## Reverse Engineering an Old Lenovo Thinkpad Laptop.

30558C Landon Hancock, Maryland The first thing I did was take out the battery. To get the battery out I had to slide and hold two switches, which unlocked the battery, allowing me to slide it out of place.



Afterwards I unscrewed the cover of a small compartment on the back of the laptop and removed it.



Next I unscrewed the bigger cover and removed it. There were only three screws, inside was

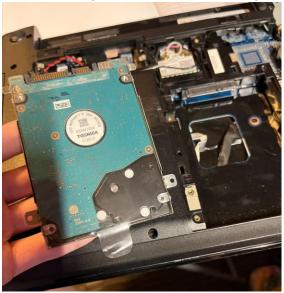


the memory and the hard drive.

The first thing I decided to remove from this compartment was the hard drive.



After removing the three screws holding it down, I had to slide it out of place.





Finally, I moved onto the memory. I had to pull on two metal pieces to be able to get the memory card out.



After I took everything out, I followed the same steps I had gone through to take it apart, but I went through them backward in order to put it back together.

Something that I learned, or realized, after taking this laptop apart is that most of the components that would need replaced often are easily accessible. Screws weren't the only mechanisms used to keep the laptop together.

At a certain point, I didn't want to take it apart anymore, because I worried that after that point it was irreversible. Most, if not everything in the laptop is delicate, and finding replacement parts would be difficult, or almost impossible, because of how outdated it was.

I could probably repeat these steps on other laptops that were made during this time and see things that I saw in this one. Or I could use some of the knowledge from taking this apart to take apart a newer, or older laptop.

Before I put it back together, I had the idea of adding a second memory card, along with the one that was in it originally. My parents helped me find another old laptop, and repeated all the steps on that laptop. I found a memory card that was identical to the one in the Lenovo laptop, so I placed it in the second memory port when I was putting it back together.