We selected a choropleth map as our primary visualization, utilizing different color saturations to depict the number of drivers involved in fatal collisions per billion miles. To enhance interactivity, we implemented a tooltip that displays data when hovering over a state, and a side bar plot that appears upon clicking a state. The side bar plot illustrates the causes of fatal collisions in that state as percentages of drivers.

We believe the choropleth map is well-suited for our dataset, which contains state-level data that can be effectively presented geographically. While considering alternative visualizations, such as a pie chart for the side plot, we determined it was not suitable due to the percentages not summing to 100%. This is because drivers may fit into multiple categories (such as both speeding and distracted) or none at all.

Our development process involved collaborative brainstorming to outline the application's concept. Henry initiated by creating the basic framework and implementing the choropleth map, followed by Joyce who integrated the tooltip and added the bar plot. Monica handled deployment to GitHub, in addition to adding a legend and various textual elements.

In total, we invested approximately 8 hours into the development process, with a significant portion dedicated to early brainstorming and experimentation.