- **Messaging.** What is the message you are trying to communicate with the narrative visualization?

In this narrative visualization, the message I am trying to convey is that although there can be trends that are explained by data, sometimes it requires additional context from the real world and sometimes there can be no clear-cut answer made. For example, in many of my explanations in my visualization, I mentioned many external factors that could have impacted the data shown. I also mentioned how there can be a fault in using data if it is not complete or not covering enough of a time period. I also explained how because there is no clear trend or correlation between much of the data along with how the data at the time was relatively new, it could have been a reason to why COVID-19 was difficult to deal with by governments. I wanted to see for myself and show how data can only mean so much without its context and factors around the data.

- **Narrative Structure.** Which structure was your narrative visualization designed to follow (martini glass, interactive slide show or drop-down story)? How does your narrative visualization follow that structure? (All of these structures can include the opportunity to "drill-down" and explore. The difference is where that opportunity happens in the structure.)

The structure my narrative visualization was designed to follow was an interactive slide show. In all the scenes there are graphs for each scene that can change based on the buttons pressed, giving the user interactivity and exploration of the data on their own. In addition, all of the graphs support mouseover details on demand to allow the user to see specific values on the graph.

- **Visual Structure.** What visual structure is used for each scene? How does it ensure the viewer can understand the data and navigate the scene? How does it highlight to urge the viewer to focus on the important parts of the data in each scene? How does it help the viewer transition to other scenes, to understand how the data connects to the data in other scenes?

I used graphs and a written explanation for each scene of the narrative visualization. It first presents the data, with an annotation on some graphs, to the user and allows them to look at trends and select through different data sets to see and then my explanation of the data comes in after. The data is split into three main sections, Cases/Infected count, medical resources, and economic status of each state. Each of them is paired with data sets that match each section which allows the data to be organized together. Annotations are made to help direct the user to a trend that is important to the graph displayed. The scenes are ordered in a way to help transition the user to view the main data, the number of cases, along with two potential categories that could have contributed to a states COVID-19 case count: medical resources and economic status. The two other sections were placed after the primary data to allow the user to think if the secondary categories made an impact on the primary data. One of the annotations specifically refers to a previous graph which allows the user to make connections while processing the narrative in order.

- **Scenes.** What are the scenes of your narrative visualization? How are the scenes ordered, and why?

The scenes of my narrative visualization are three categories of data related to each state, its COVID-19 cases, its Medical Resources, and its economic status before the pandemic and are ordered in that way as well. Each of these scenes provides a distinct category of data that can fit / be related to the COVID-19 pandemic and allow the user to think if the data can be a reason or a factor into each state's COVID-19 data. The order allows users to look at the data first and see if the following data in the other categories matches or has a correlation to the COVID-19 data.

- **Annotations.** What template was followed for the annotations, and why that template? How are the annotations used to support the messaging? Do the annotations change within a single scene, and if so, how and why

I used italicized text inside a red box for annotations to help differentiate it from the main graphs and to draw attention to it. The annotations remain consistent to all graphs that used them and the graphs that used them had a correlation or trend that was noteworthy of pointing out. The annotations change within a scene based on the data selected to view. This was done through interactive buttons that would change what the graph would plot.

- **Parameters.** What are the parameters of the narrative visualization? What are the states of the narrative visualization? How are the parameters used to define the state and each scene?

The visualizations make use of user input buttons and mouseovers to define the state of each scene. The buttons allow the user to change what data is displayed on the graph for each scene and control what they want to see. The buttons change a variable in the JS code that change what is being taken from the CSV and plotted on the graph. In addition, they can mouseover any of the data points to view the specific value plotted on the graph. This mouseover also changes the bar selected to a different color to show the focus of the user.

- **Triggers.** What are the triggers that connect user actions to changes of state in the narrative visualization? What affordances are provided to the user to communicate to them what options are available to them in the narrative visualization?

The triggers implemented are mouseovers and interactive buttons. The buttons communicate what data set they can view and see the graph of through the use of event listeners. The graph supports details on demand through mouse hovering on the graphs through the use of tooltips.