Challanges, I faced

The biggest challenge I encountered throughout the course was working with the LCD screen. From the beginning, I struggled to get it to function correctly. At this point, I honestly believe I may have just received a faulty unit. I explored and attempted every fix I could find, but unfortunately, nothing worked.

Another recurring issue was following the instructions provided. The board we were given was slightly different from the one used in the examples, which often led to confusion or errors when following the steps exactly as written. Over time, I learned to be more flexible while wiring things based on logic and observation rather than blindly following the guide. I started taking notes on what pins I used and developed a better understanding of how to connect components on my own.

I ran into trouble editing code using nano in the terminal. Formatting and spacing issues kept causing syntax errors. To solve this, I began editing the provided code using a different text editor, then transferred it to the Pi as a new file. This helped me ensure everything was properly formatted and eliminated a lot of unnecessary debugging.

What have I learned?

Through this project, I learned how to build something practical that could be used in the real world. I now have a much better understanding of how to combine hardware and software to create a functioning device. It is something that’s incredibly valuable if I ever want to pursue a career in hardware development or embedded systems.

This has been one of the most enjoyable and rewarding school projects I’ve worked on. It gave me the freedom to create, solve problems, and build something tangible. Creating things has always been a passion of mine, and this project has given me a career goal of where I’d like to work on my path forward.