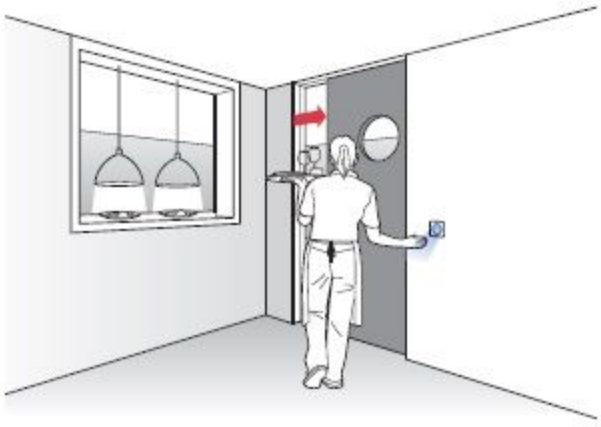
H.A.N.D.S.



🌟A Way to Keep Us Clean🌟

PROBLEM

The alarmingly fast spread of the Coronavirus created a global pandemic which drastically altered our normal lives. A post Covid world must ensure public health safety, but how?

Hand sanitizing is an easy way to prevent the spread of germs in public buildings such as hospitals, clinics, restaurants, grocery stores, libraries, and malls. All these facilities have hand sanitizers, usually at a table or a wall, but there is no current way to detect whether people are actually sanitizing their hands in these crowded public venues. We need a way to enforce the public use of hand sanitizers in order to prevent the spread of germs and cultivate good hygiene habits in the post Covid world.

SOLUTION

What if people were not allowed to enter a building *unless* they sanitized their hands first? Telling people to use a hand sanitizer simply isn't enough. We need an automated system in the age of technology that keeps the doors closed for each and every person that tries to enter *or* exit a public building until they have sanitized their hands. Installing contact-free door openers using modern sensor technology will encourage good hand hygiene which is an important factor in stopping the spread of future viruses. This is the idea behind **H.A.N.D.S.**

H.A.N.D.S. in Action

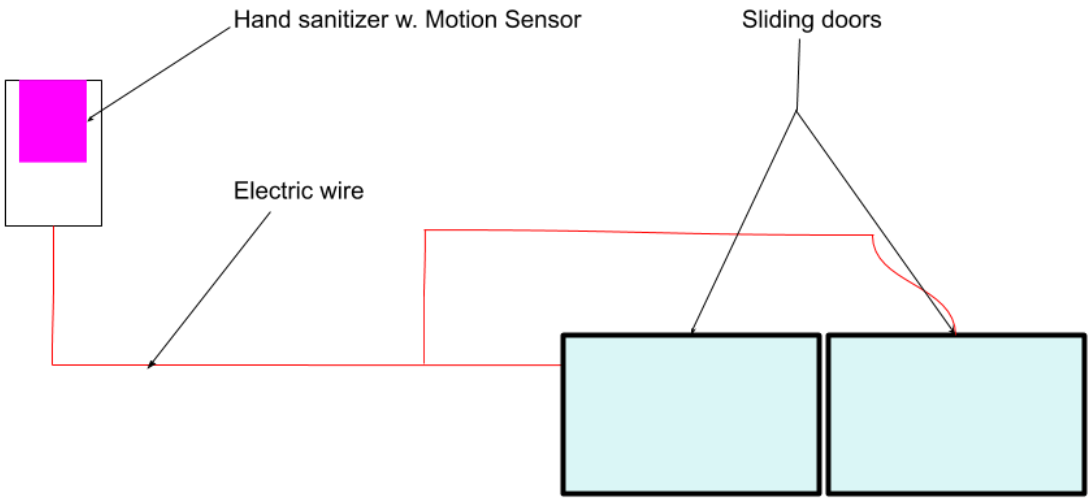
A person walks towards the glass sliding doors of QFC. He expectantly waits for them to open, but they don't. That's when this person notices a sign next to the doors saying, 'Sanitize your hands to enter the store'. There is a motion-activated hand sanitizer dispenser above the sign. Obediently, the person takes the hand sanitizer and rubs his hands together. Instantly, through wires and motion-sensor technology, the glass sliding doors open, and the person walks inside, his hands now scrubbed free of germs.

A good thirty minutes later, the person returns to the doors, this time to exit. He is pushing a cart full of groceries. Again, the doors do not open for him immediately. The person sees the same sign, this time on the inside of the store, saying, 'Sanitize your hands to exit the store'. Releasing his cart, the person sanitizes his hands again, and the doors slide open for him. The person regains control of his cart and rolls it through the doors, his hands still healthy and clean.

This is **H.A.N.D.S**: Hygienic-Activated eNtrance Door Sensor.

Through the use of motion-sensor technology, a person cannot enter or exit the store until their hands are sanitized. This way, we can avoid taking germs into and out of many large public places and maintain a cleaner and safer post Covid world, thanks to. H.A.N.D.S.

CONCEPT DESIGN



TECHNOLOGY

This is how H.A.N.D.S. works:

1. When a person puts their hand underneath the hand sanitizer, the motion sensor in the hand sanitizer will release some hand sanitizer (this is a feature that is already in many hand sanitizer dispensers).
2. After the release of the sanitizing solution, the motion sensor in the hand sanitizer will send a signal through the wires attached to the sliding doors. When the doors receive the signal, they will open for around 7-10 seconds (Note: there will be a sign saying, 'No Tailgating'). This allows the person to walk into the store. This same process occurs when a person exits the store.

BENEFITS

H.A.N.D.S is a great way to keep us safe. Its key benefits include the following:

- Motion sensor technology is readily available and relatively inexpensive
- Installing hand sanitizers at entry/exit doorways is more practical
- A focus on prevention will reduce healthcare costs and contain viruses
- A hands free door opener is a simple and effective way to reduce the spread of germs
- Good health hygiene will become more routine and create a safer environment

FAQS

What if you run out of hand sanitizer?

➢ There will be a key pad at the doorway where you can type a code to alert a worker to refill the container.

How can people be forced to comply?

➢ They will not be able to enter or exit a building since the hand sanitizer is wired to the door using sensor technology.

Who will benefit from H.A.N.D.S?

➢ Everyone! Good public hygiene is essential to all citizens and we each have a responsibility in reducing the spread of viruses in public spaces and creating a cleaner post Covid world.

Where will H.A.N.D.S be installed?

➢ Any public venue with high amounts of people and contact. These include hospitals, medical clinics, restaurants, grocery stores, malls, libraries. Other places could be public schools, colleges and private companies.