## **Website Problems**

Looking over hundreds of archived websites from the start of the internet, we can see a picture of how technology has changed. Over 30 years of the internet being widely accessible, we have shifted our concerns from creating basic, practical websites to interactive and stylized ones. This shift is normal, and as time elapses every year, the styles that are connotated with innovation only improve. In this regard, many of the previous websites lacked proper styling, making the website seem boring, outdated, and most importantly illegible. Without any separation between different types of content, it was hard to follow the content in the way the designer intended. Another common issue was that the website was designed primarily for a laptop or monitor screen, and mobile devices were not considered. This is often the case for older websites as the prevalence of mobile devices has not reached the height that it has now. Also, a large part that was missing in the user experience was a navigational bar. Some of the previous websites had them, but others had a single scrolling page with all the content jammed into one area. An easy and accessible navigation bar lets the viewers quickly parse through the information on the screen and allows them to easily choose what content they want to view. With all these issues in mind, the new course website was designed to address these issues.

## **Addressed Issues**

The first thing I wanted to implement was a navigation bar at the top of the screen that had quick access to the other parts of the website. To make it stylized, I used common UofT symbols such as their signature blue and their logo. With a common theme in mind, I continued to build the rest of the website. I wanted every section on each part of the website to stand out and be separated from the previous one, which is why I used a combination of

flexboxes and grid layouts to perfectly capture the entire viewport. I also implemented modern UI details, such as removing the thick borders of buttons and making sure each link does not turn purple once visited. With all these styling and layout changes in effect, I believe the general experience for the user shifted to a happier one. The final thing I wanted to ensure was that the webpage was still functional and pleasant on a mobile screen. I ensured this using both media queries and flex-wrap properties so that my content could nicely fit into the viewport of the user, regardless of the dimensions of their device.

## **Challenges**

I would say the single largest challenge wasn't even any of the HTML/CSS itself, but just the lack of proper organization. Web development is a very tedious and time-consuming task, so it is important to try and optimize your efficiency. At first, I had multiple tabs open and kept switching between VSCode, Chrome's inspect element, and the actual website, and this caused my process to be very rigorous. Eventually, I connected a second monitor to my screen and appropriately sectioned my tabs, and the difference was unbelievable. Without needing to switch tabs constantly allowed very efficient and optimal design building, and even decreased time for testing. Finally, the other challenge was getting lost in your code. Having many different styles and sections for your work can easily make you lost if you aren't careful. Sometimes I would forget which items were in a flexbox, and which weren't, and centering items was always tedious. In other instances, properties with intuitive names (ex: vertical-align) would not vertically align my items because they were applied to the wrong container, or didn't represent the innermost child. These problems are typical, and I tried to address them in a planned manner. I would always use inspect element to view the styles applied to each element, and over time, I would quickly resolve any errors. Overall, the process was demanding, but after working through it, I believe I have created a website that can properly function as the main page for a university course.