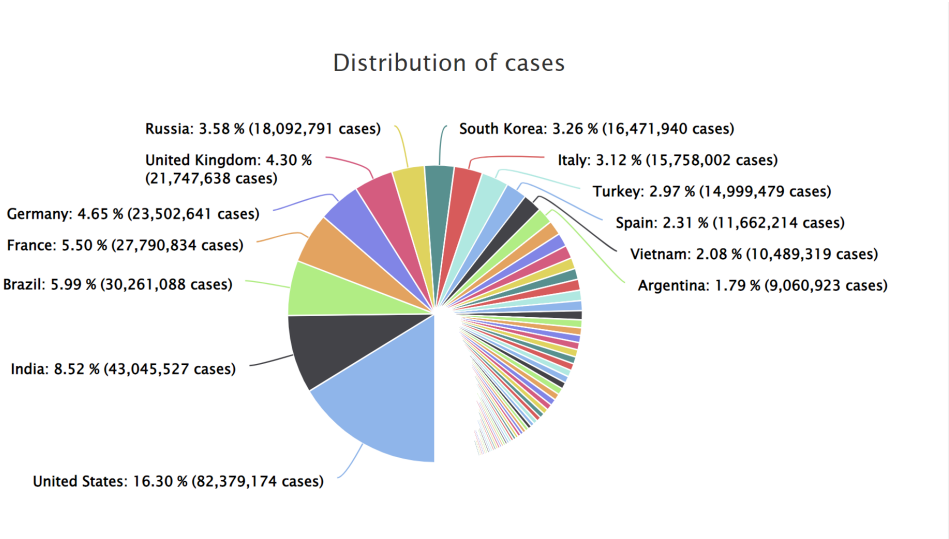
Criticizing and Creating a Simple Visualization Nathan Van

1.

Below is an example of a **good visualization pie chart.** The pie chart represents the distribution of COVID cases around the world that is divided by country.

The pie chart did a good visualization by separating each country by a unique color code, ranking from the country with highest percentage/number of COVID cases to the lowest percentage/number of COVID cases by the pie size, and drawing a related-colored line to the appropriate country with detail number of cases.



Below is an example of a **bad visualization x-y axis bar chart.** This bar chart represents the Confirmed Case, New Case, Total Death, New Death, Mortality Rate, Population, Total Recovered, Total Test by Country.

The bar chart did a very bad visualization of its data due to the mixed-order of the countries; no panels can be drawn from the chart. Also, the x-axis label consists of many categories that many countries do not have data for. In addition, the measurement metric of the population is in the billions but none of the metrics is at least 1 billion.

2.

Below is a **R Program Visualization using ggplot2 library.** The dataset used in this visualization is a dataset containing the prices and other attributes of almost 54,000 diamonds. This visualization illustrates the different types of quality cut of diamond and their total count number for each cut type.

This visualization is a good illustration of the data presented because it separates each bar with a unique color and it has a color-coded description of each cut clearly shown on the right hand side. In addition, the bar chart successfully illustrated a panel of poor quality cut in lower count number and high quality cut in a higher count number. The panel of the chart shows a low to high count number which is perfect for human observation.

```
Source on Save
1  library(ggplot2)
2  ggplot(data = diamonds) +
3  geom_bar(mapping = aes(x = cut, fill = cut))
```