LOXONE

Config Challenge
09/04/2020
Lift Access Control

User Story:
As the bursar of a new college building being constructed at the moment we have a particular problem that we need a solution to overcome

As each floor of the building will be devoted to a different subject we want to ensure that students can only access the floors of the subject they study, while staff can access all floors. This is not an issue for the stairwell as each floor has an entrance door.

However for the lift we want to limit the buttons that can be pressed to a person's access via an NFC Code Touch in the Lift

Details:
This building has four floors, and each floor has different departments.

> Ground: Entrance and enrollment.
> First Floor: Mathematics
> Second Floor: Engineering
> Third Floor: Staff Offices

The ground floor must be able to be accessed by all with no requirement for presenting a key fob or code as otherwise new starters would not be able to enrol.

The first floor can be accessed by staff and mathematics students.

The second floor can be accessed by staff and engineering students.

The third floor can be accessed by staff only.

There will be an NFC Code Touch installed in the lift, with relays from Loxone wired in series with one of the cores from each relevant lift button, meaning both the relay from Loxone must be closed and the corresponding lift button then pressed for the lift to go to that floor.

A little extra challenge:
The building has an open day on the 3rd Thursday of every month, so on this day the department wants for all of the lift buttons to be operational without the need for presenting a key fob or code.