

Throughout the history of the United States, the stock market has endured both recessions and growth periods. Major events in the world and in the US have had various effects on the market. My narrative visualization will explore 3 different major events and how they affect the stock market in the form of the Dow Jones Index adjusted for inflation from 1915 to 2021. In general, there is a positive correlation between how the public views the event and the Dow Jones Index.

My narrative visualization follows the interactive slide show structure as my narrative has 3 main slides that the user can freely explore. The slides are controlled by the historical events tab on the left side of the panel. The events are ordered chronologically from Great Depression to World War II to 2008 Recession so the user can move from earliest event to the most recent event without being confused which happened first. Although they are in this order, the user is free to go from slide to slide to explore the details offered in each slide.

All my scenes are organized with the same visual structure to promote consistency. The left panel contains the current historical event that is selected. Below that is a description of that current event. The center of my page is where the main chart lies. It is where the user can hover over each point in green to explore the events that happened on that day and how the stock market reacted to it. On the bottom, there is a timeline overview which contains the entire Dow Jones historical index adjusted for inflation from 1915 to 2021. The path on the graph that is bolded in red indicates where the historical event happened in the context of the whole timeline. This allows the user to know exactly which part of the graph they are looking at. Lastly, each scene has 3 pictures on the right panel that are representative of the historical events. Because these pictures are not the focus on the narrative visualization, I have adjusted their opacity to 50% to reduce their distraction from the charts in the middle.

To prevent putting too much annotation on each scene, I have put 1 description that describes the event and 1 annotation in blue letting the user know to hover over each point to bring up additional details on the events that happened during that day. Within each pop up, that event might have a positive or negative effect on the stock market. This style is consistent across all scenes to reduce any confusion for the user.

The most basic parameter of my narrative visualization is the ID for each scene. That ID is passed to all the functions that generates every panel shown to the user. The ID will decide which part of the whole timeline will be selected and enlarged for the user to interact. The ID also decides which points on the main chart will be placed and their annotations. The current state of the scene is stored by many variables such as current points, current data, current description, and current annotation. The information stored in these variables will change depending on the current ID, which is controlled by buttons from the historical events panel. The button that is current selected on the events panel has a background color of beige which is different from all other button's color, which is white. This gives the user a clear idea of which event is selected. As user select different event, that specific event will have a different background color than the rest of the events.