

Part A

I personally did several things in relation to the project. I helped organize assignment due dates and kept our team on track. Additionally I contributed to all the assignments and created the final version of our project board. In relation to the code, I played a large part in the initial code research and development. Our project took awhile to get rolling because no one had ever worked in an embedded environment. I helped get that ball rolling by discovering how to interact with peripherals and finding some helpful examples written for other chips to give us an idea of what to do. Additionally Codi and I did a lot of paired programming on some of the discovery code and the final kernel code.

I definitely built upon the original skills I identified initially. My main hope from this project was to get an introduction to embedded programming. This was certainly accomplished. I had never worked with anything embedded prior to this so learning how to write this small kernel and board support package was great experience in this area. I'd also never worked in Rust before this project so I learned quite a bit in the process of designing the os. My biggest obstacle in this project was inexperience. For example I spent nearly 30 hours messing around trying to get buttons to work properly on our device. Looking at other examples it seemed that there was a floating point value returned by the buttons that was used. Our buttons however did not seem to work with this method and sometimes triggering and sometimes not triggering. Eventually Doug, another member of the project, realized that there are two types of buttons floating point buttons and buttons that just return a high/low state. Our buttons were the latter and only hit the floating point function sometimes because of this. Had I known how to properly read a circuit diagram I would have immediately known what my issue was and not wasted so much time scratching my head trying to debug it.