People Counting System

Watch our video! Click our logo!
Or Demo: https://tinyurl.com/pcse-demo
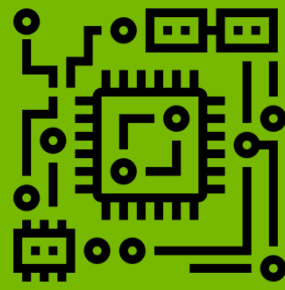
Our system allows you to check the number of people in a room

A simple counting system can be created with relatively inexpensive hardware. Two ultrasonic sensors detect the direction of movement and show the total number of people in a room on the display. A traffic light system provides a user-friendly visualization of the limit status. Two push buttons allow the user to set a custom limit.
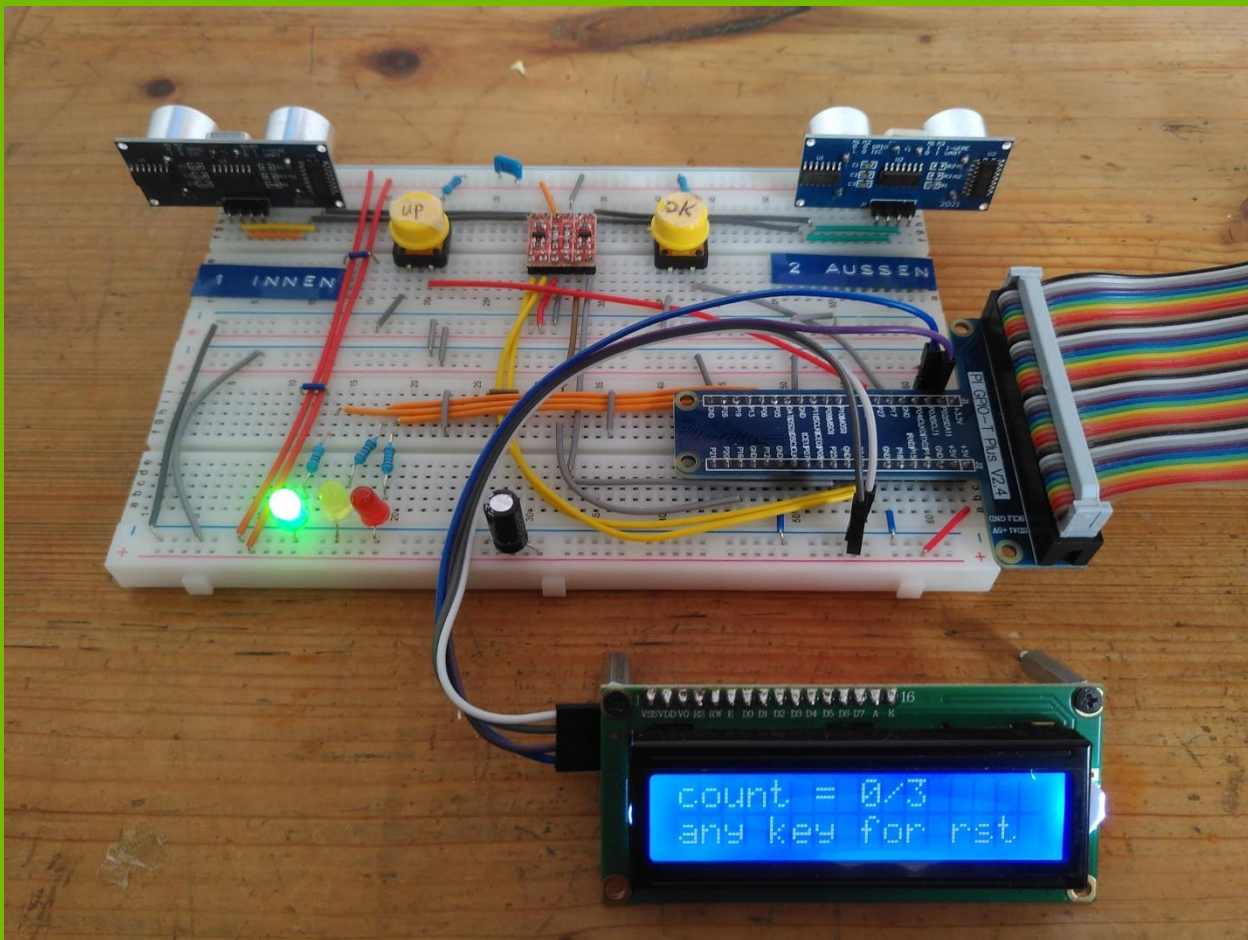
Idea

Since only a limited number of people could enter in one room due to the corona situation, we had a interesting project idea of developing a system with hardware that we already had.

Design

For the whole system, we set up the location of each piece of hardware and drew a complete schematic.

Implementation

We wrote the code in C so that the Raspberry Pi, sensors, and the other peripherals can communicate with each other.

The project turned out to be as satisfying as we initially expected. We encountered a number of challenges along the way, but we learned a lot of new things during the troubleshooting process