

How to run:

>npm run dev

Might have to install Next and NodeJS if it is not installed already.

Implementation:

The implementation of the Star Wars interaction visualization is created using Next.js, which is a framework for React. This was chosen so that states could be implemented, ensuring the only necessary components are rerendered. It also uses d3.js.

The code handles data from json files containing all the characters from the different Star Wars episodes. All the characters have attributes, them being divided up into nodes and links (except for *value*), where *name*, *value*, *colour* represent nodes, and *source*, *target*, *value* represent links. We use these to represent the different characters in the implementation and find the interactions between characters.

The implementation has two graphs, them representing the characters as circles, and lines in between representing the links between the characters. Selecting a circle highlights the circle and the lines connected to it, and a window to the right shows the information of the circle, such as the name and value, as well as the connected circles names and values. The graphs represent the different Star Wars episodes, and the user can swap between different episodes to show different graphs with the characters in the respective episodes. The two graphs can represent different episodes, and if the same character exists in both episodes, clicking the circle representing a character in one graph will highlight the circles in both the first and second graph. The user is also able to filter the graphs with a slider that adjusts the graph based on how many links a node has.

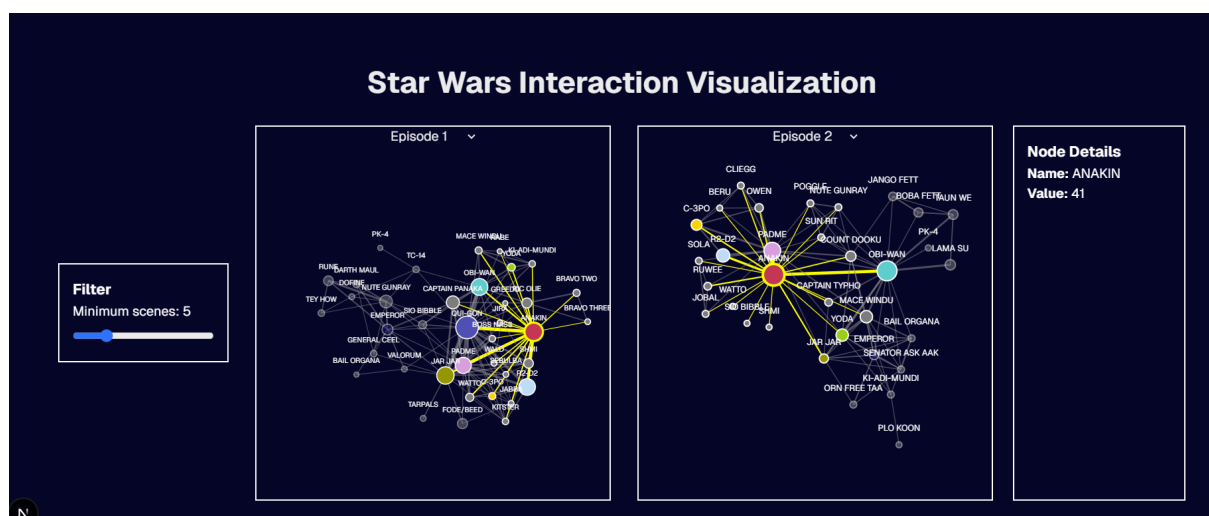


Figure 1: Linking between the graphs