

## CS424 Project 1: Ishta's Phone Usage Statistics

This project is about collecting some form of data about myself and visually presenting it. It shows that many things can be data and there are multiple visualizations available to use and modify to convey a message or recognize a pattern in. Thus, I will talk about my project.

### **Motivation**

Cell phones are a common technology for a lot of people, but despite modern advancement, battery life is still a problem. So I decided to investigate about how I use my phone, not only to see what applications are being used, but rather why I am pulling my phone out of my pocket and show perhaps my personality, culture and other personal aspects of daily life.

### **Data Collection**

So I downloaded an app that tracked how many times I simply looked at my phone such as look at my lock screen or actually use my phone further. I gathered the data for a week. As I was gathering the data, I decided to split my usage into two categories of less than 5 seconds and more than 5 seconds. This will tell me if my battery life is being used for mostly turning the LED's on for the lock screen. I, then, collected the top 14 reasons in each category by frequency and saved it in a JSON file.

### **Visualization Technique**

My initial sketch was to do a bubble chart but that is not personalized to my data set. Then, I thought about how it all comes down to me examining my phone's battery life, so I have an SVG that is a battery shaped and it shows the percentage of my data is less than 5 seconds and more than 5 seconds, so the user can see the comparison of my usage. Furthermore, the colors are similar to stages of battery levels such as green, yellow, and red. When the mouse hovers over one of the categories, it will pop up a bubble chart that contains bubbles. The bubble node's radius is determined by the frequency of the reason. Also, each bubble will have text to show the reason for each node. The reasoning to choose bubble chart is because I wanted the user to see why I am using my phone and see "oh, she uses her phone because she is bored more than making phone calls." The webpage will also contain instructions to hover over the battery image on the left.