ANTI COVID-19 APP

# OBJECTIVES:

Since the outbreak began in January 2020, Covid-19 has affected more than 161 million people worldwide and resulted in about 3.3 million deaths. Despite efforts to detect human infection with the virus as early as possible, the confirmatory test still requires the analysis of sputum or blood with estimated results available within approximately 30 minutes; this may potentially be followed by clinical referral if the patient shows signs of aggravated pneumonia. This work aims to implement a soft collar as a sound device dedicated to the objective evaluation of the pathophysiological state resulting from dysphonia of laryngeal origin or respiratory failure of inflammatory origin, in particular caused by Covid-19.

# Functional Requirements:

 Build an application that people can access and see the details of corona in online.

 The application should have signup, login, profile, dashboard page, and product

page.

 This application should have a provision to maintain a database for people

information, vaccination information and more details about covid-19 in INDIA.

Also, an integrated platform required for doctors and patients.

Administration module to communicate with doctors.

While the above ones are the basic functional features expected, the below ones can

be nice to have add-on features:

1,india map, covid affected area and more

# Non-Functional Requirements:

Security

App Platform –User Name/Password-Based Credentials

Sensitive data has to be categorized and stored in a secure manner

Secure connection for transmission of any data

# Standard Features

      1. Scalability

        2. Maintainability

        3. Usability

        4. Availability

        5. Failover

# Logging &amp; Auditing

 The system should support logging(app/web/DB) and amp; auditing at all levels

Monitoring

 Should be able to monitor via as-is monitoring covid daily bases

Cloud

 The Solution should be made Cloud-ready and should have a minimum impact

when moving away to Cloud infrastructure

Browser Compatible

All latest browsers

# Technology Stack

 Front End Angular 10+/ React 16+

Material Design  Bootstrap / Bulma

Server Side Spring Boot / .Net WebAPI/ Node Js

Database MySQL or Oracle or MSSQL

# Key points to remember:

### **Complete the "COVID-19 contact tracing and status apps" section in the App content page**

If your app is a COVID-19 contact tracing and/or status app, please go to the[**App content**](https://play.google.com/console/app/app-content/summary) page (**Policy** > **App content**) in Play Console, and provide the required information in the "COVID-19 contact tracing and status apps" section.

To determine if your app is a COVID-19 contact tracing and status app, please use the guidance below:

1. Publicly available COVID-19 contact tracing apps include all apps that track or monitor infected or exposed individuals for the purpose of COVID-19 responses or mitigation.
2. Publicly available COVID-19 status apps include apps that verify an individual’s vaccination status, current infection, or history of infection, e.g., for the purposes of determining the individual’s eligibility for travel or entry into public spaces. Note that this also includes apps that merely store an individual’s vaccination or test records but do not interpret this data and issue public health conclusions.

# Application assumptions:

1.   The login page should be the first page rendered when the application loads.

2.   Manual routing should be restricted by using AuthGuard by implementing

the canActivate interface. For example, if the user enters

as http://localhost:8000/signup or http://localhost:8000/home the page should not

navigate to the corresponding page instead it should redirect to the login page.

3.   Unless logged into the system, the user cannot navigate to any other pages.

4.   Logging out must again redirect to the login page.

5.   To navigate to the admin side, you can store a user type as admin in the

database with a username and password as admin.

6.   Use admin/admin as the username and password to navigate to the admin

dashboard.

# Action URL Method Response

Login /login POST true/false

Signup /signup POST true/false

Get All covid list – Home /home GET Array of covid list

Add to covid affected people /home/{id} POST covid affected people

Delete covid recovered people /Cured/delete POST recover Deleted

# Monitoring

Regularly monitor the following in hospitalized patients to facilitate early recognition of deterioration and monitor for complications

* Vital signs (temperature, respiratory rate, heart rate, blood pressure, oxygen saturation)
* Hematologic and biochemistry parameters
* Coagulation parameters (D-dimer, fibrinogen, platelet count, prothrombin time)
* ECG
* Chest imaging
* Signs and symptoms of venous or arterial thromboembolism.

Medical early warning scores

* Utilize medical early warning scores that facilitate early recognition and escalation of treatment of deteriorating patients (e.g., National Early Warning Score 2 [NEWS2], Pediatric Early Warning Signs [PEWS]) where possible.

* There is a lack of data on the value of using these scores in patients with COVID-19 in the primary care setting.
  + A systematic review and meta-analysis found that the NEWS2 score had moderate sensitivity and specificity in predicting the deterioration of patients with COVID-19. The score showed good discrimination in predicting the combined outcome of the need for intensive respiratory support, admission to the intensive care unit, or in-hospital mortality.

* The sequential organ failure assessment (SOFA) score does not possess adequate discriminant accuracy for mortality prediction in patients prior to intubation for COVID-19 pneumonia. However, it may be more accurate than other scores.
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# Frontend:

* 1. Ram: Design an auth component (Name the component as auth for angular app
* whereas Ram for react app. Once the component is created in react app, name the
* jsx file as same as component name i.e Ram.jsx file) where the customer can
* authenticate login and signup credentials
* 2.   Signup: Design a signup page component (Name the component as signup for
* angular app whereas Signup for react app. Once the component is created in react
* app, name the jsx file as same as component name i.e Signup.jsx file)where the new
* people has options to sign up by providing their basic details.
* email
* username
* Mobile number
* password
* Confirm password
* Submit Button
* Sign in Link
* Signup Box
* b.   API endpoint Url: http://localhost:8000/signup
* c.   Output screenshot:

# 3.   Login:

* Design a login page component named (Name the component as login for
* angular app whereas Login for react app. Once the component is created in react
* app, name the jsx file as same as component name i.e Login.jsx file)where the
* existing customer can log in using the registered email id and password.
* a.   Ids:
* email
* password
* Submit Button
* Signup Link
* b.   API endpoint Url: http://localhost:8000/login
* c.   Output screenshot:
* 3. Patient is affected or not Button 4.   Dashboard / Home:
* 4. Affected area Button
* 5. Logout Button

b.   API endpoint Url: http://localhost:8000/home

* c. Screenshot

# Dashboard / Home:

1. Design a home page component named (Name the

component as homepagefor angular app whereas HomePage for react app. Once the

component is created in react app, name the jsx file as same as component name i.e

HomePage.jsx file) that has the navigation bar and lists all the available products as

grid elements with appropriate filter options.

a.   Ids:

1. user Navbar

2. people Home Button

3. covid affected Button

4. vaccination Button

5. logout Button

6. Home Body

b.   API endpoint Url: http://localhost:8000/home

c. Screenshot

# Admin:

6.   Admin Dashboard:

 Design a dashboard page named (Name the component

as dashboard for angular app whereas Dashboard for react app. Once the

component is created in react app, name the jsx file as same as component name i.e

Dashboard.jsx file) where the list of products is displayed on the admin side.

a. Admin Navigation: Design a navigation component (Name the component

as adminhomepage for angular app whereas AdminHomePage for react app. Once

the component is created in react app, name the jsx file as same as component

name i.e AdminHomePage.jsx file) that can navigate to products and orders.

      i.Ids:

1. adminNavbar

2. people Home Button

3. covid affected Button

4. vaccination Button

5. vaccine Order Button

4. logout Button

Certification of Vaccination The purpose of this form is to take steps to prevent the spread of COVID-19 and to protect the health and safety of all Federal employees, onsite contractor employees, visitors to Federal facilities, and other individuals interacting with the Federal workforce. If you fail to submit this signed attestation, or if you are unable to provide proof of any required negative COVID-19 test, you may be denied entry to a Federal

# Backend:

Class and Method description:

 1.   UserModel: This class stores the user type (admin or the people) and all user

information.

a.   Attributes:

     i.   email: String

     ii.   password: String

     iii.   username: String

     iv.   mobile Number: String

     v.   active: Boolean

     vi.   role: String

2.   Login Model: This class contains the email and password and aadhar details of the user.

a.   Attributes:

    i.   email: String

    ii.   password: String

iii. aadhar: String

## TO PREVENT COVID-19 (COVID - PRECOTION):

**Dear Customers,**

**As we take measures to mitigate the risks associated with the COVID-19 pandemic, we are evaluating all scenarios that could unfold.**

**Currently, we have cut our installation crews by half and are only operational with provisions in place. We have implemented the following measures suggested by Thunder Bay Public Health and within our own Health and Safety Policies and Guidelines.**

**These measures include:**

* **frequent hand washing for at least 20 seconds with anti-bacterial soap**
* **frequent use of hand sanitizers if unable to immediately wash hands with approved methods**
* **extra cleaning of work areas and common surfaces with anti-bacterial products**
* **advising all employees who are sick to stay home**
* **refrain from hand shaking - zero touch policy**
* **sneezing or coughing into a sleeve**
* **social distancing of 2 meters - this includes while we are conducting installations. Please respect our boundaries.**
* **travel ban on all business or personal travel unless it is for the completion of industrial or institutional infrastructure projects deemed essential**
* **self isolation for 14 days at the first sign of possible symptoms**
* **all invoices are to be paid online via our secure servers or e-transfers. Absolutely no cash or cheques will be accepted. We have chosen to go this route to minimize risk of touch or transfer.**

**Even with these measures, we are still at risk of having an employee develop COVID-19 infection at any time given our close working quarters with our clients. As a result, we ask that you, our customers, provide us with advanced notice if you are feeling unwell or have chosen to self-isolate so that we may reschedule your installation to a more appropriate time.**

**At this time, all office visits are suspended until further notice. This allows us to ensure the health and well being of our staff and clients remain our top priority. Should you need to discuss your quote, order or installation, we can assist over the phone or via email.**

**During this difficult and uncertain time, we thank you for your understanding and wish that you and your families stay safe and healthy.**

BY

ARAVINDHAN.V

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