

For the first project, our team chose a key as our non-printed object. Our goal was to combine it with a practical 3D-printed object of our own design that could, ideally, be uploaded online and be accessible to anyone who wanted to customize a copy for themselves. To have a properly functioning object, our first priority and biggest concern was whether the keys would stay in the keyholder or not because while a single key is easy to contain, people generally carry a ring of keys or a lanyard.

For the base of the object, we came up with a generic rectangular shape that would be simple to mount or drill onto the wall. We then added three slots onto the right side since that felt like the most natural orientation to slip keys in with (unless someone were left-handed.) The slots are placed at an angle and run across most of the width. We also placed a 1mmx1mm strip inside of each slot to hold the keys in place since we noticed that all keys have a groove on the right side. After that, each of the members were free to alter and personalize the design.

I based my final version off of the affordance of keys being a sort of small weapon. Two of the slots have generic RPG weapon designs coming out of them and the front pocket has the text "CHOOSE YOUR WEAPON."

The outcome was kind of ironic and funny. Since the clear filament sticks on to the plate very well, I actually couldn't remove the object from the tape or the glass. Ryan, the Tech, managed to hack off most of the glass plate and I was able to continue breaking off the shards and chipping away anything that extended beyond the width of the object, but before I'd chipped the glass off, it would have made a fantastic albeit rather dangerous weapon.