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N328 Visualizing Information
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How Time Is Spent In Different Countries - Visualization

For this project I tried to find a dataset that I found interesting. One set that I found and decided to use was a dataset going over how people spend their time. The dataset is limited to people in European countries. Even though the data does not cover every country in the world, it was still interesting to look at. And it made me wonder, how do people spend their time? There are lots of questions I came up with. How much time is spent working from country to country? Which country's citizens spend the most time in traffic on a typical day? Who has the highest average time doing personal care activities? Because that's where I'd want to go. These are just a few of the questions I thought of while looking at the data. But while looking at it, the whole time, I wondered one simple question, how do people spend their time (in general) throughout Europe? Also I wanted to know how this changed from males to females. Do they spend their time differently? And that's how I came about designing my graph.

For my graph I wanted to show all the activities listed in the dataset for both males and females one way or another. I thought this would give the user the ability to see and compare every category of spent time in each country. I also wanted the user to have the option to switch between each country, because having every country showing would be quite hectic. I also wanted to see if there were ways I could organize the activities into subcategories. Here are some early designs of the graphs:
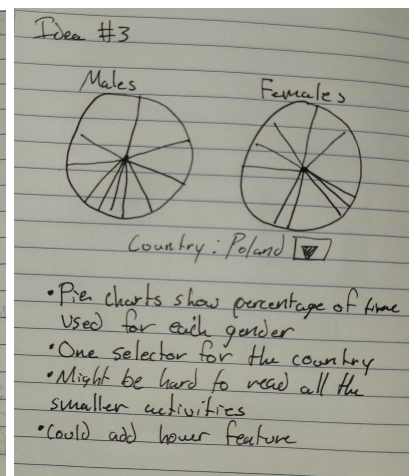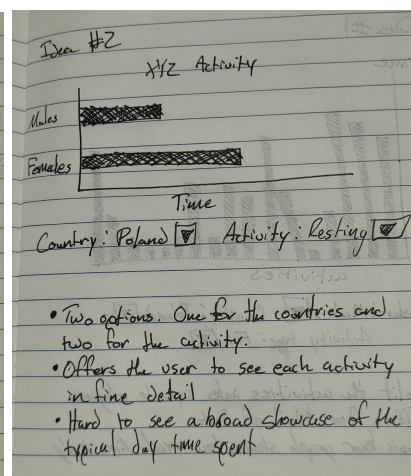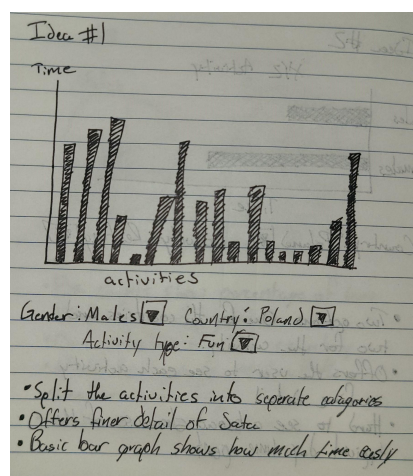
In the end I opted for a simple bar chart. I thought that this would be the best way to show the data in the way I wanted to. Below the chart I added two option boxes where the user can select the data that they wish to see. One for the gender and another for the list of countries. I decided to keep all the activities shown on the final graph. I wanted the user to easily compare different activities without having to change a bunch of things in the option boxes. I feel like this gives a more streamline view of the entire dataset. They can select each drop down option box to find the exact data they wish to see. I feel like this is a very simple way to allow the users to interact with the dataset, but it is very effective. There is really no room for error on the usability side, because even if they select something they did not mean to, the graph will still list what is being shown on the graph. And with only two different options it allows the user to quickly see their mistake and fix it to see the data they want to see.

When deciding on colors for the bars of my graph, I wanted to keep the simple theme. The simplest color scheme I could think of was the universal colors for boys and girls, blue and pink. So when the graph is showing the data for the males, the bars are blue, and pink for the females. There really was not that much effort that went into deciding the color scheme for this visualization. I feel like the colors were already chosen for me.

The last big decision takes place on the Y axis. And that is what unit of time I would be using to show the data for the amount of time spent. In the end I went with "minutes". There are a few reasons for this. First, if I used "hours" there would be some activities that the user would not even be able to see. Even with the unit of "minutes" some activities are hard to see. If I used "seconds" there would be huge differences between the bars. Even more so than they already have for "minutes". So in the end I felt like using the unit "minutes" was a good balance.

While using this visualization I have created, the user can easily answer the question I had at the beginning. How do males and females spend their time differently throughout Europe? By selecting the different options in the dropdown boxes, the user can find out just how different time is spent between the genders for each country. And because the user can easily see the differences between the two, I think this visualization works. It serves the purpose for which it was built.

Link to Youtube Video: https://youtu.be/_RFcF90l2n0