**Key Components:**

When thinking about the essential components of computers, I start to think about what I always need to build a PC. Central Processing Units (CPUs) that run all the program’s instructions and controls cannot operate without a motherboard. But not all motherboards are swapable to CPU’s.  For example, the latest Asus ROG STRIX X870 motherboard (ASUS, ROG STRIX X870-A GAMING WIFI, 2023) only works with AMD’s CPUs on an AM5 socket, but someone not knowledgeable about computers can easily mistake an ASUS RGO STRIX z790 (ASUS, ROG STRIX Z790-E GAMING WIFI II, 2023) that only supports Intel CPUs as the right motherboard for an AMD processor. Another common misconception are input/output devices where a CPU/motherboard combo does not support CPU graphics, but someone who is not familiar with computer will plug an HDMI cable for video output into the motherboard rather than the GPU (graphic processing unit).

**Personal Devices:**

Personal devices throughout the years have become an amazement to what they are able to do. Coming from the era of T9 texting (T9 (predictive text), 2024) with the physical button inputs like payphones, to now where phones can listen to what I say and display the speech to text in a text message. Some of the main differences between portable devices and computers outside of video applications such as teams, skype, and Facebook messenger are touch screens that display vivid images. Samsung’s Galaxy s24 ultra has a stunning 1440p resolution display that provides OLED! What about the face that most cameras on smartphones and tablets can produce 8k imaging! 8k! Overall, though some of the differences between the portable devices are basically all in one stop shop, output and input, CPU, lower voltages, and small.

**Works Cited**

ASUS. (2023). *ROG STRIX X870-A GAMING WIFI*. Retrieved from Republic of Gamers: https://rog.asus.com/us/motherboards/rog-strix/rog-strix-x870-a-gaming-wifi/

ASUS. (2023). *ROG STRIX Z790-E GAMING WIFI II*. Retrieved from Republic of Gamers: https://rog.asus.com/us/motherboards/rog-strix/rog-strix-z790-e-gaming-wifi-ii/

*T9 (predictive text)*. (2024). Retrieved from Wikipedia: https://en.wikipedia.org/wiki/T9\_(predictive\_text)