Thingspeak documentation
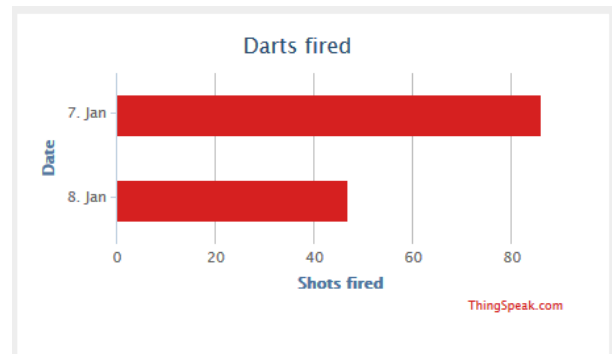
Website: https://thingspeak.com/channels/1278861

Description: A thingspeak channel will be sent data from the Raspberry Pi and display it on a few charts, which sums up the data per day.

How it works:

The data is sent to the thingspeak server everytime the magazine is popped out, and if the response is not a 0, meaning data rejected, it is then displayed on the channel in several charts. There is a summed chart for each daily use:

- Darts fired
- Magazine used
- Jams

They're displayed in a bar graph.

Other info:

Data can only be received every 15 seconds.
Certain widgets are also available, but they only display the latest data point.

Code snippet:

```
def magazineRemoved(self):      #mag-thingspeak
    global magazineChanges
    magazineChanges = magazineChanges + 1
    response = thingspeakSend()
    if (response != 0): resetValues()
GPIO.add_event_detect(switch, GPIO.FALLING, callback=magazineRemoved, bouncetime=1000)
```

Data will be sent whenever the magazine is removed. This process is running inside it's own thread, since it's triggered through add_event_detection, meaning it won't disturb the rest of the code while waiting for a response from thingspeak. The values collected will only be reset if the response from thingspeak is anything else but 0.

```python
def thingspeakSend():     #sending to ThingSpeak
    response = nerfgun_channel.update({shot_count_field: shot_count, magazine_change_field: magazineChanges, jam_door_field: currentNumberOfJams})
    return response
```

This function is the one that does the actual sending of data to their correct fields on everything. This is also the function that return the code from sending data.

```python
def thingspeakSend():     #sending to ThingSpeak
    response = nerfgun_channel.update({shot_count_field: shot_count, magazine_change_field: magazineChanges, jam_door_field: currentNumberOfJams})
    return response
```