Individual Lessons Learned

What were the most challenging bits of the course/project?

During the course, as someone who has previously worked with C++, the C part was mostly a repetition for me. However, similar to C++, I found pointers to be a bit tricky, and I invested a significant amount of time in debugging my code. The exercises provided an excellent opportunity to delve deeper into the syntax. And drawing the stacks proved to be extremely helpful. It aided my understanding of the more abstract concepts.

For me, the most challenging aspect of the course was the shell and bash part. In my opinion, the introduction provided during the course was a bit short, which compelled me to conduct extensive web searches to grasp the concept better.

Another concept that I found initially difficult to comprehend was Git. However, as I worked on the project, my understanding gradually improved, and I now feel more confident in utilizing the basic operations. Working on the project also taught me a great deal about organizing work within a larger group. Luckily, all four group members possessed a coding background, which meant that we could collaborate effectively and solve many of our problems together. Often, one of us had previously encountered a similar problem and could help the others out. While working on the project, the biggest challenge I faced was understanding how Arduino works and how to connect it with the sensors to obtain the desired data. Once I grasped this concept, the coding process became more straightforward. However, it is worth noting that the compilation phase required a significant amount of patience. This waiting time was for me sometimes frustrating.

Any never seen concepts learned?

During the course, I had the opportunity to learn and utilize for the first time the shell and bash. These concepts were completely new to me and required some time to grasp properly. Additionally, I found the theoretical aspects of memory representation, memory allocation, virtual memory, and memory planning to be particularly valuable. While these concepts are often mentioned, understanding their actual content and relevance in specific contexts was a new and interesting experience. Furthermore, delving into the stack and learning how to visually represent it was both engaging and enlightening.

I had heard about Git before and had some basic exposure to it in another course. However, this was the first time I had the opportunity to use it in a larger collaborative environment with other individuals. It allowed me to deepen my understanding of Git and explore its functionalities more extensively.

Arduino was an entirely new program for me, and I encountered some initial challenges while getting started with it. Even towards the end of the project, I occasionally faced uncertainties regarding why certain aspects worked or didn't work. Nevertheless, the project provided me with the invaluable experience of programming sensors for the first time, which is surprising considering my background in Physics, where sensor usage is quite common.