3/9 Minutes

Audio:

* Code written on the Raspberry PI that uses the microphone to take in a sound and convert it to a .wav file and pushes it to a program that takes FFT of the sound. Next, it takes the .wav file and compares it to a saved sound file and compares the FFT to see how different/similar it is and to determine if the alarm is going off from the saved data file.
* Nick then ran the program to show that the program was functional and could identify the alarms or not
* Nick also ran live recording test to show that the whole system was functional
* Difference threshold still to be determined with more tests but have a good feel for it at this point
* Shazam test?!

Wristband/BT:

* Bluetooth message pushed to the wristband and wristband will take in the signal and push it to the LCD on the band
* LCD is functional based on using the Sparkfun BT app at this point, just need to square up the BT signal part of it
* If nRF board can power LCD via SPI, then all other things that connect to the board can be done
* Schematic of wristband is finished, just need to create an Eagle file
* Bootloader programming needs to be looked into and figured out (look into ESP32 and python files)
* Fix programming mode (something other than buttons like jumpers or signal paths)

GUI:

* GUI interface designed via TKInter with keyboard and alarm severity
* User will input names which will be used in the PI and the variable string will be passed down the chain and eventually to the wristband LCD
* Hit OK button and record button