

10-Reflection

When it was time to bring the functional and form components together, I was unable to fully close the case. I tried to a couple different arrangement of the components and even drilled a new hole for the MP3 module, but eventually concluded that the battery would have to be attached to the exterior in order for everything to fit. In the process of squishing everything, several of my wires broke off, so I quickly had to re-solder some joints. My screen lost function during this as well and I was unable to identify which wire was causing the issue, so I cut the ribbon cable and soldered it directly to the board. Using a multimeter to read voltages and current was immensely helpful for identifying where the problem was. Hot glue was also key to assembling my device. If I could go back and do things differently, I would have made my case deeper to make room for all of the ribbon cable and stacked components. I also would have made holes in my case for easy access to the power booster so that I wouldn't have to take apart the case to recharge the battery. Though the ribbon cable was a great way to organize things, I would not recommend it. That was probably the number one problem I had and was something I spent a lot of time going back and fixing. Finally, I would have been more careful about the orientation of components that I was soldering or attaching. The number of parts that I put in backwards and had to reorient was very high and easily avoidable.