Project Report

Team - SolvedIt19

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Description

An automatic hand sanitizer powered by Arduino which can be used to dispense alcohol-based sanitizer fluid or liquid soap. It'll dispense the copious but at the same time, optimal amounts of fluid without having to touch the device.

Motivation

With the increasing chaos caused by COVID-19, there is an ever increasing urgency to maintain hygiene, especially washing our hands. This is one of the methods recommended by the WHO to control the spread of the virus.

We see a lot of advertisements and public health media which advises people to use Soap/Hand Sanitizers. And they also advocate not using the hands to dispense the fluid and instead to use their elbows, which is more effective in containing any potential viruses on peoples' hands.

This aims to save people from resorting to absurd gymnastics with their elbows to dispense soap/sanitiser. It also saves people from using their hands and risking the hygiene of the next person who uses the device.

Practicality

This project is absolutely practical in the sense that Arduino boards are extremely inexpensive. Moreover, since Arduino boards are open source, one can make their own limited Arduino boards for as low as ₹300 - ₹500, maybe even less. This will enable more people to buy this device and help keep themselves hygienic and potentially, reduce the spread of COVID-19.

Scope

Such a device with it's extremely economical aspect and it's practicality will attract a sizable portion of the Indian public. Moreover, with the pressure to push toward a hygienic India, in the wake of the COVID-19 unrest, this certainly is a need of the hour product. These reasons suggest with near surety, that this product will generate a lot of profit even if it is moderately priced. Along with that, assuming the government's support, since it is in public interest, this product has a very high potential to be a big hit.

Demonstrations

Photos and a Video demo of our project can be accessed by clicking here.