Sensor **A**nyone **G**uarding

Team: Guarder

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problem

Various types of harm are problematic in shelters. Examples include noise, infections, locational problems, and sexual victimization. Of particular note are sexual victimization and theft in restrooms and tents. Sexual victimization is unwanted sexual behavior. Any act that is not consensual and not equal is a crime. Therefore, we have developed a plan to combat sexual victimization and theft.
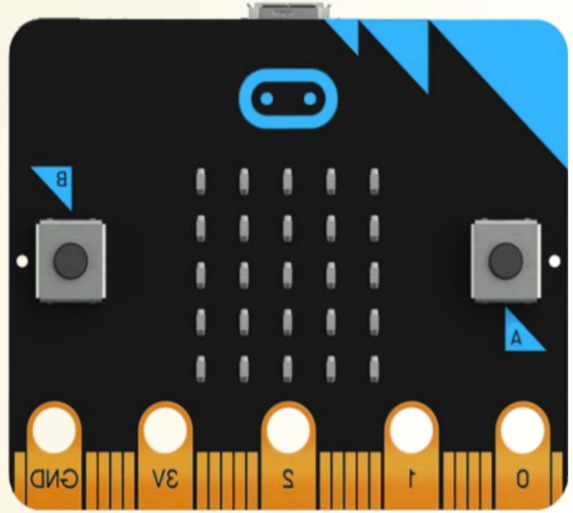
objective

During disasters, many people gather in shelters to save their lives. However, it has become a serious problem that sexual abuse sometimes takes place in evacuation centers and many victims suffer serious physical and mental injuries. We propose this measure to improve this situation and provide a safe and secure evacuation environment.

mechanism

◎Outer door
Password consisting of A button and B button
Press A + B at the same time = Role of the Enter key
・If you are correct…
　A "check" mark appears on the screen.
・If you are wrong…
A "cross" mark will appear on the screen and an alarm will sound.
・In case the user is wrong…
◎Inner door　　　　　　　The alarm can be turned off by entering a specific password.
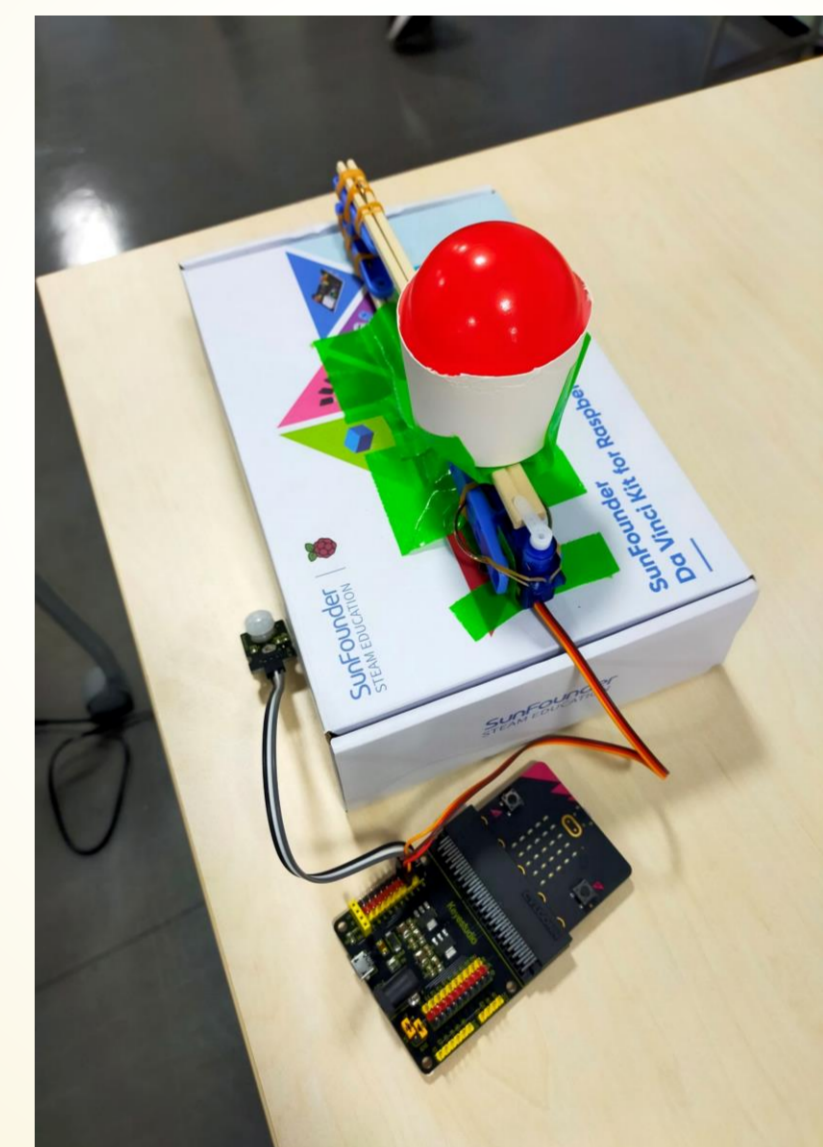System that opens from the inside
It is connected to the external micro bit using wireless technology.
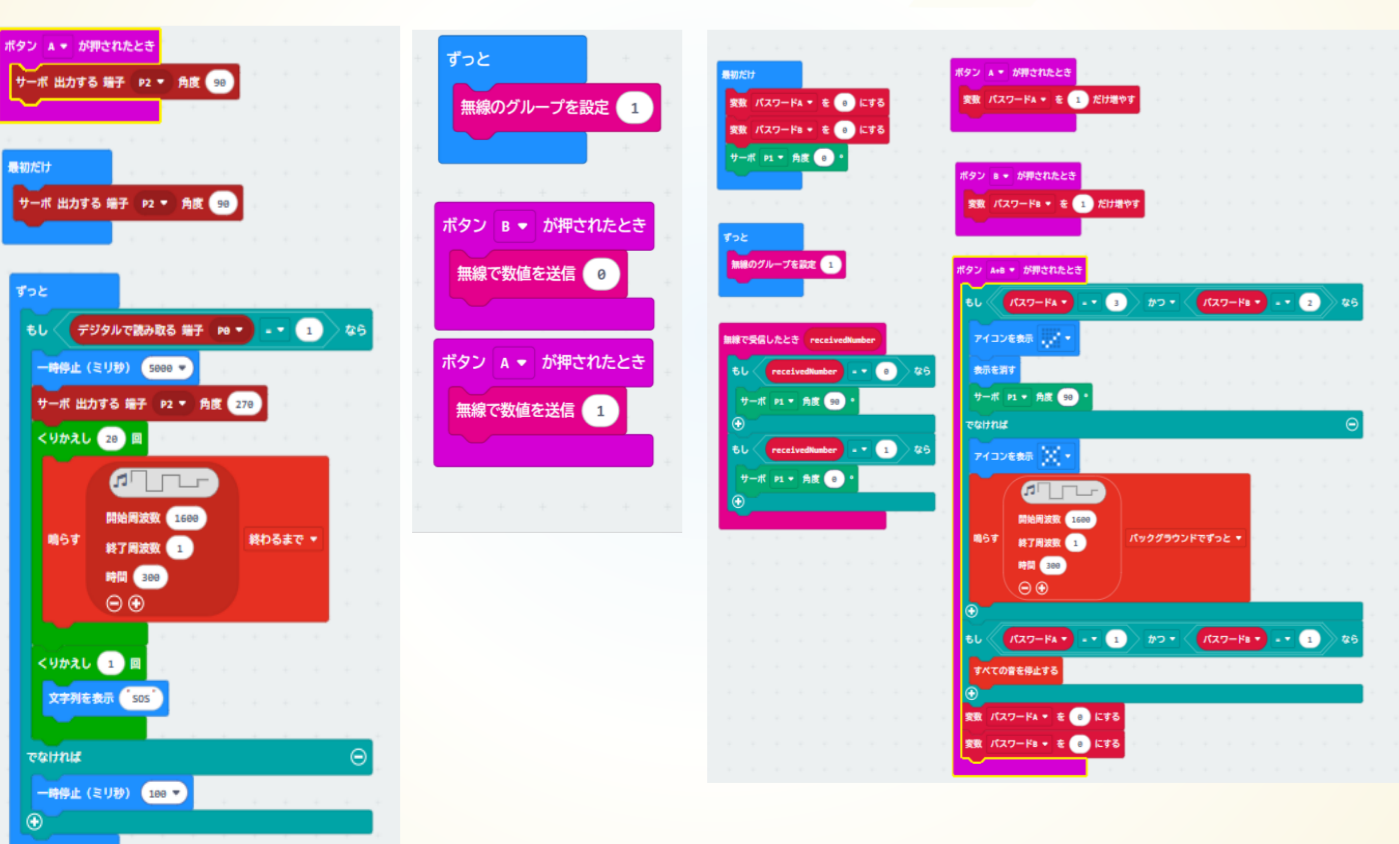
◎Fire ball
If you stay in front of the sensor for more than 10 seconds, the human sensor will respond and a buzzer will sound. When the human sensor reacts, the servo motor moves 90 degrees. The hold is gone and the launcher fires. A colored ball hits the floor and the ink sticks to the criminal's clothes, making it possible to find the criminal.

Launcher

How to make

Summary

These products are expected to make life at evacuation centers safer.
Locks with PIN codes will play an important role in terms of security. It helps protect people who are difficult to fight back on their own, such as women, children, and the elderly.
However, I couldn't create a function to set the PIN number via Micro:bit, so I had to set it directly from the computer, so I would like to improve that.
-Colored ball launchers will be useful as a way to repel suspicious people. Not only that, but simply installing them is thought to reduce the crime rate.
To distinguish between passersby and suspicious persons, we set a time period before the colored balls are fired, but this is not considered to be a reliable method of distinguishing between them.