

TEEN TECH 2020

Safer streets for cyclists

By Year 9



What global challenges are we facing?

- Climate change
- Dwindling oil reserves
- Pollution



What local and personal challenges do you face?

- How to make fewer short car journeys
- How to do more exercise as part of our daily routines
- **How to make the streets safer for walking and cycling**



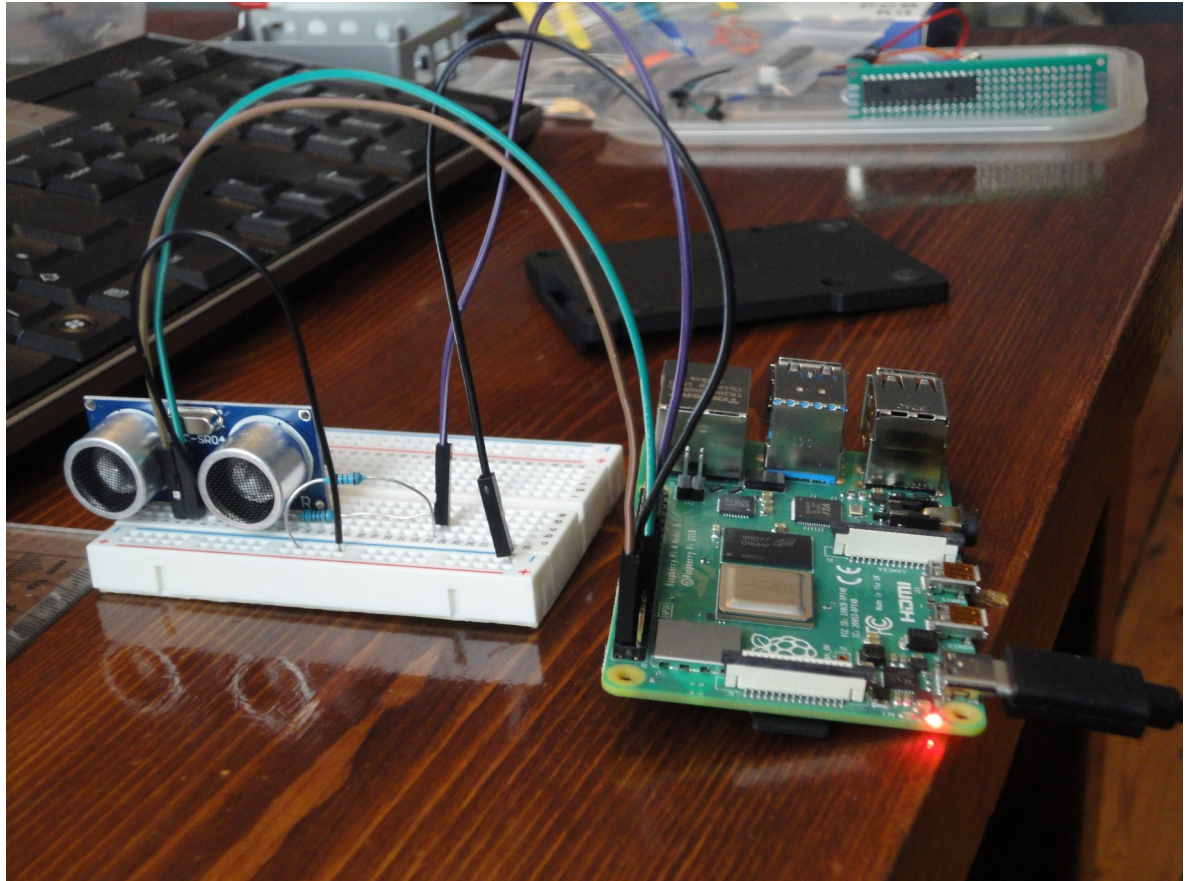
Our presentation

- Our device is called **Elbow Room**
- It measures the distance between cyclists and the vehicles passing by
- It records the measurement data and sends it to the cloud for long term storage
- The data can then be analysed to inform road planning decisions, highlighting the importance of **safer streets** to encourage cycling.



Our presentation

- We have used a Raspberry Pi connected to an ultrasonic range finder
- This is our prototype →



Our presentation

- We have written and tested a Python script that will record when vehicles pass closer than 250mm from the device.



Our presentation

- The Elbow Room device will be attached to bicycles and record data during cycle trips so we can promote **safer streets for cyclists**.

