CoVistron

A project by Beta_Codinators :

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Description

An all-in-one platform for people under home-quarantine due to CoViD-19

The Problem

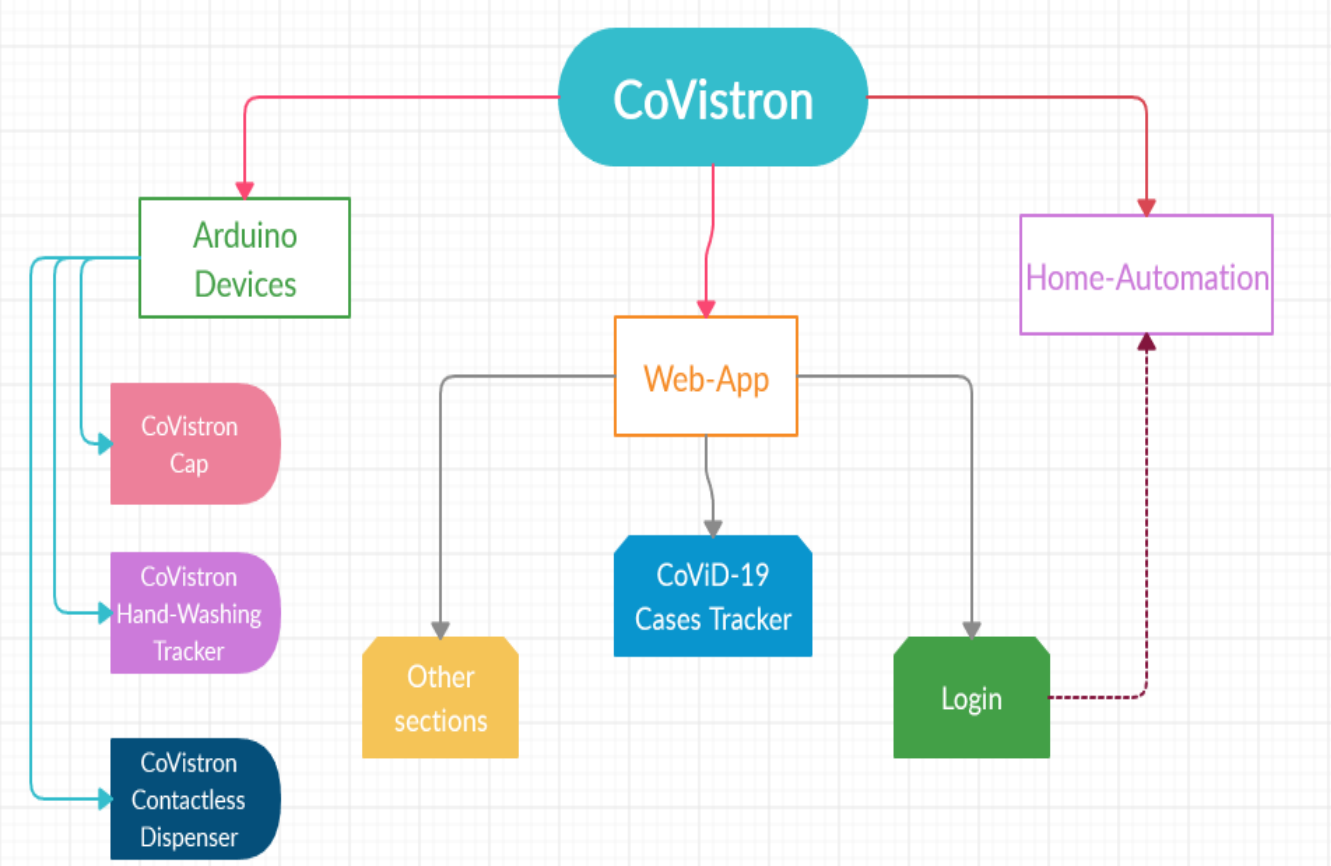
The world is heavily affected by the novel-Coronavirus and due to its highly contagious nature, many nations are forced to put their citizens under lockdown and confine them to their homes to curb this pandemic. But home-quarantine can be an unpleasant experience for many, especially for long periods involving several weeks. These people may also be

compromising on the basic but important safety precautions advised by their respective health organizations. All of these problems may lead to unprecedented consequences and would hamper the whole initiative.

What is CoVistron?

Keeping in mind these issues, we have suitably devised CoVistron to be an umbrella initiative to help the quarantined people and make the whole process a satisfactory but safe affair. Powered by IoT, it can guide, accompany and entertain people in this crisis. CoVistron involves the following –

- CoVistron Smart Devices
- CoVistron Web-App
- CoVistron Home-Automation


CoVistron
Arduino Devices
Home-Automation
Web-App
CoVistron Cap
CoVistron Hand-Washing Tracker
CoVistron Contactless Dispenser
CoViD-19 Cases Tracker
Other sections
Login

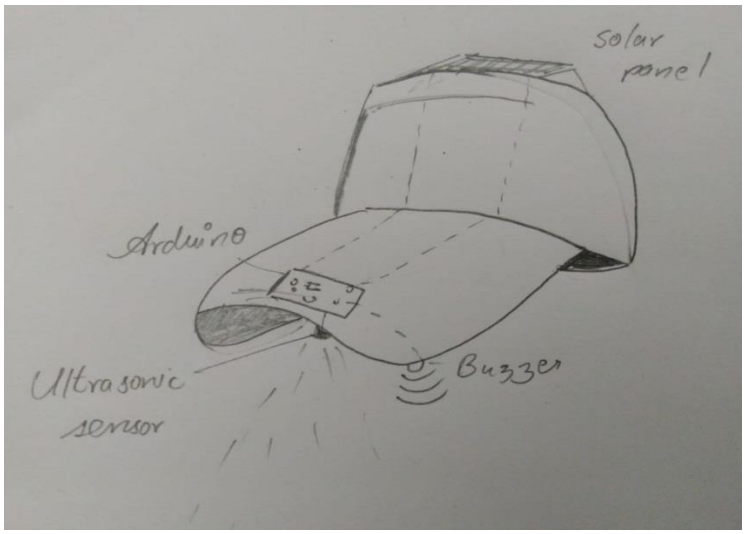
The smart devices have been devised to help people follow safety precautions without fail in an innovative and fun way. Home-Automation is also deployed as a precaution to minimize the physical contact of people with their home appliances to prevent disease transmission to their housemates in that manner.
The Web App can be used to facilitate home-automation. In addition, it provides a real-time tracker of CoVid-19 cases around the world and in India. It has details of our smart devices and a small entertainment section providing hacks to overcome boredom. Moreover, it also has a section providing safety precautions to its users to promote awareness.

CoVistron Arduino-powered Intelligent Devices

These devices are deployed to help you with safety precautions like washing your hands with soap/hand-wash for atleast 20 seconds, not touching your face and minimizing physical contact with shared objects like handwash dispensers. The devices currently available are -

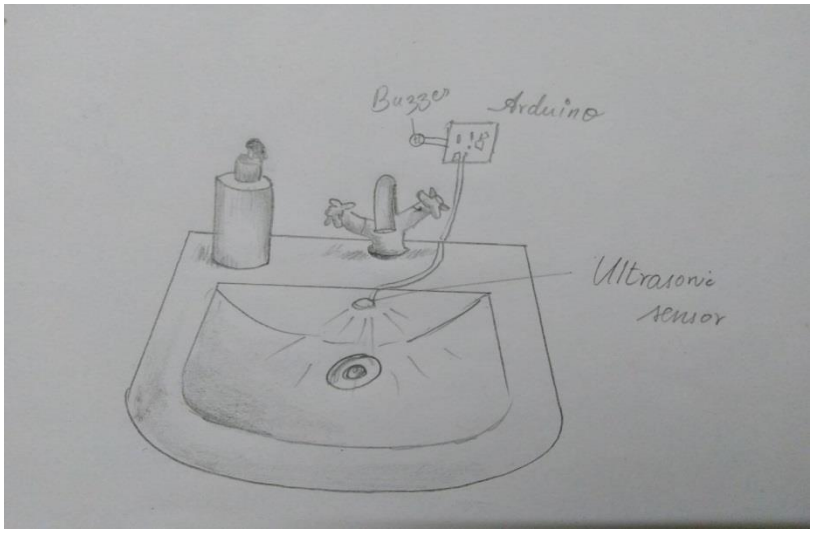
1. CoVistron Smart Cap:

It helps you avoid touching your face by alerting you whenever you try to do so.



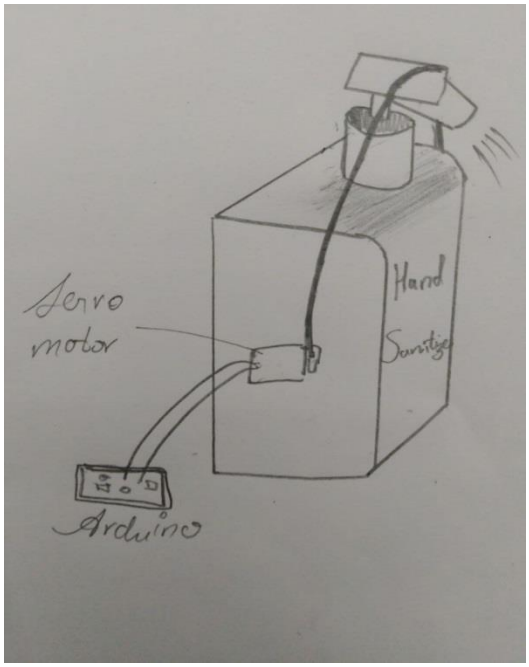
2. CoVistron Hand-washing Tracker:

It promptly tracks your hand-washing time and cutely annoys you if you haven't achieved the 20 seconds target.



3. CoVistron Contactless Hand-wash/Sanitizer Dispenser:

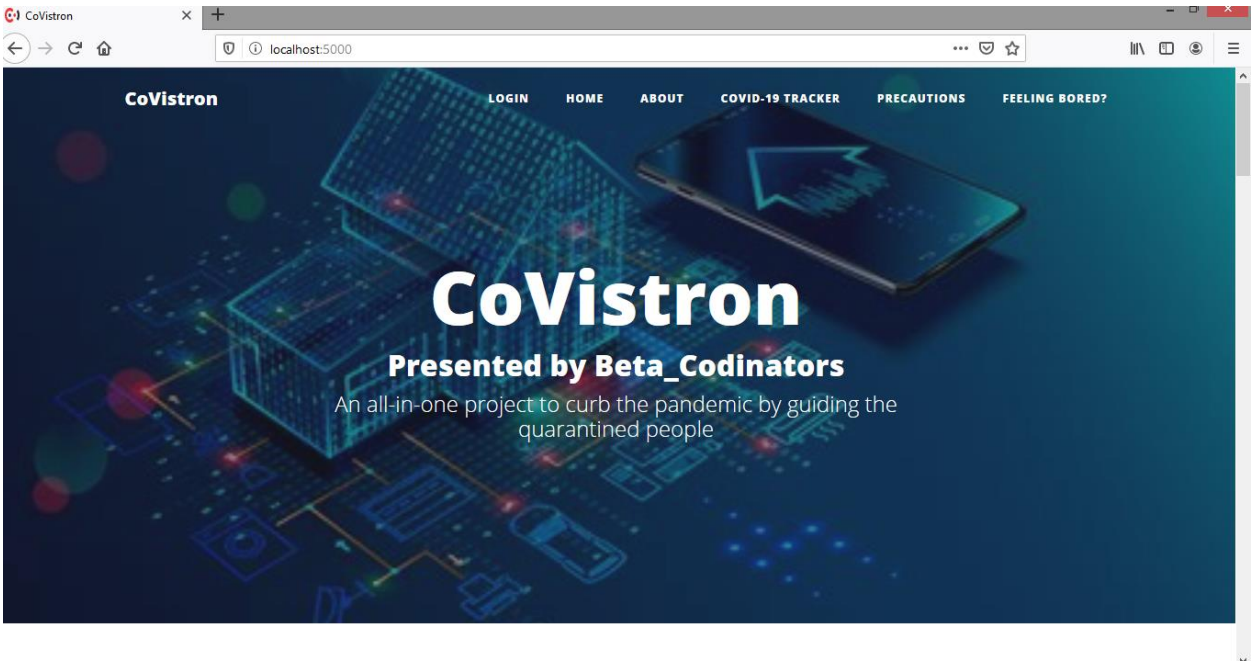
It dispenses a suitable amount of hand-wash / sanitizer without physical contact by detecting the presence of your hands. It is useful in homes where multiple people share the same item.

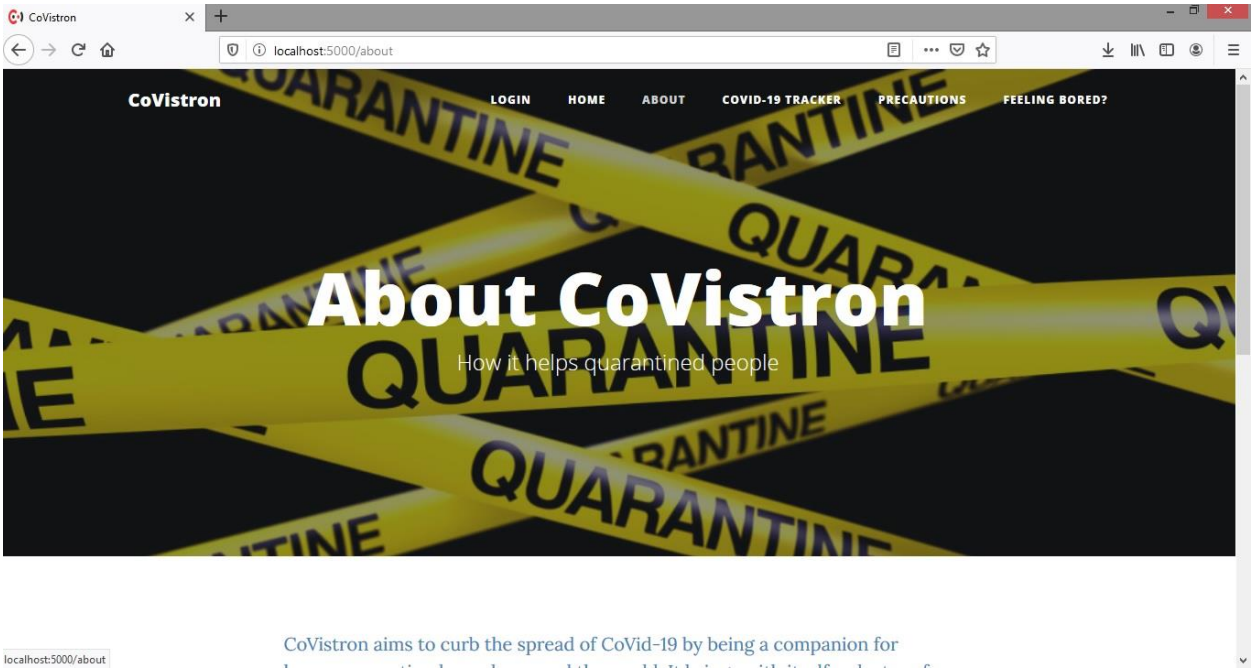


CoVistron Web App

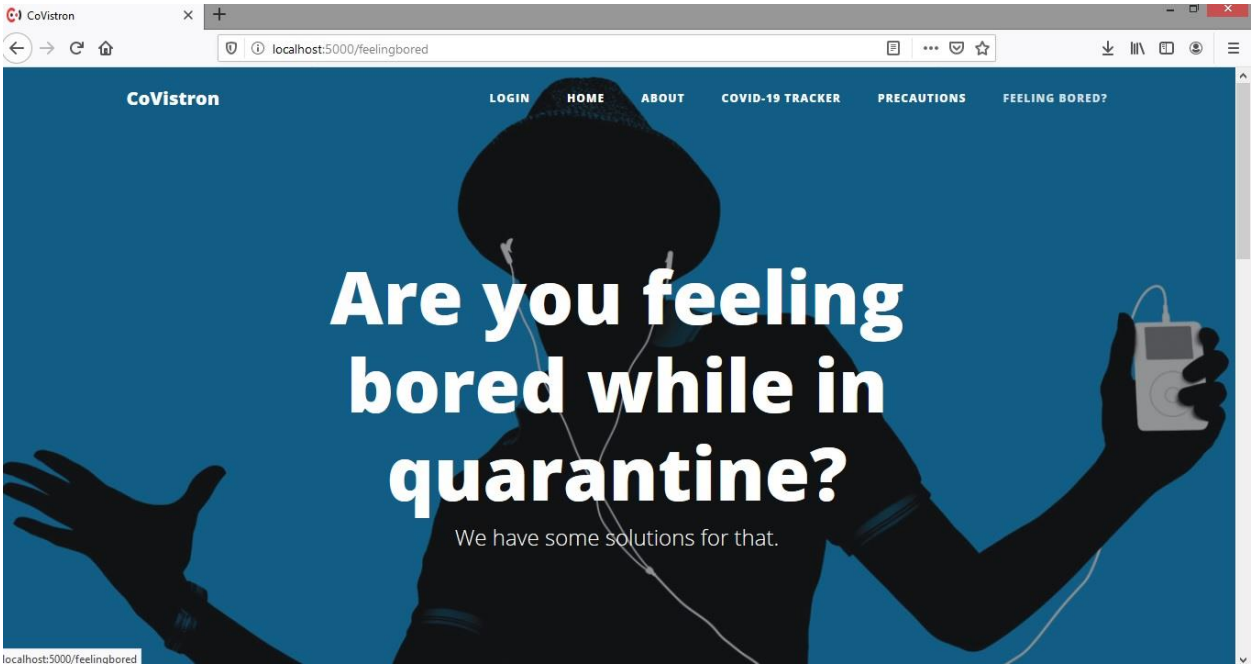
The Web App has a state-of-the-art real-time CoViD-19 cases tracker providing details such as number of cases, active cases, recovered cases, deaths etc…, from India and the rest of the world. It also has the login page to execute home-automation for our registered users which is built with Bolt IoT.

Additional sections include 'About us', 'Precautions'(to spread awareness) and 'FeelingBored?'(Entertainment)...

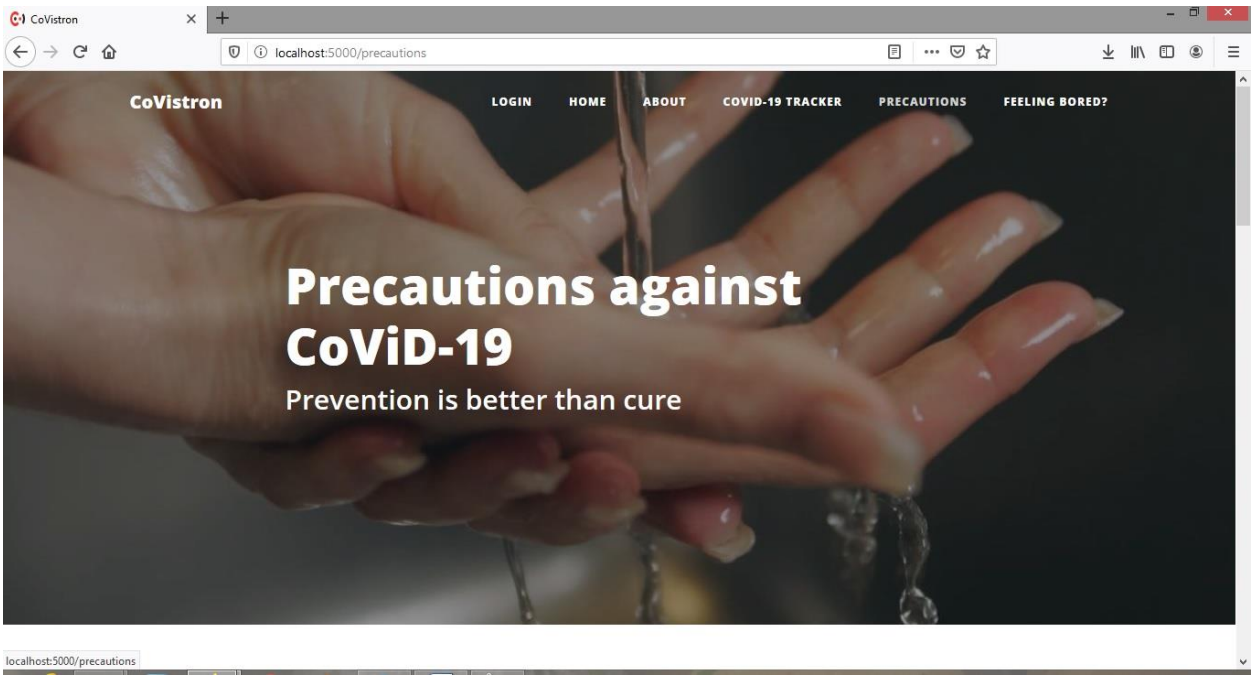




Login for registered users

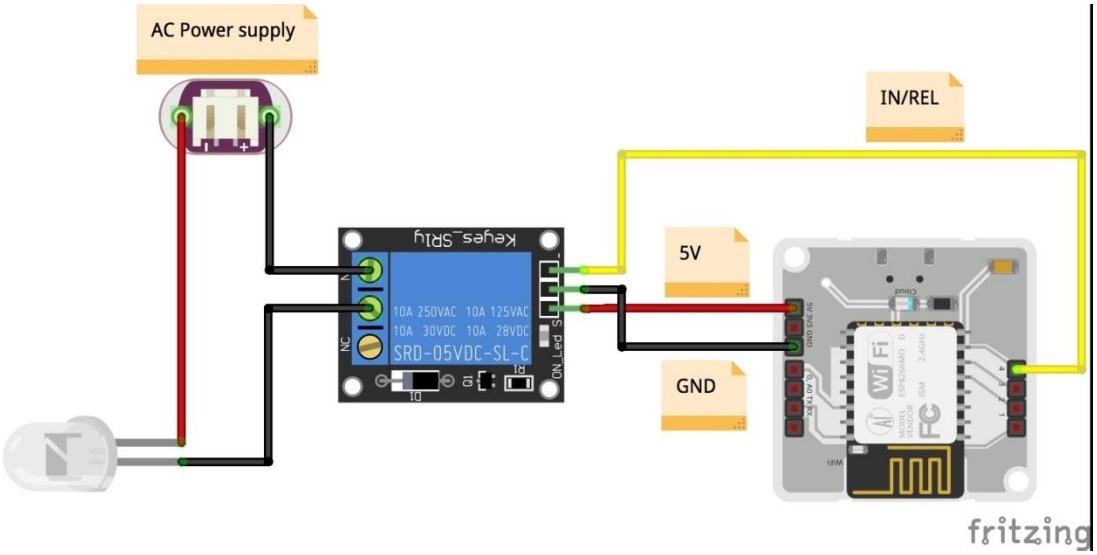


CoVistron
localhost:5000/tracker
CoVistron
LOGIN
HOME
ABOUT
COVID-19 TRACKER
PRECAUTIONS
FEELING BORED?
CoViD-19 Tracker
Real-Time Tracking of COVID-19 cases around the World
COVID-19
This tracker is not entirely accurate and should not be taken with much


CoVistron
localhost:5000/precautions
CoVistron
LOGIN
HOME
ABOUT
COVID-19 TRACKER
PRECAUTIONS
FEELING BORED?
Precautions against CoViD-19
Prevention is better than cure
localhost:5000/precautions

Covistron Home-Automation

Home-Automation is powered by Bolt IoT. A Bolt Wi-Fi-Module is required for this purpose. The CoVistron Web App allows users to execute home automation by logging in using their Bolt device credentials.



We chose the 1st year exclusive – Arduino Track because we felt human negligence has played a role in this pandemic and will continue to do, but innovation can help cancel out its effect. We were impressed with the versatility and efficiency of Arduino and we were sure that we could make good use of it to curb the pandemic through innovation.

Uniqueness and Practicality

CoVistron as an umbrella of various services to combat the pandemic is truly a unique idea. We feel there has never been such a similar serious effort before. Integrating various factors such as home-automation, data collection and tracking, entertainment etc.., CoVistron is surely a one of its kind project. The hand-wash dispenser idea is not entirely unique but we included it to increase the number of our cluster of devices.

Since the global situation now is quite gloomy, we feel that this wouldn't be a very easy-to-do DIY project for individuals mainly due to lack of availability of materials.

But, this project would be a great success if communities or governments and organizations endorse it as a whole and set up centers to mass produce our devices with technical support. Arduino and its components are relatively cheap and are available easily. Also our devices are indeed easy to assemble. They can distribute these devices to their citizens who can use them to improve their quarantine experience and also helps curb the pandemic faster.

Future scope with a revenue model

As mentioned above, it is up to governments and organizations to take up this idea for the benefit of their citizens. So, most of our orders will be in the form of short-term contracts involving technology transfer of our devices and services for mass production and distribution.

CoVistron indeed has great potential to become popular in the current situation and can generate handsome amounts of revenue from organizations willing to buy our services. But keeping in mind the goodwill behind the project, we will be relaxing on the profit-generation model for the benefit of the society.

Competition

Due to the pure uniqueness of CoVistron, we wouldn't be facing significant competition. But in case we face competition in the future, our low profit-margin will earn better goodwill than our competitors. We will also be welcoming suggestions mooted by our users and implement the cool ones on a war-footing. Our features

shall also be made much more public-friendly to gain greater acceptance.

Implementation

Here's the link for a full walkthrough of the implementation of CoVistron, including the Web-App, Intelligent devices and Home-Automation –

https://drive.google.com/file/d/17CwtvUCDZIIazLm7uEP-FsS8KFr1Jb60/view?usp=drivesdk