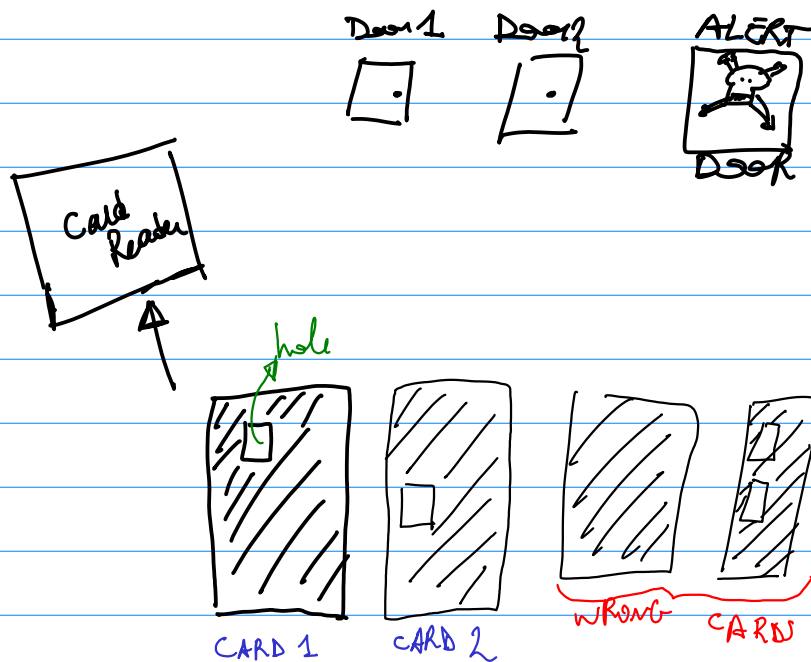
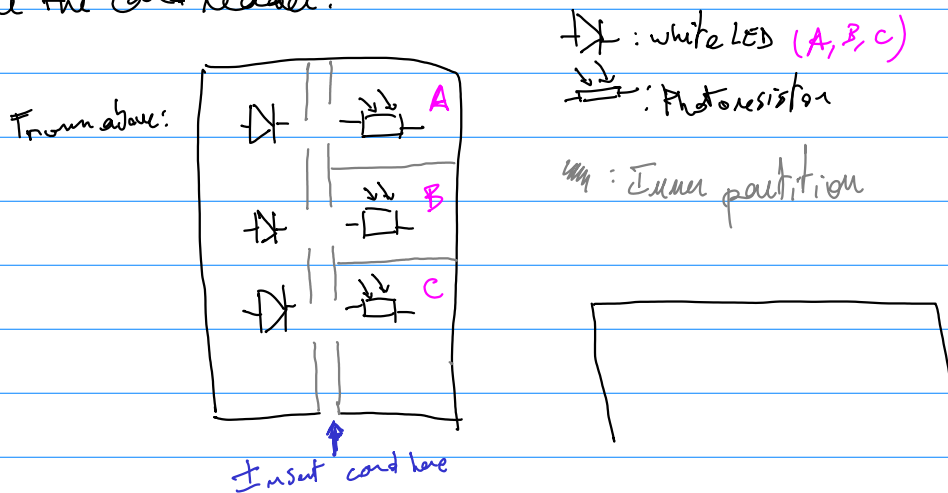




If a wrong card is inserted, trigger the alarm, release the dogs.

Inside the card reader:



The hole in the card lets the light through to the sensor.

The sensor C detect the insertion of a card. If the sensor senses light, we have a 1, 0 otherwise.

By default, we have: $\begin{matrix} C & B & A \\ 1 & 1 & 1 \end{matrix}$

The gate 1 is opened with code $\begin{matrix} 0 & 1 \\ 2 & 0 \end{matrix}$

Anything else triggers the alarm.

It's easy to add new doors or more complicated cards.