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Assignment 4

The assignment is implemented in three files, a javaScript file, a css file and an html file. The javaScript file main.js takes in two urls, one that contains interactions of all Star Wars episodes and one that contains interactions of Star Wars episode 1.

The urls are fetched by calling the same function for each url. The function fetches the url and assigns it to one plot. This way we can visualize two plots beside each other (the one to the left shows interactions of all time and the one on the right shows episode 1). To change the plots to any of the other urls one has to go and change the url manually in the code. In the function a node-link diagram of the data set is made by using d3.forceSimulation() and continuously updating the nodes and links. The final visualization can be seen in Figure 1.

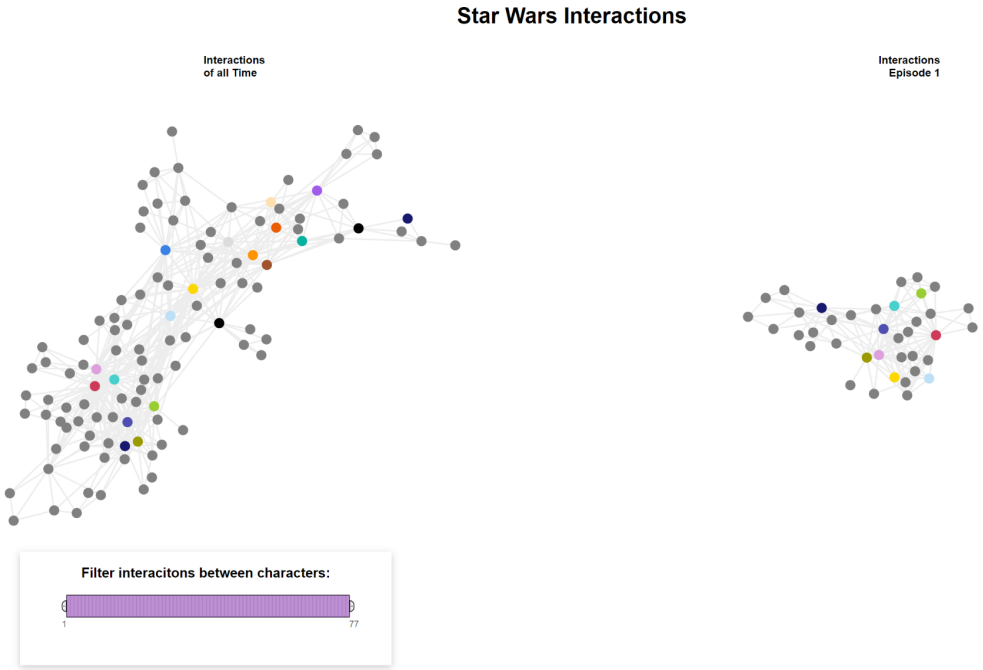

Figure 1: The final visualization.

When hovering on a node or link the info of it is displayed. For the nodes the name of the character and how many scenes they have been in is displayed and for the links the names of the characters in the interaction and how many scenes they are in together. This can be seen in Figure 2 and 3. To show what node is being hovered over it becomes larger and when a link is hovered over it also becomes larger and changes color to purple.

Brushing and linking is implemented so that you can hover over a node or link in one of the diagrams, and if the same node or link exists in the other diagram it is highlighted there as well. This is also shown in Figure 2 and 3.

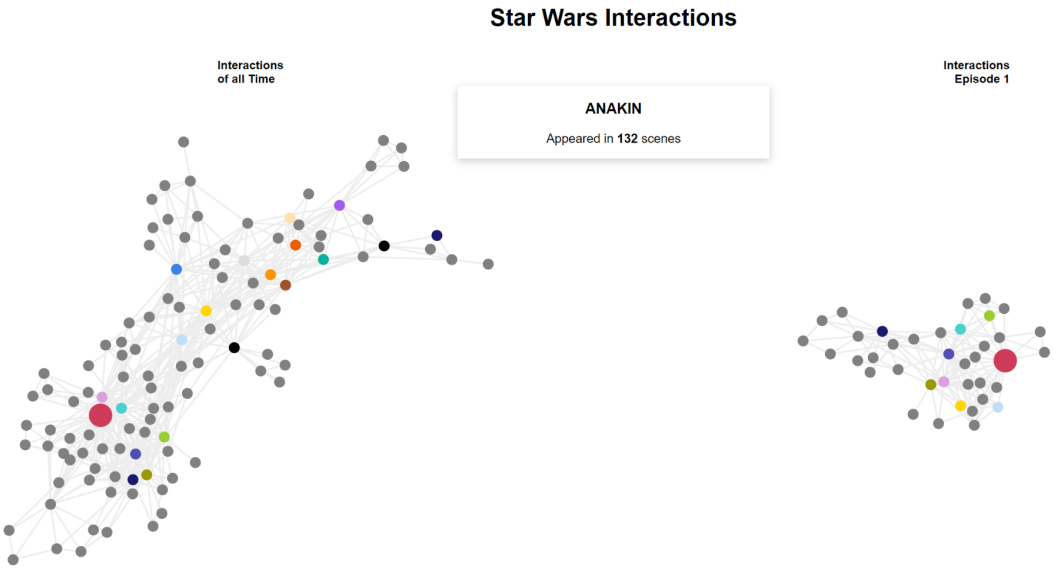

Figure 2: Hovering over a Node

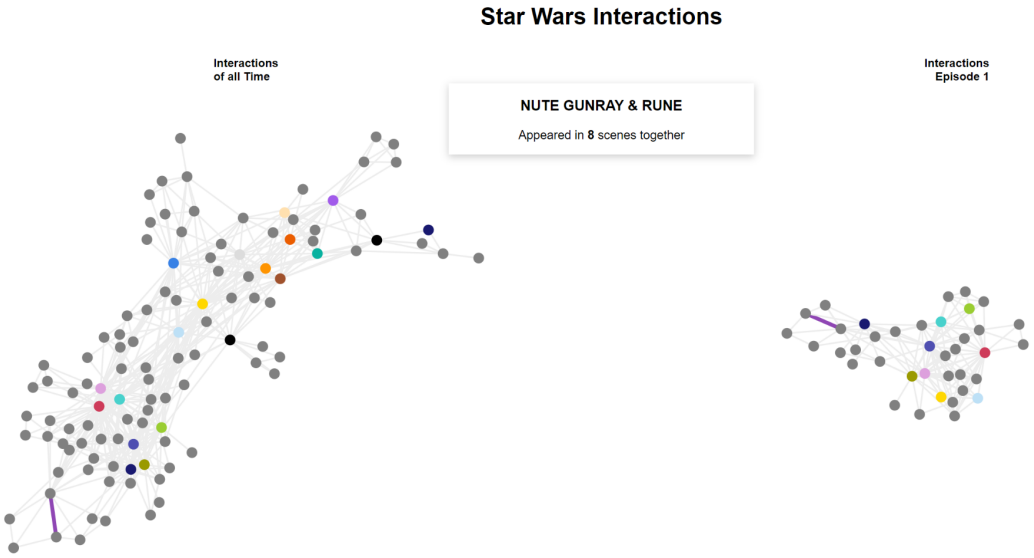

Figure 3: Hovering over a link

A slider is also created to be able to filter the number of interactions between characters (the links) on the node-link diagram that shows interactions of all time. The slider updates the links and nodes every time it is changed as shown in Figure 4.

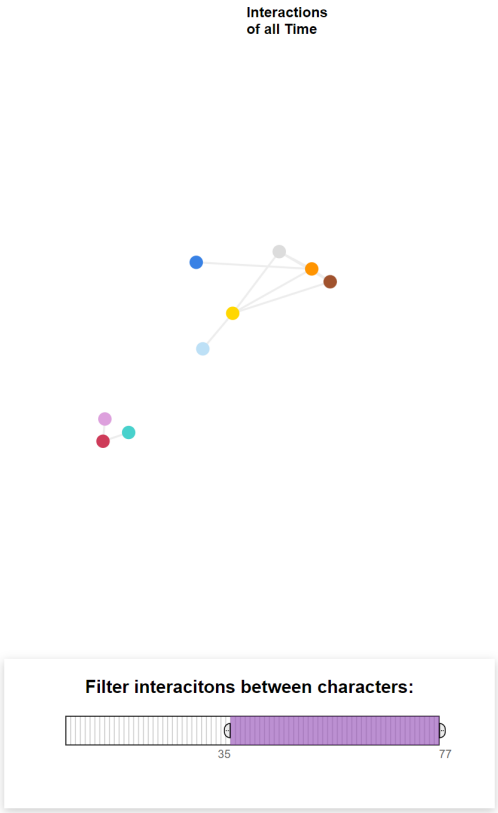

Figure 4: Showing the functionality of the slider.