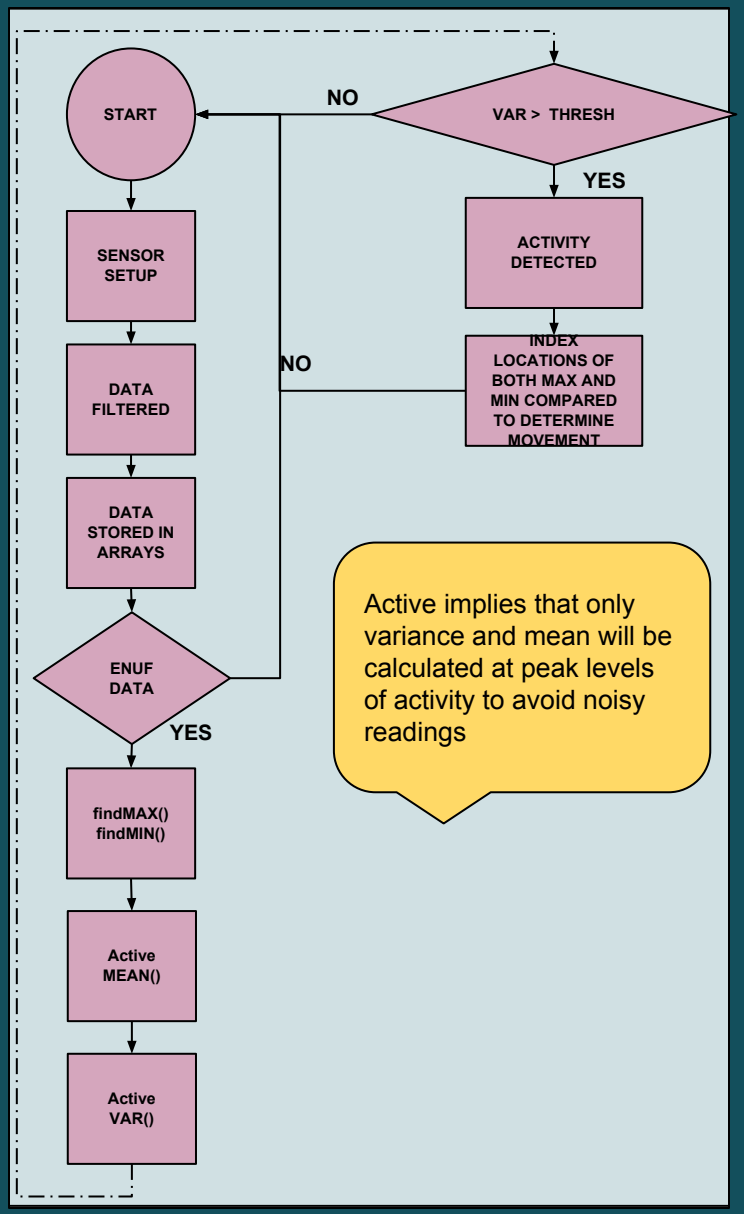
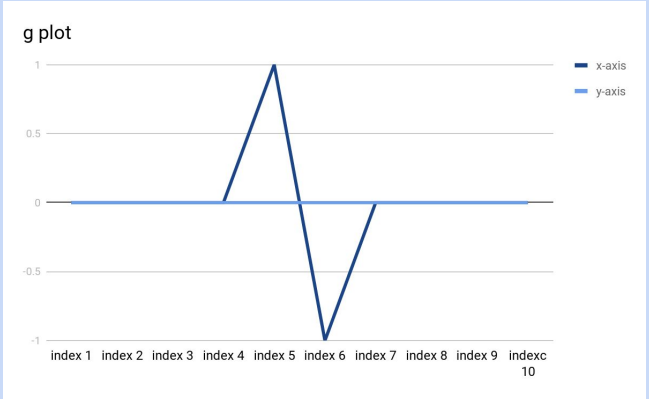
## Software Block Diagram




## A More In-Depth Explanation of the Algorithms blocks




MAX() returns an int of value 5
MIN() returns an int of value 6

MEAN then calculates the average value using the datas' extrema → $\frac{Data[5]+data[6]}{2}$

VAR then calculates the variance using the datas' extrema and calculated MEAN → $\frac{(Data[5]-MEAN)^2+(data[6]-MEAN)^2}{2}$

The Algorithm checks to see if the max came before or after the min. You can determine the movement of the sensor by Applying this in 3-dimensions