

Automated Access Control System

Our customer was a company that needed a more flexible access control system for the office.

An automated access control system is needed for offices and spaces located in areas with limited access and areas with partial or full public access. In the most basic case, it is a locked room.

Recently, however, more and more automated access control systems are being deployed, whether it is a coded lock, a lock with RFID tags or advanced finger, facial and retinal scanning systems. But these systems have shortcomings. For example, the human identification process to gain access takes some time.



Challenge

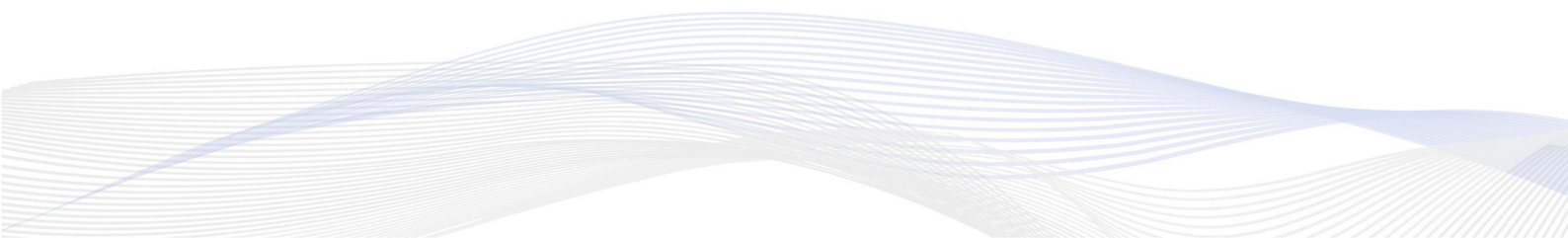
We needed to provide an access control system with automated user identification without requiring the user to take an action.

The automated access control system was supposed to work via a mobile app using Bluetooth LE and centralized server to allow remote manipulation of locks.



Solution

To solve this problem, we developed a mobile app for iOS & Android. This app determines the distance to the door. When a certain threshold is reached, it signals the server to open the door. The server, in turn, communicates with the release mechanism through internal channels.



Features



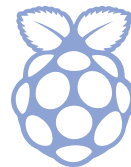
Automatic opening of doors when approaching it. You don't need to place a chip on the door. You only need to have a cell phone with the installed app.



Seamless access control system: it prevents unauthorized access attempts, but at the same time doesn't require any further action. That is, the door opens on its own by the time you approach it.



Technologies Used



iBeacon

RaspberryPi

ARDUINO

