Omar Boffil

## COVID – 19 & the U.S Economy

The content of my narrative visualization is about how the COVID – 19 affect the U.S economy. I used as reference the S&P 500 to demonstrate how the economy has not grown since the beginning of the pandemic. I explain how the economy is at the same level that it was one year ago. I did it compering the information of the S&P 500, which is the more important index in the U.S Stock market and the raising of peoples with coronavirus in the country. The messaging that I am trying to past is to show how this pandemic keeps the country at the same level that it was one year ago when it supposed to grow.

The narrative structure in this project fallows the martini glass as well as the interactive slide. It uses the martini glass because the user will start fallowing some data at the beginning to understand what it is happening in the economy. Still, it will be to the end when it lets the user explore how the pandemic's impact causes the country not to grow as it was expected and instead stock at the same level. Also, I concluded interactive visualization where the user can point the chart to see the data and interact with a char that will demonstrate with real data how the country is at the same level. This structure was designed to make it possible that the user with the data can fallow the design and understand different pieces of data that demonstrate at the end, the effect of it.

The graphs in the project are the graphical representation of information and the data used to demonstrate the knowledge and make it simple for the user to understand. It ensures that the viewer understands the data with the annotations that it has and the text that you can find in the different views that point the data in the various visualizations. The various scenes are connected and organized to tell the story. It shows the main point in the first scene, which causes the problem in the second scene. Finally, it demonstrates in the third interactive visualization of how this affected the country, comparing data from last year with this current year with the pandemic in place.

The scenes that you will find in my project are four. This first one is line charts demonstrating how we were before the pandemic what happened after the epidemic and what was expected to occur if the plague would never happen. Then, a var chart demonstrates the rising of the cases by month, where the user can interact with the cart to see the exact number in each month. Finally, a line chart that demonstrates where the index is with the pandemic and where the country was a year later, with the purpose to show to the user how the economy got stuck. They are organized like that because this first chart starts the story to make the user understand what we are talking about. The second chart demonstrates that the number of coronavirus cases has been increasing and the effect they have on the economy. The final chart lets the user explore how the increase in the cases has affected the economy so much that it did not grow as expected. These scenes are organized to tell the whole story of how COVID-19 affects the country's economy.

Annotations are designed to help the user to understand the graphs, the point in time where thing occurs, for example, in the first scene the annotations are to improve the user to know-how was the economy before the pandemic, where was the economy after the epidemic and to show where the economy supposed to be by now if we wouldn't have the coronavirus in our life. I added this annotation because I want the user to understand the data without reading the extra information in the views. This will be useful to the user who does not want to expect time to read the information but still want to understand the graph and tell the story behind this information.

I used the S&P 500 and COVID-19 data as the parameters to build the story of my project. The parameters are the date and close price, where the date has all day in the last two years, and the close price is the price of the stock market at the end of each period. I got the data from the previous two years of the stock markets to compare the status of our economy. I compare the date with the increase of coronavirus cases each month to demonstrate that this ends up affecting the economy. The coronavirus data is a list of new cases by date in the country with a group it by month to show more reliable information for my project. The parameter is the month and the total cases.

The different views in the project are connected with buttons. This connection is trigger when you click on the various buttons at the bottom of the pages. Also, the visualization U.S – 19 CASES BY MONTH trigger the visualizations as soon as you jump to the view, also I used D3 functions to show the data in the chart when you point the bars with the mouse. In the last view, "Stock Market and The COVID – 19", you will find two buttons that trigger the chart's differences that show the effect of the economy from last year to this year. The triggers in my projects are designed to connect the user with different views and help them to interact with the various charts to get a better perception of the data.

The objective of this project is to demonstrate how the economy was affected by the pandemic. It is a simple design with chats and summaries that help the user to understand the problem with real data applying the knowledge obtaining in the Data Visualization class at the UIUC.