Lab10: Pie Chart in SVG

In this lab, you are going to use SVG (Scalable Vector Graphics) and JavaScript to create a pie chart and project it in a browser screen. The goal of this lab is to get you comfortable with the idea of integrating visualizations within an HTML document.

Requirements:
1. Get your support code running.
   a. “Developer Tools” of Google Chrome will be very useful for completing this lab.
2. To learn how you work on/with JavaScript object, try printing out each value of the the given dataset, “statistics” hard-coded in the js file, on console.
3. Have a plan for what your resulting DOM (Document Object Model) tree should look like, and draw the tree on a sheet of paper.
4. Construct the pie chart.
   In the support code:
   a. The main idea is to represent each pie slice by using “path”, SVG element, and group them all as one pie chart by using “g”. (Note: This is not the only way to create a pie chart.)
   b. You are responsible to:
      i. Define the outline of each pie slice (the path description of each “path”).
      ii. Give a different color for each pie slice.
      iii. Add highlighting functionality where only the pie slice underneath the mouse cursor is highlighted.
      iv. (Optional) Display the data content mapped to the selected pie slice.
5. “Beautify” your html page.
   a. For example, consider to update size of text, color of visualization, overall layout of the html, etc
   b. For example, add a short description of what your visualization is for, etc.

Note:
The following links may be useful to get you started this lab.
- (g) https://developer.mozilla.org/en-US/docs/Web/SVG/Element/g

Grading:
We will ask you to demo your work on Thursday, December 7, 2017.