**The track will:**

* be bordered by a ‘wall’ at least 50 mm high,
* have a white line of width 17 mm ±3 mm, which will be at least 140 mm away from each wall,
* have a black floor (apart from the white line),
* include a slope that has an angle of less than 18 degrees.
* Steps in the surface of up to 4 mm like on the flat to ramp
* Line breaks of up to 6 mm
* Changes in surface material??
* Changes in reflectivity

**The buggy:**

* Should not be larger than 28 cm in width
* Should not be higher than 20 cm in height
* Should not be lower than 4mm
* Should not have battery packs that weren’t given to us

**The testing phases:**

Must be able to navigate a max angle of 45 degrees every 50 mm of track and bends that are a **minimum** bend radius of 50 mm for a smooth bend

Must be able to navigate pinch points of 28 mm

Must be able to navigate the final race which **may contain tighter bends**, chicanes, and other dastardly obstacles.

End of the track:

At the end of the track, the buggy should turn around and make its way back to the start, and this needs to be triggered by a Bluetooth Low Energy (BLE) intervention.

**Every part of the buggy must be 20 cm from the end of the line**

**Avoid these problems:**

* You have spares sensors and wires available
* You do not leave pins floating, e.g. the unipolar/bipolar motor-driver pin.

**Some constraints:**

* . The buggy may not turn around until the whole of its chassis is within the turning area
* The buggy must stop back at the start by detecting the end of the line, where “stopped” is defined as all parts of the buggy are within 20 cm of the end of the line and is stationary. ???

**Winning buggy:**

The winning buggy will be the one that completes the course in the fastest time, without touching the walls of the track.

Prizes will also be awarded for the best proposal, most innovative buggy, best software documentation, and best estimation of the track length