Project Title

Polluted

Project Description

Use a Raspberry Pi and sensors to acquire pollution levels on your way home. This idea is not new! But it is interesting.

The Raspberry Pi is an incredible piece of kit. But the thing that makes it most amazing is its connectivity. We would like you to connect sensors to a Pi to measure air pollution on your daily commute.

Your project will take you through the following process:

1. What is air pollution?
2. How do we measure it?
3. What is a Raspberry Pi?
4. How do I use it?
5. What sensors do I need?
6. How do I connect them?
7. What data do they produce?
8. How do I analyse it?
9. How do I transmit the data?
10. How do I display it?
11. How do I measure outside?

Experience Areas

This project will allow members to gain and exercise knowledge and experience in the following areas:

Possible costs

Around £200 for complete sensor kit, Rasp Pi and Bluetooth dongle for transmission

Equipment or Accounts needed

Laser Particulate Sensor Gas Sensor Base Grove Kit Bluetooth USB

Deliverables

See 'Your Project Deliverables'.