HCIL Assignment 3

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Constraint (In College Campus)

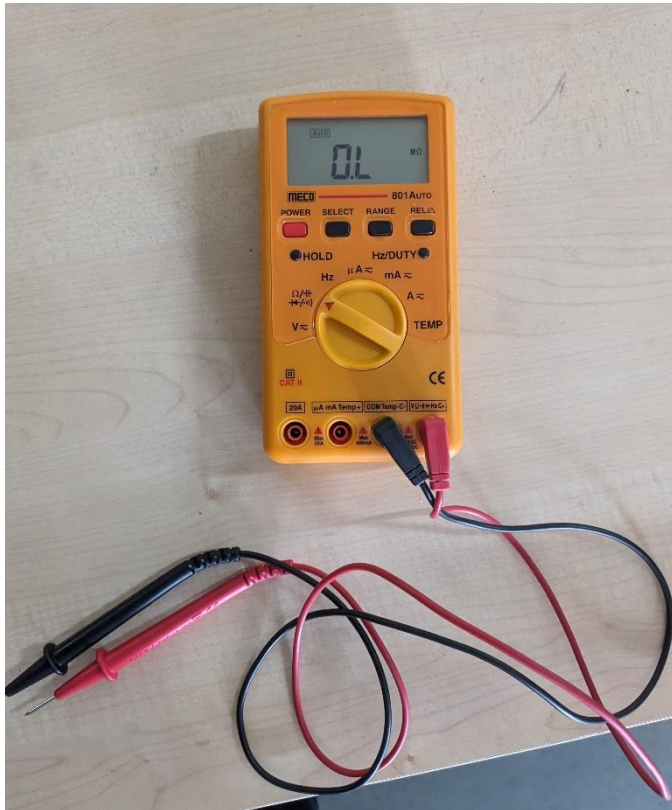| Image	Description
1. Water cooler at 3rd floor A3 building	This water cooler on the fourth floor of the A3 building (IT Department) has this enclosure platform under the taps to keep glasses to fill. But because of the enclosure, it limits and constraints the size of the container in which you want to fill the water (glass, bottle, etc.).
2. Metal cutter in workshop	This machine is a metal sheet cutter in the workshop. It has a constraint on the width of the metal sheet that can go in it, or the maximum width of the metal sheet for which this machine can be used.

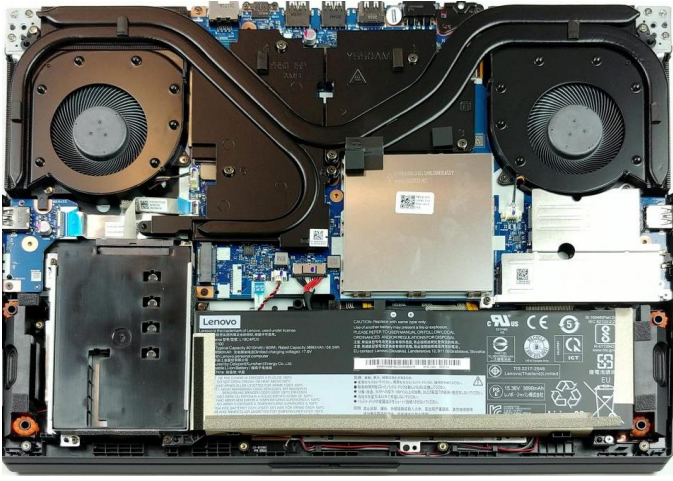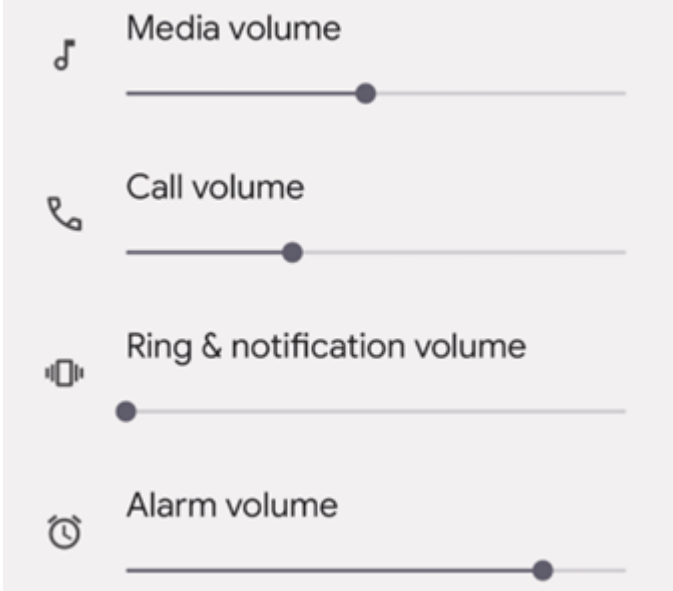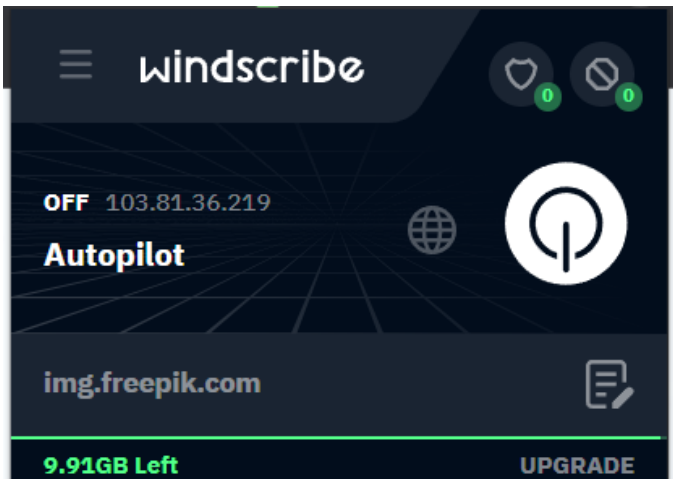|	
3. Bench vise in workshop	A bench vise is used to clamp metal or wood in workshop. This bench wise has a limit or constraint on the maximum width of the object that it can be used to clamp.
4. Lift access for college lift	The lift in our college can only be used by authorized users (faculty members, and people with lift access cards). This is a constraint to the usage of lift by other than authorized users.

5. Digital Multimeter in MP Lab

The digital multimeter in our MP Lab in the IT Department has a constraint of maximum current measuring capacity of 400mA or 20A (depending on the terminal used).

Constraint (In Own Neighborhood)

Image	Reasons why it is a Good Design
1. Lenovo Legion 5 upgradability (Rudra)	My Lenovo Legion 5 laptop came in box with a 512GB SSD and a 1TB HDD. But I recently wanted to upgrade it with an additional SSD since I had read it in my laptop's manual that it has two NVMe M.2 SSD slots and a Hard disk slot. But apparently the Hard disk slot overlaps with one SSD slot. This creates a constraint in which I can either use two SSDs or one SSD and one HDD.
2. Combined ring and notification volume (Rudra)	The ring and notification volume slider in the Google Pixel smartphones (like my Pixel 4a) are combined. This creates a constraint on when you want to silence your notifications but don't want to silence your call ring.
3. Free version limiations (Rudra)	Most of the freeware software and applications nowadays have some limitations in their free version, which can be overcome by purchasing their Premium versions. For example, in this case, I use Windscribe VPN which provides me with only 10GB bandwidth for a month.

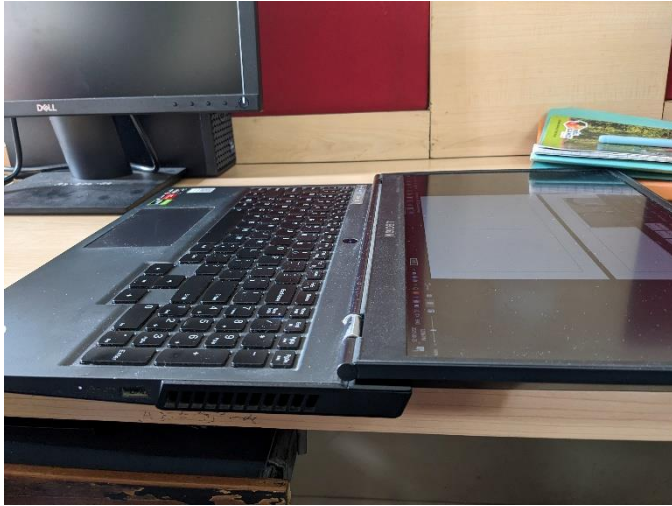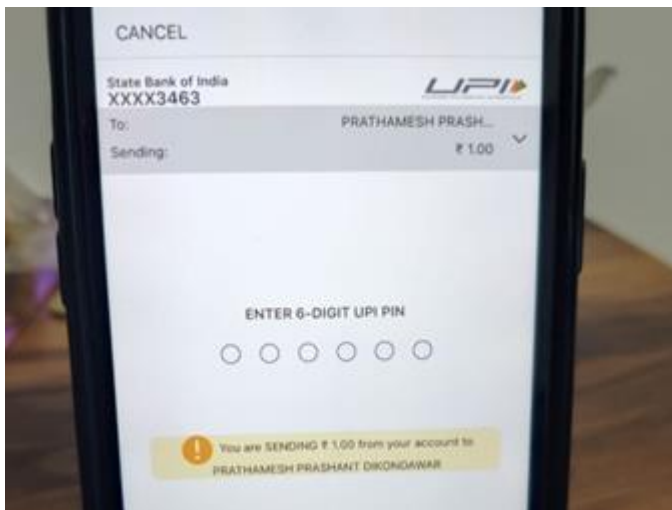|	
4. No headphone jack (Manish) 	I have a Google Pixel 3 smartphone. This phone does not have a 3.5mm headphone jack. This creates a constraint for me to use either a 3.5mm headphone jack to USB Type-C adapter or a wireless earphone.
5. Geyser (Manish) 	This geyser heats only up to a limit then it automatically shuts down.

6. Laptop maximum hinge angle (Manish)	Laptops have a maximum hinge angle constraint. Like for example, this laptop does a 180° angle.
7. UPI PIN (Prathamesh)	Some banks (such as SBI) constraint you to create a six-digit UPI PIN instead of a four-digit one. This option of PIN length should be given to the user.
8. USB Type A (Prathamesh)	USB Type A has the constraint that it cannot be used from both the sides (as opposed to USB Type C which can be used irrespective of the orientation of the head as it is a symmetric design).

9. Only USB Type-C port on laptops (Prathamesh)	The newer MacBook Air as well as some other slim Windows laptops have only USB Type C ports, both for charging as well as connecting peripheral devices. This creates a constraint for the user to purchase a USB dongle.