

Step Counter & Graph

By Sophie Armstrong & Julien Purvis

What is it?

It is an accelerometer that graphs x & y and converts the data into steps. It will track the live data from the watch sensors. The components would be the TTGO watch, the EC2 server, and my computer. The watch will read the acceleration and send the information to the EC2 server. From there a graph will be displayed showing the x/y motion and the steps analyzed. I will have to make the graph somewhat simplified so that the live updating is fluid.

Tech stack:

Arduino, HTML, Visual studio code, EC2,

Design and purpose

Trade off in design:

- We will have to have a simplified graph since we are not measuring time but the analysis equation output for steps.
- We will have a limited walking range due to hotspot.

Purpose:

- To track fitness and steps.
- health

How is it gonna work?

I expect to struggle with coding a actively updating graph and how I'll display the graph.

Timeline:

Oct 30th - Have html done.

November 6th - Have accelerometer reading to EC2 server accurately.

November 13th - Have analysis of data coded.

November 20th - Have graph made.

November 24th - Hve graph refine for fluid updating.

November 29th - Have full watch and website completed.