A device to fit in cars to measure air quality in different areas for visual comparison. The air quality values will be visualised using an online application that uses an online map provider (such as google maps or openstreetmap).

**The Data**

The data that needs to be collected will be GPS and an air quality value. The GPS location will be used to identify where in the world the air quality value has been read. The air quality value will be used with an online map provider to plot a contour map of the air quality.

The data will need filtering. Filtering techniques will need to be studied to remove any unacceptable data that may reduce the quality of data collected.

**Collecting Data**

A portable microcontroller will be needed to collect data for both GPS location and air quality. As distance is eventually limited on online map providers (e.g. zooming in so far you don’t know what you’re looking at is pointless) a few readings every m^2 would create an accurate averaged reading.

**Storing Data**

Storing the data from an SD card Is