Innova Individual Assignment

Ву

Zachary Phoon Jun Ze 1900353B

T14

School of Informatics and IT

Diploma of Cyber Security and Digital Forensics

Tutor name: Terence Toh

In the current world of technology, we find ourselves with multiple gadgets lying around on the table eventually leading to lack of desk space. I have an iPad, Apple Pencil, laptop and 2 monitors on my desk, I always face difficulty finding a spot to put my devices to charge while I'm using my laptop and monitors for productivity as my mouse is always colliding with my charging devices



First Idea is a mini bookshelf for technology, it will have rows with slots to fit the technology inside while allowing cable to enter from the back to charge the devices. This ensure that a small spot on the cable can serve as a charging area for multiple devices without place on each other.



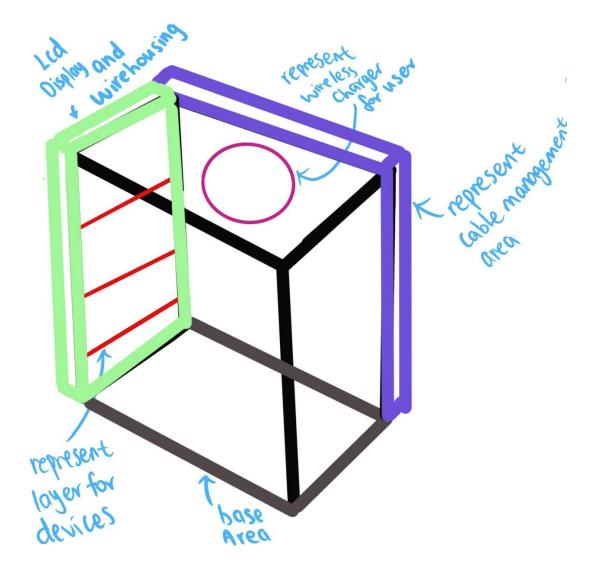
Second Idea will be like a cable rack but for devices, can place then in a horizontal slot in between the holder slots that means cable management will be easy and access to charging cables are easier. This can be mounted on the table through some screws to ensure to help increase the space of the device



Third idea will be like stationary organiser, it has many slots to store item big or small. This will cater to different sizes and other products beside tablet and handphones, it can serve as a double purpose and be used to hold wallet and keys. This will be act like a location of all your valuable so that when packing, you wont forget to unplug the device from another location and also keep track of what items are missing.



Fourth idea will be like an interactive fridge, it can show battery percentage of devices when charging when connected. This will allow the user to know when the device has finished charging and available for use instead of turning on the device to check the battery percentage. It can serve as a double purpose; you can also set reminders on the devices so you can keep up to date on the schedule. A display on and off button will be place to safe power consumption.



Above is a sketch of my design, I called it tech manager, an combination of the first four designs. The green lines represent the LCD Display mount point to show battery percentages as well as the date and time. Red lines within the green area represent the different layers, number of layers may vary. The Dark grey line represents the base area layout. The Black line represent possible changes to the design but most probability to be removed to reduce cost of material.

The circle at the top represents a wireless charger to allow users to use this as a charging area instead of using another wire to connect to it. However, this only applies to wireless charging devices. Finally, the purple area will be where cable holders will be kept ensuring no cable is entangled while charging. With the design set aside, you may be wondering where the cables are plugged into, a USB hub will be located at the top left along the green and purple line, this allows the USB hub be connected to the LCD screen via a motherboard that will run the

system to retrieve and display the percentages of the battery. As for power, a power cord can be built into the system, this allows power to the USB hub and LCD display. The OS system can be Linux coded easily to ensure it is user friendly however for the device to be registered, the cable used must be able to have data transfer. This tech manager can be kept on the desk and design for a side table version can be released if popularity for this product is in demand.

As for materials, the shell can be made from wood. The housing for the LCD, it will have a metal plate cut out and stick on adhesive to ensure it stays in place as well as making the design nice. The housing for the cable can use a multiple cut of cable holder and screwed into the wooden shell. We can have a cut out in the wood and place a non-flammable material to hold the power area to ensure the product does not catch fire. For future expansion of product, we can have an additional slot to allow the device to have a detachable layer that can link to the existing product for more space and tower up.

With this, they can act as a charging dock that can place on your desk or side desk. Solving the issue of no space to charge multiple devices at one locations without multiple cable extension.