**SETSTATS**

A picture containing antenna

Description automatically generated

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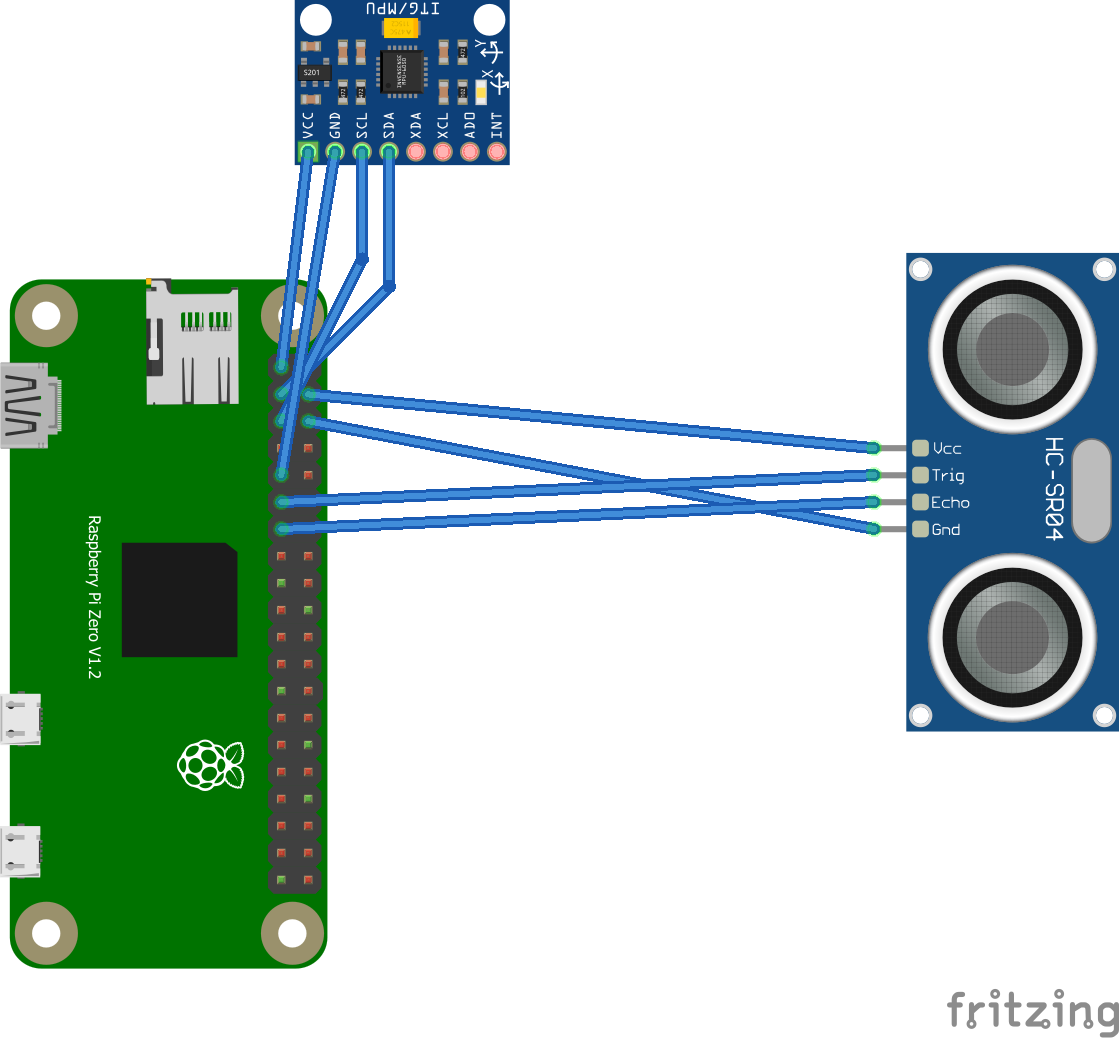
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etc

**Hardware**

Detail the hardware required

1. R**aspberry Pi Zero** – this is being used as it is the more compact option whilst also having low power consumption.
2. **Accelerometer (MPU-6050)** – used to measure the displacement on the x-axis.
3. **Ultrasonic Sensor (HC-SR04)** – is being used to measure the distance from the ground very accurately.
4. **Power Bank (5000 mAh)** – the power source which will be connected via micro-USB.



Detail how we will power it and how we will connect it to the internet

Is it mobile?

The system will be connected to an external rechargeable battery source (Power Bank), which will give long lasting life with a low power consumption.

It will be connected to the gym’s Wi-Fi or your phone’s hotspot.

**Data**

Detail what data we will be gathering by our device

How the data will be gathered

How we are going to be processing the data collected

How the device and data are going to be secured

Frequency with which each sessor can record a value and how the sensors work

Api’s to be detailed here if we use them

How cron will be used to process the data, listing the cron jobs that will be run

Detail security, how will we ensure that the data is secure (data transferred between the device and a server and while in storage)

**User Interface**

Paper prototype

How users connect

What data is available to the users

What functionality they have to view and interrogate the data

**Users**

Use case etc (have at least one solid use case)

End users, who are our users? How will they use what we develop (app and device (device setup?))

Create user personas and user stories (have 4? One of each category: new, experienced, pro, injured)

**Testing**

How we going to test?

Have people we know try to use it and watch them and have them give feedback?

Old, young, new to lifting, never lifted before, experienced, professional

Compare results and feedback (note their feedback for improvements)

**Our Tasks**

Give tasks to each of us and detail what each of us will be doing