



# Use **quizbot.xyz**

Mission to Mars July 2019 presentation



# Who we are

**Ashley** - Programming, Hardware testing

**Sebastian** - Programming, Rover testing, Power Point,  
Presentation planning

**Kavan** - Hardware testing, Rover testing, Media content

**Adam** - Media content

Introduction to our demo





## Straight Lines

Each rover track is powered by an independent motor with a constantly changing power output. Due to this the motor's force needs to be constantly adjusted to allow for driving straight lines.

## Turns

Turning can be achieved relatively easy by reversing one track and having the other one continue forwards. This action will then rotate the rover.



## Ultrasonic Sensors

US sensors use waves which travel at the speed of sound to detect the distance of the nearest object. We use this to detect potential drops ahead and any obstacles which lie in the way of the rover which helps maneuver difficult terrain.

## Light sensors

These sensors detect how bright the area they are facing is and then log this data. They can be used to follow a bright light or to avoid darker regions.

Our demo





# Looking back at the week

During the week we had many setbacks but also many successes.

We learnt how to work together as a team efficiently and how to work well under time pressure.

# Questions and answers

