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ESP32 24 Hour Temperature Report

The project for ENGR 103 involved creating a device from our ESP32 that could take in some form of data that we found interesting, which we could then write a report about, and think about. For the project, I created a temperature sensing device from the ESP32 that used a combination of a thermistor, a resistor, breadboard, and some male-to-male connectors. Using them, I was able to create a device that didn't blow up my computer, but one that was able to read temperature. Before plugging it in however, I created a rough version of my code, that was simple able to take in the rough values. After further research, and seeing that the log function broke my code, I found a function that was able to create accurate data and print it every second. After even more coding, I was then able to finalize the project, by creating an array, with 600 slots, perfect for a 10-minute average (data every second, 60 seconds in a minute, 600 seconds in 10 minutes), and by creating a way for it to average those values, and to also show me the max and min values of the entire data set so far. What I drew from the data is that the room I put the device in was very cold. At my house, people like to get into my stuff without permission, and to try and "hide" it, I put it in a storage closet in my house and stay a very consistent 60 degrees for most of the time, with a few spikes here and there, most likely from an error in the readings. To conclude, I created a temperature sensing device with an ESP32, that collected data for 24 hours. The data found showed the room that the device was in stay a nice cool 60 degrees for the entirety of the 24 hours.