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CP341: Data Visualization Final Reflection

I felt that this class was informative and engaging, and I’m thrilled with my progress throughout the past block. Looking back at my work, I am proud of how much I challenged myself to make advanced visualizations, stepping out of my comfort zones with new programs. I developed strong fundamentals in visualization that I can and plan to use in future projects, and I have developed confidence that I can build anything I am able to imagine using my current skills. Throughout this course I maintained a high level of engagement and averaged a high level of effort, although this fluctuated throughout stages of the class. Specifically, I found that my effort in the earlier weeks of the class was on the lower end, but I would have spurts of productivity to compensate for things I was falling behind on.

As talked about in my weekly goals, this was something I struggled with mostly due to burnout from the school year, and a lack of passion for what I was doing. The transition to D3 from more pre-built visualizations was tough for me because I spent lots of time on bar graphs or scatter plots in D3 that could much more easily be implemented in Seaborn. However, I turned around my motivation to build D3 visualizations and subsequently my work ethic in week 3 when I changed datasets. Also, since I set specific goals for myself at the end of week 2 for how I was going to improve my retention, my class effort has been much higher and I have felt much more comfortable using D3.

Considering all the learning objectives, I believe I have a high competency and am satisfied with my knowledge of all of them. The objectives I am most confident in are my abilities with HTML and CSS, interactivity, and different data formats. Coming into this class, my primary goal was to have a good understanding of HTML and CSS, so that I can have the skills to build my own portfolio website, build elements for clubs and organizations I’m a part of, and make myself a more well-rounded software engineer. Therefore, I put lots of time learning about complex elements and stylings in webpages. I learned best by taking more complicated templates that had cool features, and seeing what styles they implement to make the template visually appealing. Through modifying both regular HTML and Bootstrap HTML templates, I got a good sense of what is possible in website development. In addition to website creation, by the end of this class I have a great understanding of how to create visualizations in D3, and what kind of data representations are best fit for D3 and Vizhub. Finally, I have worked with many different data formats implementing csv, json and geojson files in my visualizations, even converting between them. I also learned to combine multiple of these formats into one project, such as with my Aussie Toilet Data visualization.

I was weaker with some of the learning objectives that involved giving formal descriptions of data or describing domain-agnostic abstractions. These were topics that we talked about as a class in the first week of class, but as we began working on visualizations and final projects, got swept under the rug a little bit. I noticed halfway through the block that some of the terminology surrounding data visualization was starting to slip my mind. Because as a class we didn’t get much practice beyond the first week using our terminology to talk about data abstractly, I spent extra time completing an extra visualization peer review sheet in class to try and improve my skills. I still feel confident in my ability to talk about high-level actions that a visualization should accomplish, and I know enough common marks and channels as well as what humans interpret best to optimize my own and other people’s visualizations.

Throughout the class but more consistently during the end of the block, I showed up at 9am before class started to ask questions and get some extra work done, and this greatly helped me achieve my personal goals for the course. Once I had built in more consistency with when I was working, I found that I was more productive during the day and was able to get through any roadblocks I was having quickly.

As mentioned in my weekly reflections, I also had a hard time with procrastinating earlier on in the block. This impeded my work by forcing me to rush some of my creative choices as I scrambled to put together a final product. In general, I felt as though my final visualization had some awesome features but was not as polished as I would’ve liked. While this may be a result of me trying to cram too many feature implementations into a short time frame, I also think specifically my Aussie Toilet Data visualization would have been much more polished and less buggy if I hadn’t procrastinated some of my features so much.

After thinking about all my strengths and weaknesses throughout the course, although I wish my final products could have been more professional in a couple ways, the work that I put into my visualizations and websites shows a high level of competency in all the learning objectives for the class, even for those that I don’t feel as confident in. Furthermore, I have gained all the skills I hoped and expected to from this class and worked hard to try and get the most out of every topic introduced to us in this class, from Seaborn through Bootstrap. Therefore, I feel I earned an A for my work in this class.