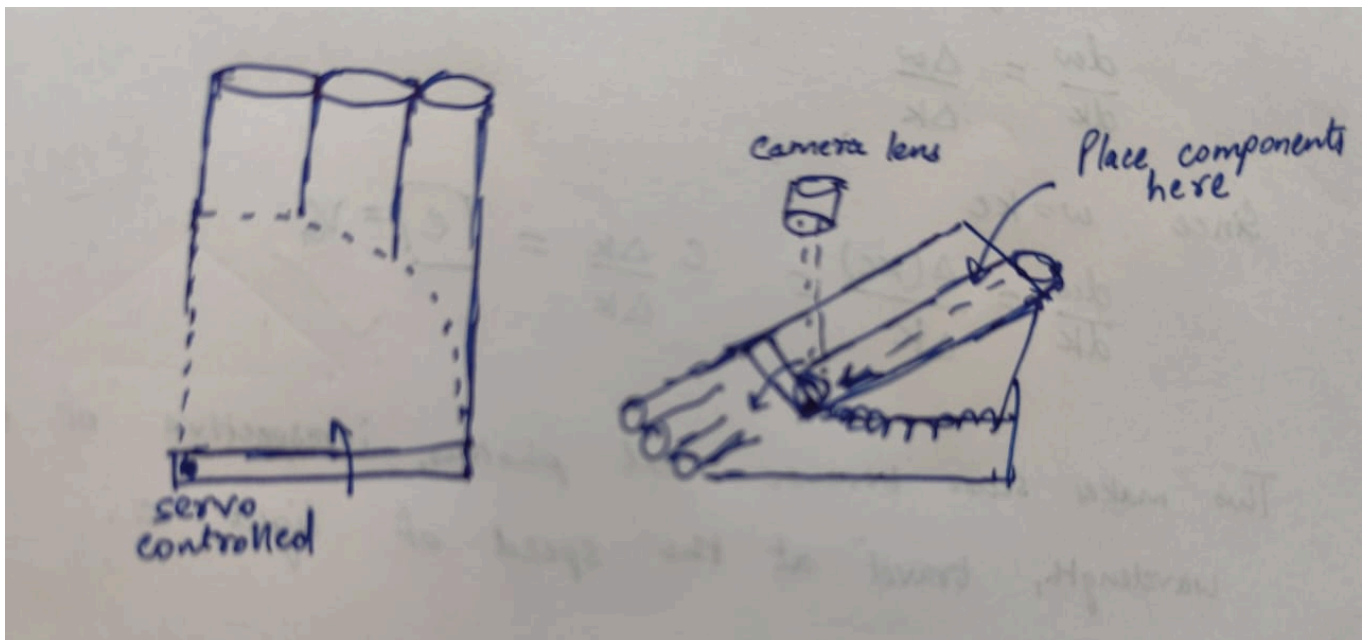


- I have designed the cabinet designators keeping ease of access in mind, i.e., I have tried my best to keep frequently used (what I guess are frequently used) items near the middle/top and rarely used items at the bottom.
- The resistors, capacitors, inductors box can have other frequently used supplies like LED, op-amps (maybe?).
- Sensors can be put in the resistors/ICs/misc. section depending on how frequently they are used.
- Try to keep all boxes labelled. Also put small components in zip-lock bags and label the bags.

A Project Idea that might be useful



Ok so there is a servo controlled stick and n pipes (here 3). The entire thing is on a sufficiently sloped plane so that all the components slide down.

We put the components through the tube shown in the right figure one by one. There is a motor at the end of the tube which opens if something is touching it after a delay, and closes automatically. We can place a camera which captures the component when it is stationary at the other end (stopped by the gate) and sends a picture to a phone/laptop, from where we can choose which of the 3 pipes the component should go through.

According to our selection, the servo controlled stick moves through a specific angle, directing the component into the right tube.

The only problem is we would have to put all components one-by-one, which can be automated but I am out of ideas right now.

But I think this might help in sorting small components faster than manually doing it. It can also help in counting inventory while sorting it.