**Remote Work Clerk**

**Student Name:** Anna Ballot **Student ID:** 08340251

The purpose of this device is to help workers while remote working. While “working”, I may take a longer than intended break from my upstairs office and head down to make a cup of coffee and get carried away doing the laundry. Often when I come back to my desk, I have missed an important message or call on my laptop, and there can be a delay in me responding.

This device will register the sound when a Teams notification comes in through the Grove Sound Sensor, the Arduino will use MQTT to send data to ThingSpeak. ThingSpeak will use React, ThingHTTP, IFTTT, which will trigger Voice Monkey on my Amazon Alexa downstairs in my kitchen to tell me that I have a Teams message upstairs.

I will turn on this sound monitoring via a hand gesture before I leave the office, and turn it off when I’m back (the LED light will notify me when it is monitoring)/ Alternatively I can use the Blynk app to turn on and off the monitoring.

This device will also monitor temperature in my home office, and will notify me via Blynk and the LED screen if it goes above a certain temperature. This will prompt me to open the window so I don’t get sleepy.

I will write sound sensor data and temperature data to MySQL via PHP to a local server I have set up.

**Tools, Technologies and Equipment**

* Arduino Explore IoT Kit Rev2
* Temperature sensor and Gesture sensor which are included in the above kit
* Grove Sound Sensor
* ThingSpeak (React + ThingHTTP)
* IFTTT
* Alexa Voice Monkey
* Amazon Alexa – Echo Dot
* C++
* PHP
* MySQL

**Project Repository**

<https://github.com/annaballot/remote-work-clerk>