Computer Science AP Project: Writing Assignment

- 2a.) The computing innovation i'm talking about in this essay is Bluetooth. Bluetooth is a very popular program used in many devices, and in most cases is used to simplify digital tasks such as texting, calling, scheduling, etc. The way Bluetooth works is it sends and receives data between the bluetooth device, and the device it's connected to, and sends the data in small packs back and forth between devices. In the artifact attached to this the top shows the data being sent from the host device and then back to the slave device. The bottom is....
- 2b.) In the development of my artifact I downloaded images and pasted them in a google docs document. Then i needed to get something to signify data being transferred. So I went to the top of the document and clicked the "Insert" tab and created a drawing. I then pasted the arrows and placed them in the desired location. Then I copy and pasted a new set of arrows, and edited that set to face the opposite direction, and repeated the last step. I then made several text boxes to label the different images or describe what is happening. That involved the most effort out of all of the artifact.
- 2c.) One of the benefits of Bluetooth devices is that it make some tasks easier to manage. For example someone might need to answer a business call but need to attend to do some physical activity. Bluetooth earbuds allow for that person to comfortably answer their call and speak to them while also being able to do what they're supposed to. One possibly harmful effect that bluetooth devices have is that the signals being sent to and from both devices can cause brain tumors and other mental problems.
- 2d.) The kind of data Bluetooth primarily uses are MHz radio waves. They operate from 2402 to around 2480 MHz. They carry small packs of data through these radio waves to one of seventy-nine different channels. These transfers are referred to as hops. A Bluetooth usually makes approximately eight-hundred hops per second between the both devices. One concern about Bluetooth devices is that the host device itself can potentially be at risk from being breached through Bluetooth device or connection. Bluetooth does not establish a private which with enough skill is possible to peer into either device.

2e.) Citing:

"How It Works | Bluetooth Technology Website." *Bluetooth*, www.bluetooth.com/what-is-bluetooth-technology/how-it-works.

Retrieved 12/8

"Bluetooth." *Wikipedia*, Wikimedia Foundation, 11 Dec. 2017, en.wikipedia.org/wiki/Bluetooth.

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"How Does a Bluetooth Headset Work?" *Jabra*, <u>www.jabra.ca/q/how-does-bluetooth-headset-work.</u> Retrieved 12/12