Individual Assessment

The main part that I worked on was the software part with Adam. The software part included the front-end application that the user looked at and experienced and the actual code behind the notes and sounds that played when the user presses buttons. I worked on more of the front end. The main obstacle I faced while doing this project was that I have only worked a little bit in unity and I always have trouble going back to it after a long time because it is not something I am super interested in. I learned C# in my last coop semesters, and we worked on it a little bit last semester, so I was good to go in that. Everything went smoothly for us on the software side because Adam helped me out a lot with a couple problems I was having. He is a bit more experienced in Unity, and that is why we mainly chose to do our project in that.

As I said before, I mainly designed the front-end part of the application. I used C# and GIMP to help create pictures for the background, make the buttons, and design the entire front-end experience from the start menu to the creation of a song. I got some advice from the entire team on what colors I should use and how we wanted everything to generally look, but I was the one who put all the pictures together into one working application. I designed each scene that was created and most of the look and feel for everything that was not creating songs. I was not sure how to do much of the background stuff, so Adam had that covered and we worked together to get the application going.

We accomplished our main goals from the beginning, except for putting the project together. On the software side, we learned how to put together Unity dashboards into scenes to create a flowing application using buttons and menus. The hardware side accomplished their goal of 3D-printing a small piano for our project, and they got the circuits sort of working to connect our software to their hardware. The problem was with this whole COVID-19 situation we could not connect our two physically. The hardware guys stayed in Cincinnati while I went back to my hometown, and Adam went back to his hometown as well. We were all connected and talking to each other, but the disconnect made sure that it was almost impossible to finish our product to the end and connect every part of the project, which was a real bummer.

Other than that issue, the entire application we wanted was finished, and most of the hardware ordered came in, or was 3D-printed successfully. The main group accomplishments were that we finished software side of the project by continuing our learning in Unity and C# and that the hardware members learned 3D printing creation software and built their own piano for our project. All of us worked well together and, to me, it seems like everyone pulled their part to get our project as finished as we could. It was harder to tell when the entire situation went bad for everyone, but, in the end, we still pushed a final product through and had a decent video to show for it, so we definitely had a pleasant ending to this whole debacle.