**Jonathan Beuzelin**

Call interface project

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This project has the side navigation bar and the main page with a working doughnut chart and a stacked bar chart with randomized values to produce a different number after every reload.

Charts

I really enjoyed this project as I had never done charts before and due to this I struggled and this led to quite a lot of time being spent on the top chart.

The process of the script for the donut chart is to first randomize the number from 0 to 26 then calculate the circumference of the circle and the percentage of the number out of 26.

Lastly I work out that numbers percentage of the circumference before subtracting that from the strokeDashOffset telling the orange circle where to stop.

The bottom chart makes use of a for loops which generates 6 numbers between 0 and 99 using maximum as the value to stop at and then pushes those numbers to the numbersArray.  
After this the numbers are added together using the .reduce function which calculates the overall total and proceeds to another for loop to calculate the percentage of each individual number and are pushed to another array by the name of percentArray.

The issue I found with my method is that the number after adding up the total percentage (done using the getTotal function) is that the number would either be 99, 100 or 101 when I needed the number to be 100 to implement the percentage value to the div which represented that value.  
My solution to this was creating a if statement at the end to subtract 1 or add 1 to one of the divs to get a value of 100% when added in total.

Next, I worked on implementing the widths, which I did with the widths function and a for loop, again maximum being the value to stop at. Following this, the script applies the percentage widths from the array and also the tooltips when hovered and then shifting the variables from the array using the .shift function and proceeds to the getPercent function again.

I had to put a repeat function in to get the widths function to repeat 4 times and I am currently still working on a way to minimize the script for optimization purposes.

Date and time

This project also has randomized dates and user name.  
The user name is chosen by having an array of names and generating a number between 0 and 8. This then matches that number to the place in the array and writes it to the document.

The hour is created by generating a number between 9 and 18 for office hours and if the number that comes up is 9am, a 0 is added in front when written to the document. The minutes are between 1 and 60 also generated. Both of these are generated by the getRandomInt function.

The date was a little more complex as the months have different amount of days in them so i made use of an if statement.  
If the number generated were to be 1, the array would point to february which has 28 days in it and the other numbers from 0 - 11 had similar conditions which meant that missing dates out in other months could be avoided. Depending on these conditions the variableForDates function works to give you a day and then this is written to the document.

Style and spacing

The structure of the page is made primarily for tablets, laptops and desktops as that would be the target for this interface and as such the spacing accommodates these targets in terms of readability and a familiar interface following common trends of the time so that people generally know where to look when they want something from this interface.

I chose the vibrant colours as I was keen for my personality to have a personal touch in this project and I also think it contrasts well with the grey and white background. To add to this I applied some media queries to increase readability in smaller and bigger displays.

What I have learnt

Undertaking this project was a great learning experience as I learnt many vital skills which include the importance of attention to detail and did my best in terms of learning how to identify where this was required such as spacing and layout in regards to positioning and keeping consistent.

This is the first encounter of learning how to use SVG and it was difficult to grasp at first but I am already looking forward to implementing them into future projects.

It was also valuable to get an insight into how JavaScript implemented with mathematics, in terms of learning new skills and how they can interact with websites.

What I would look to improve

I would look to improve the media queries as I don't feel the interface changes very well in certain displays, especially with the font and so I will look to improve the adaptability.

I want to look at minimizing and the readability of the JavaScript and the CSS as I feel it is a continuous point of improvement.