Mood Meter Visualization

LMC 3705

Rita Young

Introduction

This assignment was to create a self-portrait in the form of a data visualization. We were to choose a topic that told a story about ourselves and collect data over the course of two to three weeks. For me, I felt like my day-to-day life was an accurate representation of myself. Rather than exaggerating certain traits about myself or embellishing certain aspects of my life, I thought a more holistic approach would be both interesting and potentially revealing.

I also wanted to bring a personal touch to my visualization by adding another dimension measuring my mood. The purpose of this was to learn more about my personal habits and possibly even improve my level of satisfaction or happiness on a day-to-day basis. How does my daily activity influence my happiness? How strong of a correlation is there between how I feel and what I do, and how can I use this information to possibly improve my life?

The data collection process took 18 days, and I decided on the measurement of four variables: the date, the time or duration of the activity, the activity itself, and a five-point rating for the activity. For example, if I was stuck in traffic for two hours, I would rate that as a "1". If I went to a concert for my favorite band I would rate that as a "5". I was also open to my ratings being influenced by my day-to-day mood. For instance, if I was having a particularly bad day in general, a normally enjoyable activity might be rated lower, and vice versa for good days. Because my school week is an established routine, I felt that any potential bias would be mitigated by repetition.

By the end of the data collection I hoped to have a better understanding of where I stood in terms of being satisfied with my day-to-day life. Perhaps the process would show me whether I spend more time doing things I enjoy or simply doing things because I felt obligated to, or to simply teach me to be more aware of how I spend my time.

Data Table

Date	Activity	Duration	Rating
Friday, August 31	Class	1 hr	3
	Driving	2 hr	1
	Sleeping	6 hr	5
	Personal Project	3 hr	5
	Netflix	3 hr	5
	Reading	1 hr	5
Saturday, September 1	Driving	2 hr	1
	Sleeping	6 hr	5
	Schoolwork	3 hr	1
	Personal Project	1 hr	5
	Netflix	2 hr	5
	Cleaning	2 hr	2
Sunday, September 2	Sleeping	6 hr	5
	Schoolwork	3 hr	1
	Personal Project	2 hr	5
	Shopping	1 hr	4
	Netflix	1 hr	5
	Reading	2 hr	5
Monday, September 3	Driving	2 hr	1
	Sleeping	6 hr	5
	Schoolwork	4 hr	1
	Personal Project	2 hr	5
	Reading	1 hr	5
	Drawing	1 hr	5
Tuesday, September 4	Class	2 hr	2
	Rehearsal	2 hr	4
	Driving	2 hr	1
	Sleeping	6 hr	5
	Personal Project	2 hr	5
	Netflix	2 hr	5
Wednesday, September 5	Class	1 hr	3
	DramaTech	3 hr	2
	Driving	2 hr	1
	Sleeping	6 hr	5
	Schoolwork	3 hr	1
	Personal Project	1 hr	5
Thursday, September 6	Class	2 hr	2
	Rehearsal	2 hr	4
	Driving	2 hr	1
	Sleeping	6 hr	5
	Personal Project	2 hr	5
	Netflix	2 hr	5
Friday, September 7	Class	1 hr	3
	Driving	2 hr	1
	Sleeping	6 hr	5
	Personal Project	3 hr	5
	Netflix	2 hr	5
	Reading	2 hr	5
Saturday, September 8	DramaTech	4 hr	2
	Driving	2 hr	1
	Sleeping	6 hr	5
	Schoolwork	2 hr	1
	Personal Project	1 hr	5
	Drawing	1 hr	5
Sunday, September 9	Sleeping	6 hr	5
	Personal Project	3 hr	5
	Schoolwork	2 hr	1
	Cleaning	2 hr	2
	Netflix	2 hr	5
	Reading	1 hr	5
Monday, September 10	Class	1 hr	3
	Driving	2 hr	1
	Sleeping	6 hr	5
	Schoolwork	4 hr	1
	Personal Project	2 hr	5
	Drawing	1 hr	5
Tuesday, September 11	Class	2 hr	2
	Rehearsal	2 hr	4
	Driving	2 hr	1
	Sleeping	6 hr	5
	Personal Project	2 hr	5
	Netflix	2 hr	5
Wednesday, September 12	Class	1 hr	3
	DramaTech	3 hr	2
	Driving	2 hr	1
	Sleeping	6 hr	5
	Schoolwork	2 hr	1
	Netflix	2 hr	5
Thursday, September 13	Class	2 hr	2
	Played a concert	2 hr	3
	Rehearsal	2 hr	4
	Lunch with friend	2 hr	5
	Driving	2 hr	1
	Sleeping	6 hr	5
Friday, September 14	Class	1 hr	3
	Driving	2 hr	1
	Sleeping	6 hr	5
	Netflix	3 hr	5
	Personal Project	3 hr	5
	Schoolwork	1 hr	1
Saturday, September 15	DramaTech	4 hr	1
	Driving	2 hr	1
	Sleeping	6 hr	5
	Schoolwork	2 hr	1
	Netflix	1 hr	5
	Shopping	1 hr	4
Sunday, September 16	Sleeping	6 hr	5
	Shopping	2 hr	4
	Schoolwork	3 hr	1
	Cleaning	2 hr	2
	Personal Project	2 hr	5
	Netflix	1 hr	5
Monday, September 17	Class	1 hr	3
	Driving	2 hr	1
	Sleeping	6 hr	5
	Schoolwork	4 hr	1
	Personal Project	2 hr	5
	Netflix	1 hr	5

Data Collection

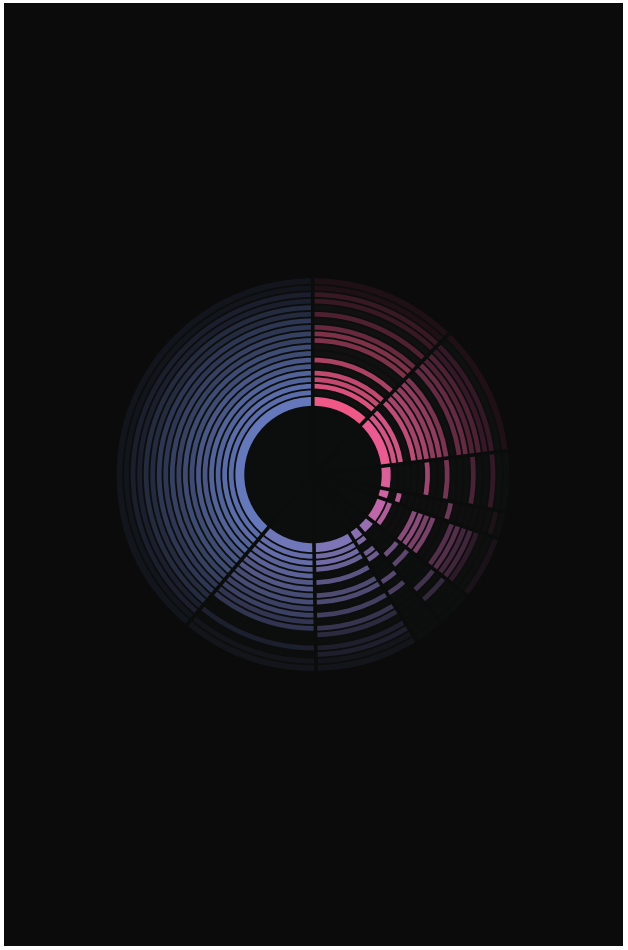
For each of the 18 days, I chose six activities that I felt were the best representation of what I did that day, recorded how long I did those activities, and rated them from 1 being strongly dislike to 5 being strongly like. After I finished collecting data, I noticed several unexpected patterns that I thought were quite interesting.

First, because my days primarily revolved around activities that were explicitly scheduled, such as going to class, my data doesn't change very much from week to week. I also found that in my free time, I tended to choose the same hobbies out of habit. On average the six activities I chose each day took up about 16 out of the 24 hours of the day, which includes the time I tracked sleeping. I measured time rounded to the nearest hour, which for the purposes of this project was strictly for practicality, but I do not anticipate this being an issue in calculating the final results because the duration is merely a weighted factor, not the primary variable I am measuring. I did not tend to track activities that either I did not feel strongly about, such as eating meals, or that were more difficult to track, such as socializing with friends.

Although I expected my mood to influence how I rated my day, I found that this was not the case as I tended to rate repeated activities the same throughout the 18-day period. I feel like the process of rating activities alongside one another mitigated the effect of any kind of bias based on my general mood, which unexpectedly did not actually change very much from day to day. For instance, if I was in a bad mood because I was tired or had a lot of schoolwork to do that day, I predicted that I would rate normally enjoyable activities, such as playing music, lower, but having to compare playing music to doing schoolwork made me rate it just as high as I would any other day.

In conclusion, I found that my level of dislike was directly correlated with how much I was obligated to do that activity. Driving to school and attending class never rated above a two, but activities where I was given more personal choice rated higher, as I found working on personal projects and spending time on hobbies like reading or drawing very enjoyable.

Digital Drafts



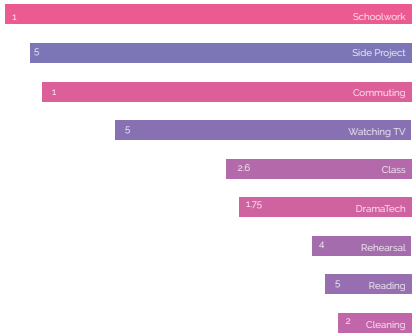
Now that data collection was complete, I started the drafting process by first reviewing the activities I chose, categorizing them, and analyzing trends in relation to different factors such as productivity. I was immediately drawn to a circular visualization because it would be easiest to show the proportion of total time spent across all the activities. I calculated my top ten most time-consuming activities and arranged them in clockwise order from most disliked to most liked, and color-coded them accordingly on a gradient from red to blue.

I wanted to include a dimension showing how consistently I performed each activity, so I included 18 concentric rings for each of the 18 days of data collection. A gap indicates a day for which the activity was not performed.

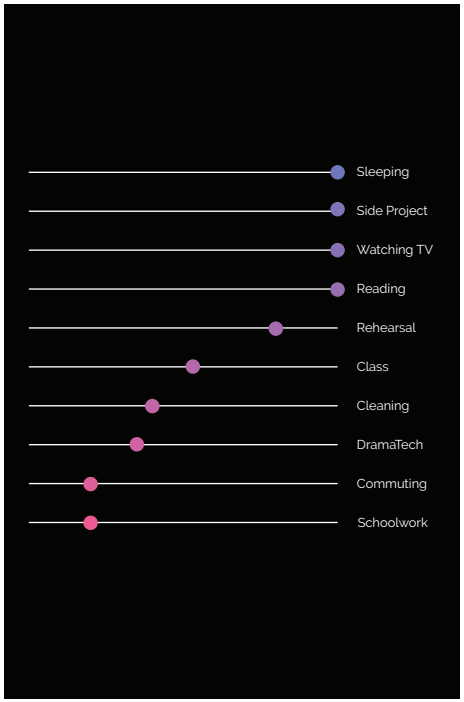
Digital Drafts

I thought my first draft already had a lot of potential, but I wanted to make sure it was the best way to organize and visualize the information I had at hand. Here are four other possibilities I came up with:

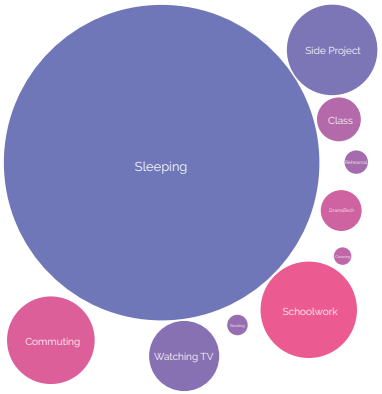
A classic bar-graph style organized from most time spent to least



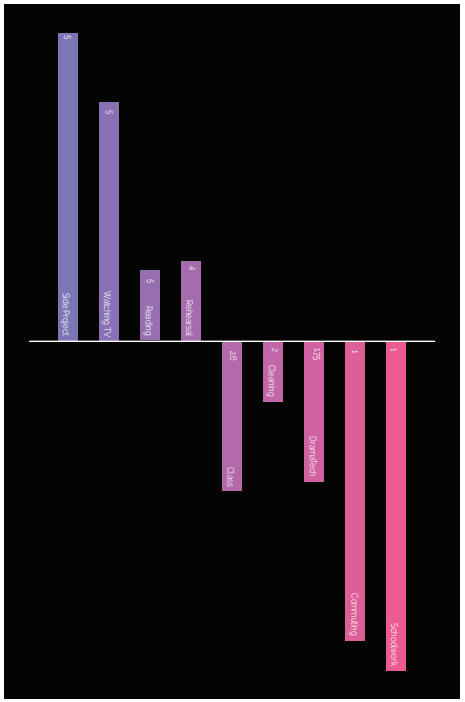
A sliding scale denoting the average rating per activity



A bubble-inspired visualization sized by the duration of the activities

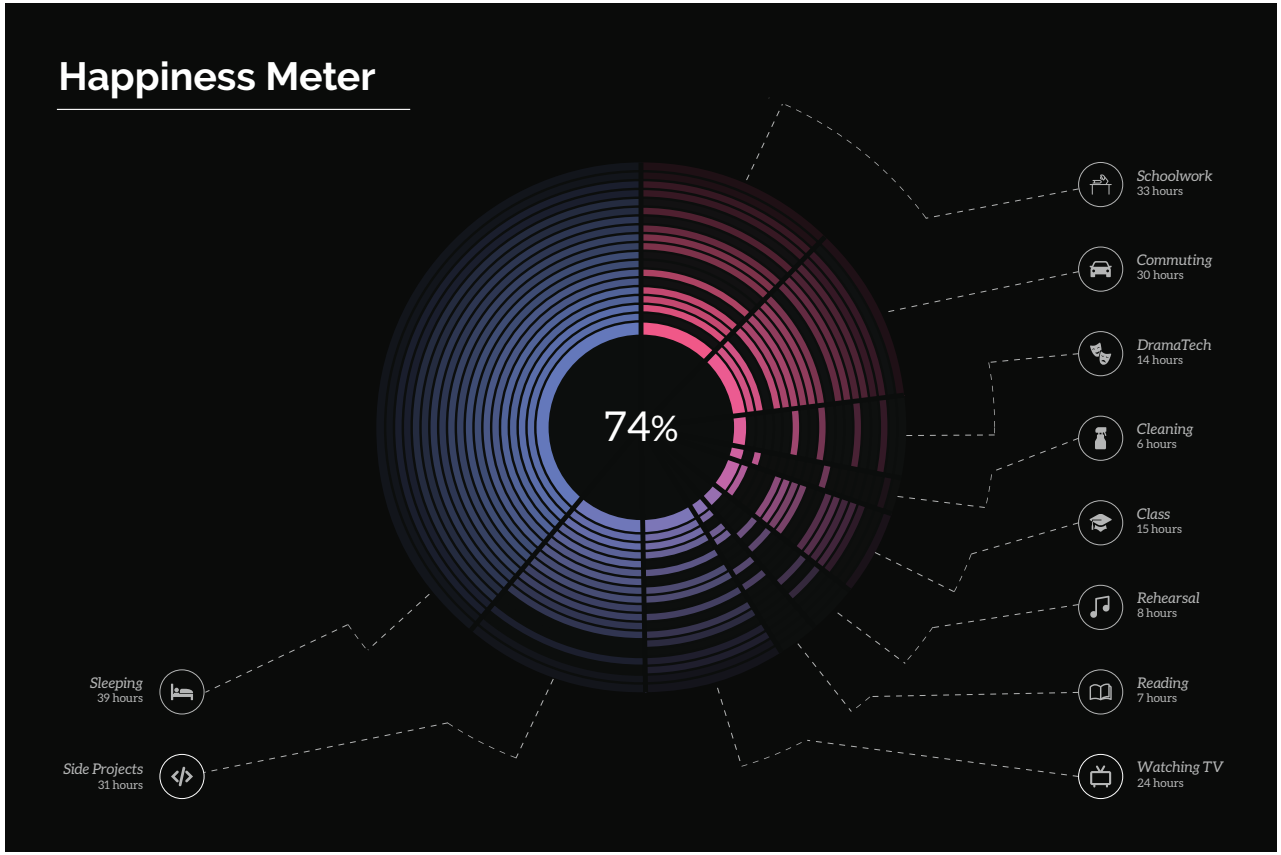


Another version of a bar-graph that inverts the negatively rated activities



None of these were as interesting to me as my first iteration, which I liked because it was able to convey consistency in a way that these four iterations were not.

Editing



I started organizing my visualization by labeling each sector, with lines radiating out from the edges to a corresponding icon with the name of the activity and how much total time was spent on it. To fit all the icons I changed the orientation from portrait to landscape, and put a working title in the top left.

I was inspired by the UI of a digital thermometer, and thought it would be interesting to include a metric in the center of the rings to denote how much overall satisfaction was derived from my daily activities. This was calculated by taking the weighted average rating of the activities and converting it to a percentage.

Final Iteration

Following my class critique, I was told that the overall form was successful but that changes could be made to make the information clearer.

I started by changing the color scheme to a lighter theme and adding a legend to the side denoting blue as a more positive mood and red as a more negative mood.

I moved the metric to the side as it was visually distracting and added a small description to briefly explain the concept of the visualization.

Lastly, I came up with a better title and made small changes to the icons to make it more balanced.