**Analyzation**

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1. **Briefly explain the logic for generating the base map.**

The base map is generated because people need to visualize a base layer, in which secondary images are used to highlight specific data in the dataset.

1. **Describe how the JSON was loaded and how was the data traversed. Explain how was the information from the JSON used to render data on the map.**

The JSON was loaded by setting up the link to the earthquake data as a variable and then creating a function that does a few things with the data. The first one is that a secondary function reads in every data point, one at a time, and returns several variables. Once the coordinates points are loaded, a cluster of markers form a layer that goes on top of the base layer. A popup that contains additional information is then coded into the layer, so that anyone can see it, if they click on the marker.

1. **Explain the logic for generating the circles and amending the size of them. What does this communicate?**

This data showed that different earthquakes had different magnitudes, some more than others. To make the circular markers reflective of the different magnitudes, a function is used to increase the radius, depending on the magnitude. An additional function is then used to change the color of the circle, depending on the magnitude. Finally, a legend was added to make the relationship between the color and the magnitude clear.

1. **Describe how the layer for the Tectonic plates was generated.**

The first step was to declare the tectonic plates as a new layer. Then, you use d3 to get the geojson tectonic layers and the function forms a map consisting of the coordinates. That layer is pushed to the tectonic layer declared earlier and then to the base map layer.

1. **What are the components in the layer control? How were they generated?**

The components in the layer control are the satellite, gray map and outdoor layers. They were all generated in the beginning part of the code with a tile layer code. The overlay maps is the tectonic layer and the earthquake layer. The layer control was generated by creating a control layer with the base and layer maps defined.

1. **Explain the difference between the base map (tile layer) and the data layer(s).**

The difference between the base map and the data layer is that the base map shows multiple ways to view the map and the data layers is a temporary layer that contains data and could be switched on or off.

1. **Walk through the logic of how the legend was generated and rendered on the page.**

The legend was generated because, in the data layer, the color of the circle marker depended on the magnitude. Creating a legend would define the range for each color used in the map. The legend was created by using a control layer and establishing the condition for each color used.