Capstone Final

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My Capstone was made to support all the teachers with the staff bathroom. The way I did that was by creating a table connected to the wall and being able to be used by all the teachers to but any accessories on it when needed and to put all the air fresheners on it. I began my journey by setting up a plan on how to build the table. The picture below shows all the views of the table and the measurements for it. I also wanted to add that going into this project I had no knowledge of wood work and most of the tools to use for it. So the entire time I was learning a lot of working with wood.



Mr. Kamal was my mentor and he helped me figure out all of the measurements. We used the pythagorean theorem and measured the positioning of each nail in the boards in order to ensure that the table was sturdy and could hold weight.



After I did the measurements I went to compare other tables to see if they seemed similar to the table I was building. I found out that most tables are a lot bigger to the size to my table but since it's being placed in the bathroom I want it to big enough to hold a couple of objects



After comparing different tables, I went into the bathroom to take measurements of the bathroom. Comparing other tables to the tables I wanted to build, I found it useful to build a smaller table because of the smaller size of the room. I wanted it to be small enough that it was useful without taking too much space out of the bathroom.



After making the measurements for the table, comparing them to my table I had one of my friends bring up quarter inch piece of wood to the engineering room and began cutting it to the size of the table and left the rest of the table for all the other students to use.



I cut a 2x4 piece of wood, as Mr. Kamal and I had previously measured. I then lined it up to the size of the table and it fit perfectly. My intention was to make it aesthetically pleasing and look professionally done by having all of the wood cut as precisely as possible.



After cutting the 2x4 wood I needed to drill some holes to the measurements I had done so when I screwed it into the wall it would go in with no problem, as you can see the were all 10 inches apart so now when the table was drilled to it, it would be super strong.



After pre drilling holes into the 2x4s I used a special drill meant for cement walls to make it easy to drill through the wood and into the wall. I used a regular drill first, and I found it more difficult and time consuming to make the holes. Instead, I used the hammer drill and it easily went into the cement wall.



After drilling all the holes to the specific measurements I had to them I put the wood on the wall before drilling it to make sure it was balanced and straight. After making sure of that I used blue screws, blue screws have threads at the end of them and smooth with no threads at the top. I grabbed the regular drill and drilled the blue screws into the wood then from there to the wall.



I aligned the table to the corner of the bathroom, and since the corner was not an exact 90° angle I had to go back and alter the wood. I used the sanding machine to round the corner so that it would match with the walls of the bathroom and continue the aesthetically pleasing image I had in mind. The sanding took me about an hour to complete.



After measuring, sanding, comparing, and drilling I attached the table to the support beams and sanded the table so it can be smooth to anyone that touches it. After spreading also every day of my free time to creating the table I finished. This was one of the best experiences i've ever had because everyday I had to learn how each tool worked and I asked questions. I learned how to advocate for myself during this too. For the first time doing woodwork I think I did pretty well.

-Thank you,

Jacob Farrell