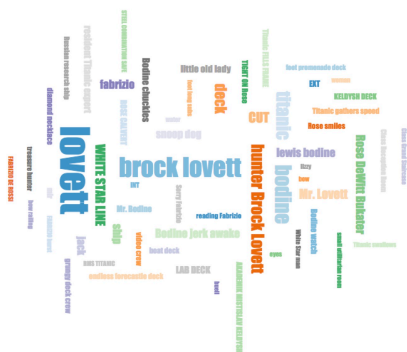
An overall sentiment of a given script with a score. Categorize a script into a hierarchy that is 5 levels deep with a relevance score.

#sentiment 0.0481468

#/art and entertainment/movies and tv/movies 0.509857

#/automotive and vehicles/boats and watercraft 0.429507

#/home and garden/gardening and landscaping/yard and patio 0.409941

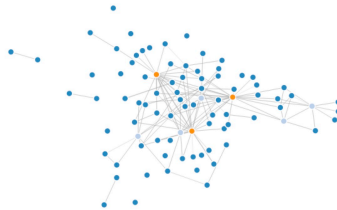


KeyWords

Important keywords in script sized by relevance.

Relationship Graph

Relationship of all characters in a script visualized as a force-directed graph. Each vertex is a character. Top three main characters are of orange, top ten main characters are of light blue, and peripheral characters are of dark blue. Each edge is assigned a force indicator, calculated using the Natural Language Processing API, symbolizing the relationship between two roles.

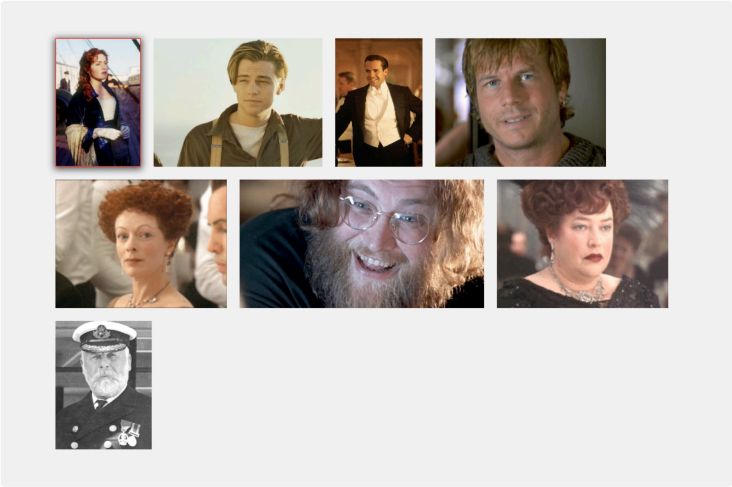


Bubble Graph

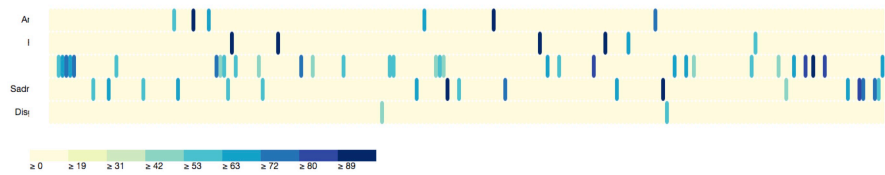
Names of main characters sized by their occurrences.



titanic

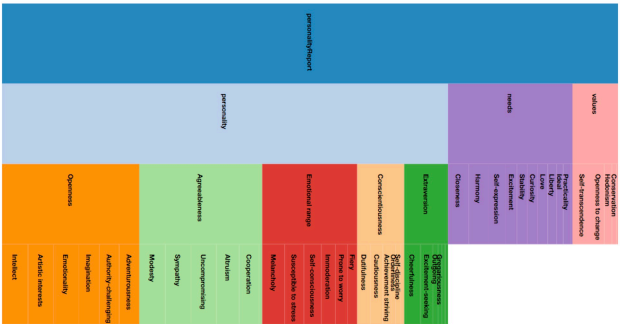


Emotional Change of ROSE



Personality of ROSE

An icicle graph visualizing the protagonist's intrinsic personality characteristics, including Big Five, Need and Values. Data derived using Personality Insight API which applies linguistic analytics and personality theory.



Another Example (Movie: *Frozen*)

Frozen-(Disney)

Header

An overall sentiment of a given script with a score. Categorize a script into a hierarchy that is 5 levels deep with a relevance score.

#sentiment 0.00681484

#/religion and spirituality/christianity 0.637585

#/food and drink/food/frozen food 0.544058

#/family and parenting/children 0.415411

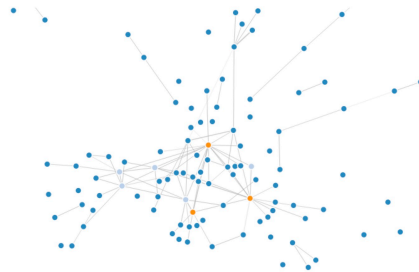


KeyWords

Important
keywords in
script sized by
relevance.

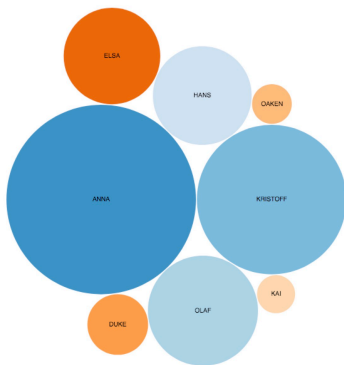
Relationship Graph

Relationship of all characters in a script visualized as a force-directed graph. Each vertex is a character. Top three main characters are of orange, top ten main characters are of light blue, and peripheral characters are of dark blue. Each edge is assigned a force indicator, calculated using the Natural Language Processing API, symbolizing the relationship between two roles.

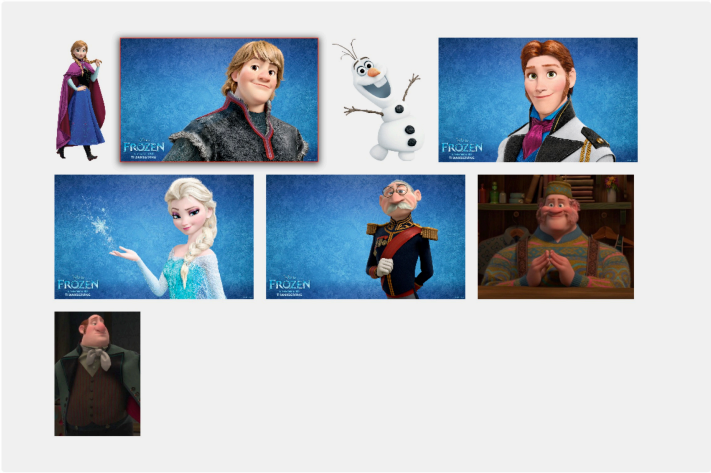


Bubble Graph

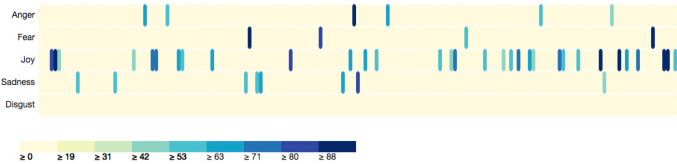
Names of main characters sized by their occurrences.



Frozen-(Disney)



Emotional Change of KRISTOFF



Personality of ANNA

An icicle graph visualizing the protagonist's intrinsic personality characteristics, including Big Five, Need and Values. Data derived using Personality Insight API which applies linguistic analytics and personality theory.

