

Screen Time

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Once a week, your phone dings, and you get that dreaded notification. You're about to find out how much time you have wasted over the last 7 days staring into your phone. Were you better or worse than last week? Were you better or worse off for it? Likely the latter! But what about our other screens?

Screen Time will monitor connections of other screens to your network and record your usage. Be it your smart TV or your Xbox, how much other time is spent straining at pixelated screens. MAC addresses for network devices will be monitored for usage, compiling data which will be graphed and actioned via Screen Time emails, to notify the user of their bad habits!

Tools, Technologies and Equipment

RPi: The Raspberry Pi will host the application and listen on the network for other connections, record the data and issue it to other services.

Python: The RPi will be programmed using Python with a combination of libraries.

WIFI: We will monitor connections to WIFI to determine device usage

MQTT: MQTT will be utilised to broadcast our data to ThinkSpeak.

ThinkSpeak: We will gather data, graph and analyse it and then action it through ThinkSpeak. The application will issue a weekly email with device usage data, and trends as time progresses

Glitch: A site will be hosted on Glitch where users can see embedded graphs and get realtime data on usage

HTTP: Another protocol to handle data availability on the website.

Project Repository

https://github.com/shanedunne/screen_time