Circuit/Software Development

A graph to show values as recorded in DATALOG.csv
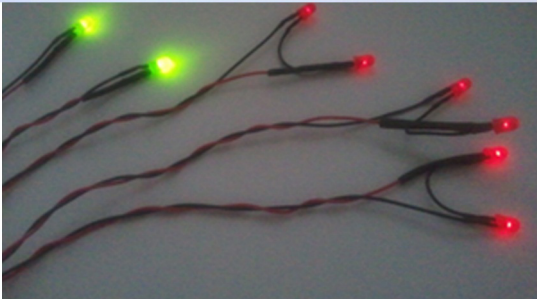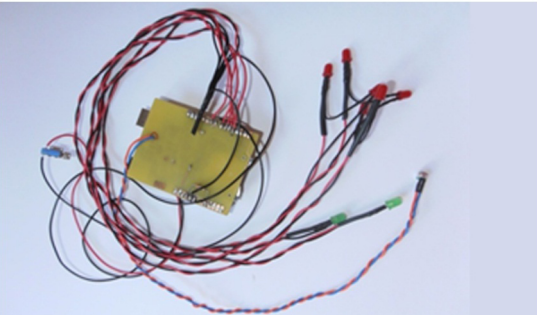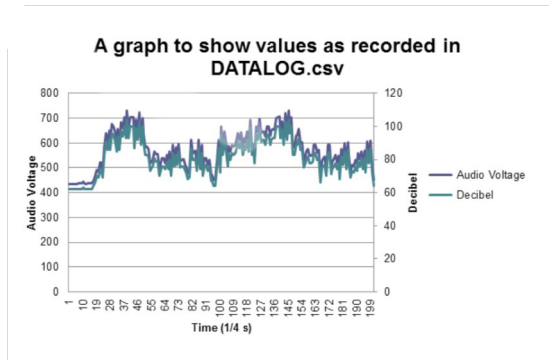
Alarm	Time	Audio Voltage	Decibel
		(Data continued after A1 triggered)	
		435	62
		435	62
		436	62
A1 X		436	62
		436	62
		438	62
		701	100
		749	107
		728	104
		716	102
A1	00:02:01	716	102
		684	97
		705	100
		692	98
		664	94
		698	99
A2	00:02:12	695	99
		700	100
		688	98
		710	101
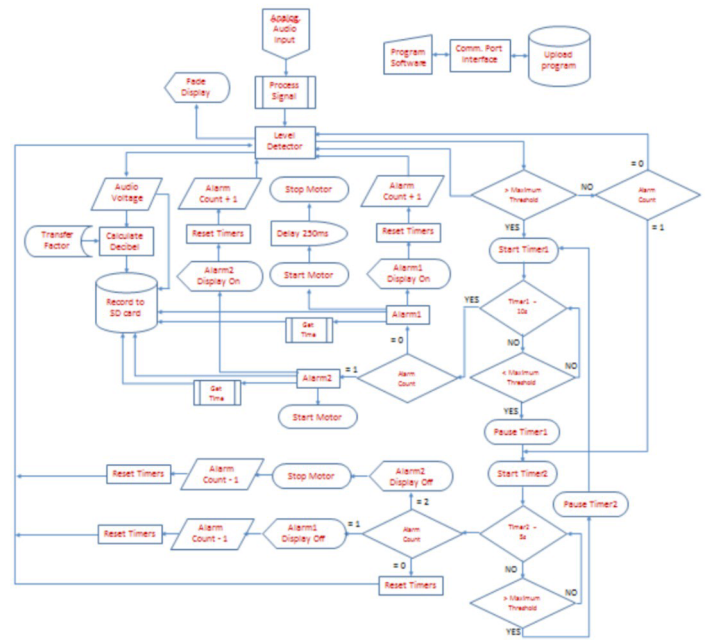
Fully developed with Arduino prototyping boards and a mix of C, C# and C++; the structured text language used by Arduino.

Operation:
1. Recieves noise and simultaneously logs the decibel level and illuminates a number of LEDs depending on the level every 1/4 second onto an SD card.

2. If predetermined noise level is exceeded for more than 10 seconds an alarm is activated.

3. If the noise level is still too high after another 10 seconds another alarm is activated.

4. If the noise level decreases below for 5 seconds then one alarm is cancelled in sequence.