Eric Gatto Self-Assessment

For this senior design project, I worked on both the hardware and software. My major responsibility was creating the physical hardware piano that would then have embedded systems attached so that it could interact with the computer. I also had the responsibility of creating some of the graphics for our software and developing some of the code for the software. Mostly saving and loading songs for playback.

I faced many obstacles in doing these tasks. I ran into a lot of trouble shooting while 3d printing the piano pieces. I had issues with the 3d filament spool getting tangled on itself and ruining prints hours into the print. On the software side I had a lot of issues just learning the IDE. Luckily though with a few calls my teammates were able to help me figure things out. In the graphics department it took me awhile to get the notes I was creating to look good at the resolution we were running our software. Through all of these obstacles though I learned a lot. I learned about 3d modeling and interactive design. I learned how to work within Unity. I even learned a lot more about screen resolution and anti-aliasing.

Working with this team I felt right at home. I’ve known all of them since my first year of college which made collaborating with them and communicating much easier. I think we accomplished a lot, even if it doesn’t look like it. We were able to get a fully functioning front end software running and working well. On the hardware side we had a little more trouble. With the pandemic we weren’t able to get some of the needed supplies for finishing everything up which made it seem like we didn’t have much done but everything was already planned out, we just needed to assemble it.

I think I learned a little bit more in working on a big project. We all communicated well and got along. I also feel like all of us worked our hardest. There were some points where there were low points where some members were waiting on others to finish up their portion to pass it on. Of all 4 of us though, Adam Tait deserves special recognition. He spearheaded the whole project and basically acted as a PM making sure all of the work was done and done correctly. In short I think this project went well, the only way that it could be better is if we had prepared better and had the hardware already purchased and in hand before the pandemic hit.