Introduction

A quick overview of the project, this was a redesign of the 1854 Cholera map of london created by John Snow. He used it to help investigate the cholera outbreak, which eventually helped him solve the case. The key features were labeled on the map such as pumps, streets, number of deaths, and landmarks. I was tasked with making the visualization more modern and interactive. My approach to this involved, tool tips and multi views that helps answer more specific questions about those who died.

Design Decisions

The lines of the map were drown with a grey fill and a thin stroke to allow other features of the map standout but still remain visible. The visualization shows the total deaths of the outbreak, one view of the deaths displays the deaths in red allowing them to contrast with the map, another view of the map is comparing genders. Each gender is separated by color, males dark blue, and females orange, these colors are color blind safe and are commonly chosen to make comparisons. The third view is a comparison of age, there are six different age categories each having gradually changing in color from a multi hue chosen on color picker. Other features on the map are the water pumps, these are displayed as blue squares, blue is a color chosen to resemble water. Two major streets are shown on the map, Broad st and Brewer st, these two streets were chosen because the pump that was identified as causing most of the deaths was between these two streets. Two major landmarks were are shown on the map Work house and brewery, im sure most people in the area worked at the workhouse but it was mentioned in the story that not many people died at the brewery because they were drinking beer.

The map was paired with a line chart, it does a good job at showing data that is related to time, it gradually shows the rise and fall of the outbreak. There are three buttons on the chart that allows users to change the view of graph and map. The lines change when the view is changed comparing genders and ages. The colors of the different categories is shown on both the graph and map. When a users is comparing two different categories they are able to deselect and reselect items to display only one object. While hovering over the lines on the chart a tool tip is displayed showing the shown specifically how many people died that day. The map also has the tooltip feature allowing you to drill down on a specific death revealing the age range, gender and date of death.

Conclusions

From applying interactivity to the visualization it visually maintain the insights gained from the original. By adding color it enhances the readability of the deaths and key aspects such as pumps, landmarks, streets, and people. Tool tips allows users to learn specifically about the dates and individual deaths. Multi view interaction and the ability to hover provided a way to gradually see the impact of cholera on this area of london. The insights gained were that the pump on broad st was the main reason of the deaths, on september 1 there were 143 deaths, and woman dead the most on this day. It was also seen that children under ten and elderly over eighty were impacted more than any other age range. This was a unique experience that you for your time.