# LOXONE

**Config Challenge**
*16/04/2020*
**Car Park Control**

**User Story:**
We are the owners of a new car park under construction for a small shopping centre. The centre will have free parking, however as it is an underground car park with a single entrance and exit, and one way traffic, we need a means of indicating when the car park is full and refusing entry to cars at this time.

**Details:**
This car park has 7 bays in it. In each bay there is a beam detector installed above the bay which will trigger when there is an object i.e car in the bay.

When all the bays are full the entrance barrier should be locked so that no more cars can enter until a car has left.

The exit barrier will have a ground loop installed on the inside that will trigger the barrier to open when a car drives up to it. This is to prevent people entering through the exit.

Finally the lights at the entrance of the car park should change between green and red, to indicate if the car park is empty or full.

**A little extra challenge:**
Each bay of the car park also has an addressable light fitting above it, when there is a car in the bay then the light should turn off.