NOVA SCHOOL OF SCIENCE & TECHNOLOGY

Interação Pessoa-Máquina

2024/2025

Assignment 1

José Romano 59241

October 30th, 2024

Bad User Design – Apple pencil 1st gen charging design

On this assignment, we were proposed to look at our world from a different perspective and evaluate the user interface design of objects/software that we use daily and choose one with a good design and one with a bad design.

The Apple Pencil (1st gen) offers a particularly frustrating experience when it comes to charging. To charge, I must either connect it to my iPad's Lightning port, which not only prevents me from charging the iPad simultaneously but also leaves the pencil precariously sticking out. This design choice feels fragile, almost inviting accidental damage to the pencil or iPad. Alternatively, I can use a small, easily misplaced adapter that came with the pencil, which adds another layer of inconvenience.

It seems Apple's design team intended this to push users toward the Apple Pencil (2nd gen), which boasts a much-improved charging solution but is only compatible with newer iPad models, like the Air and Pro, which are significantly more expensive.

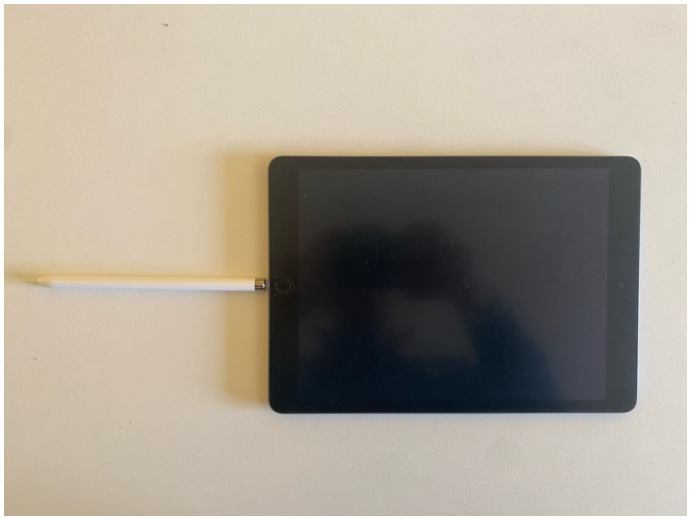

Figure 1 Photo of the unicorn design and Photo of the pencil charging with the adapter

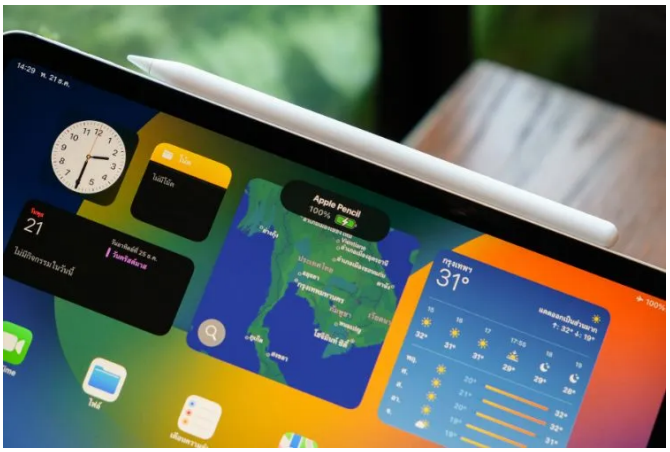

Figure 2 Design of the charging mechanism for the 2nd gen apple pencil (only compatible with iPad Air and Pro versions)

* While Apple claims that the quick charging feature justifies the design of the first-generation Apple Pencil, it remains a prime example of how design can sometimes prioritize product differentiation over usability.

Good User Design – USB-C cables

The USB Type-C cable exemplifies excellent user interface design through its simple, intuitive, and efficient features. The **reversible connector** is a key design element, allowing users to insert the cable either way, eliminating the guesswork and frustration of aligning it properly, which was common with older USB connectors.

Its **compact and uniform design** makes it universally compatible with a wide range of devices, reducing the need for multiple cables. This streamlining of the interface, with one cable serving charging, data transfer, and video output, simplifies the user's interaction with technology. Additionally, the **durability** and **robustness** of the Type-C connector ensure that it lasts longer and maintains a stable connection, improving reliability and user satisfaction.

In summary, the USB Type-C cable's design improves the overall interface experience by making it more straightforward, versatile, and durable.

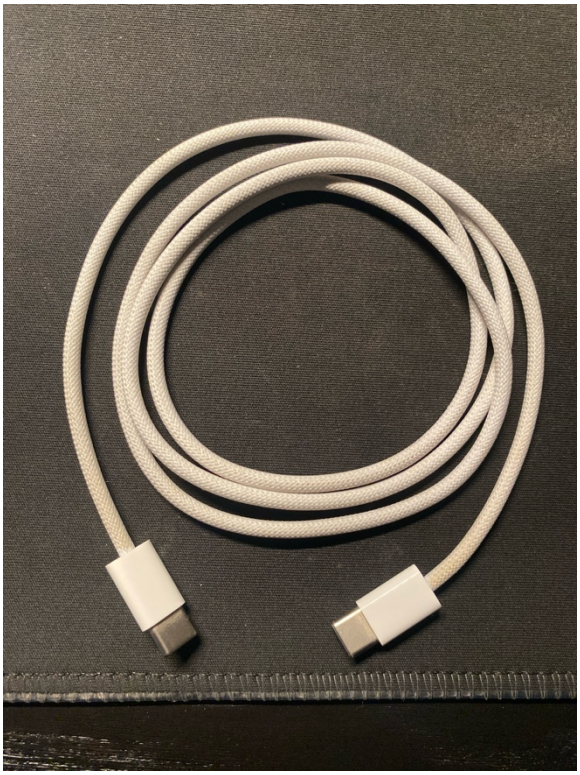

Figure 3 USB-C Cable (both endpoints and sides have the same shape)

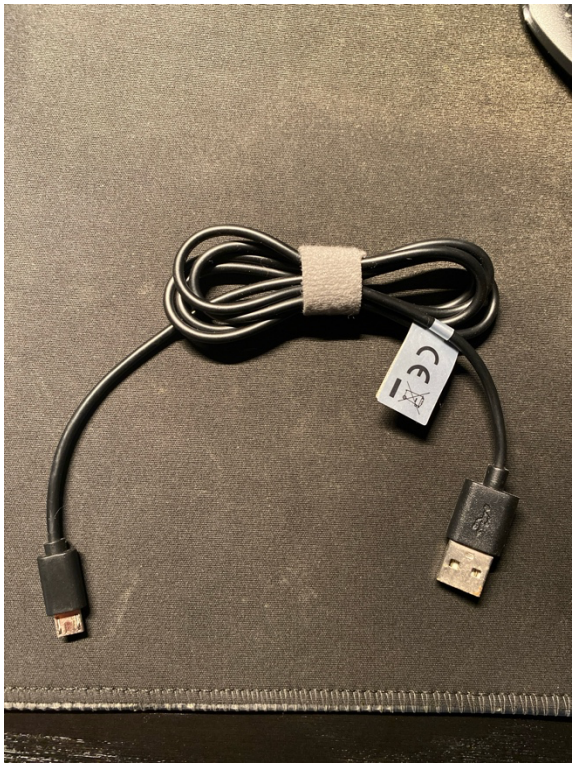

Figure 4 Micro-USB cable (needs to have a USB-A male point because the micro-USB is not compatible for inputting energy / data, only outputting