CoFind

Group Members:
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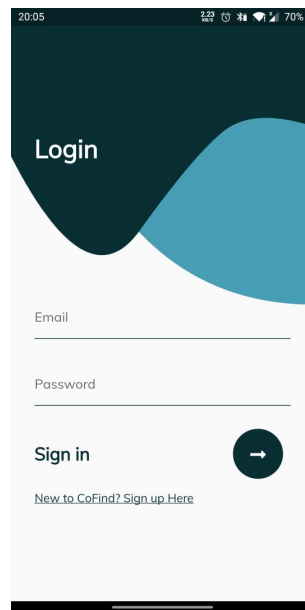G. Sriharsha
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1 Problem

With the sudden surge in demand for healthcare support, the second wave of COVID-19 brought India's healthcare system to its knees. With such large number of individuals beings affected by COVID, we soon realized that one of the biggest problems people were facing was getting access to verified resources for oxygen, blood serum donors, hospital beds, vaccinations and testing. This was when developing an application - CoFind - struck us as a good and required solution for this large yet common problem that people were facing.
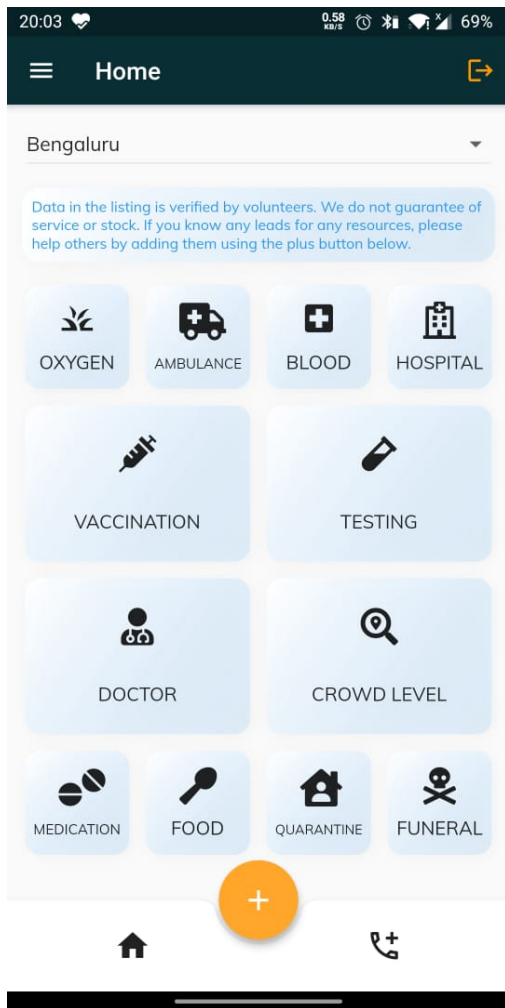
2 How CoFind solves the problem?

As soon as you open the application you will be welcomed with a signIn page. You will have to navigate to the signUp page and register yourself as a user. Only after this you will be able to access the resource information. By the way if you would like to know more about the animation cures, look into Beizer curves.
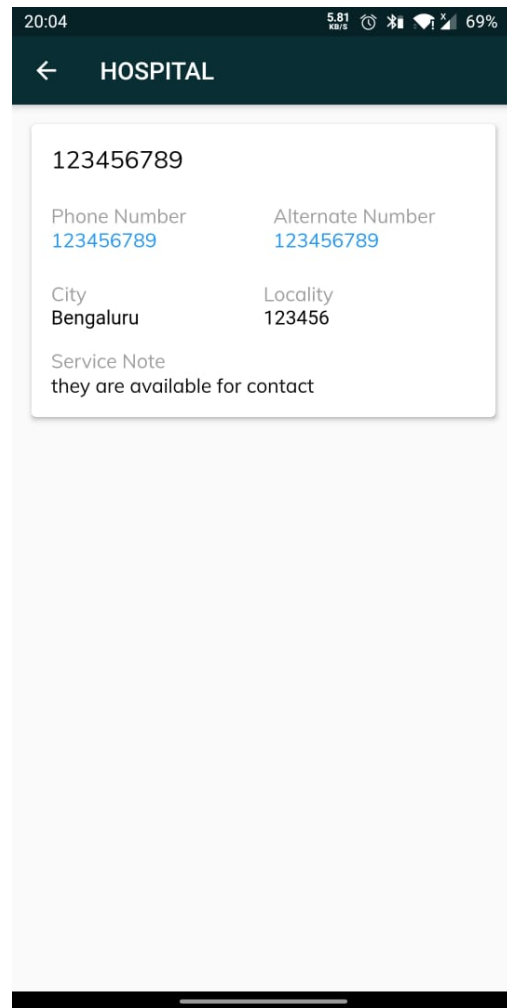

There are three main functionalities of this app:

- It gives the users a list of resources that can be filtered on the basis of the type of resources as well as the location of the resource.

- One can log in to the app as a volunteer to verify the leads received for the various resources increasing the efficiency and utility of the app. Note that volunteers are needed to be approved by other volunteers. Currently as part of this hackathon we may not be able to approve the request sent(we may not be able to check the app regularly). So if you wish to see volunteer's pages, please use the following credentials:
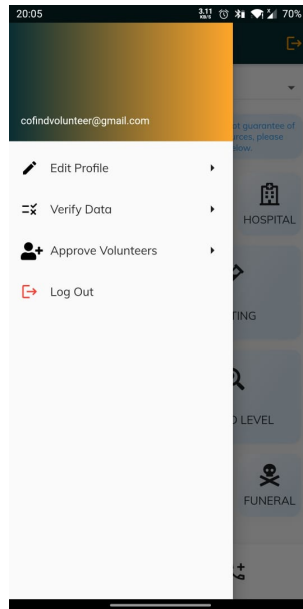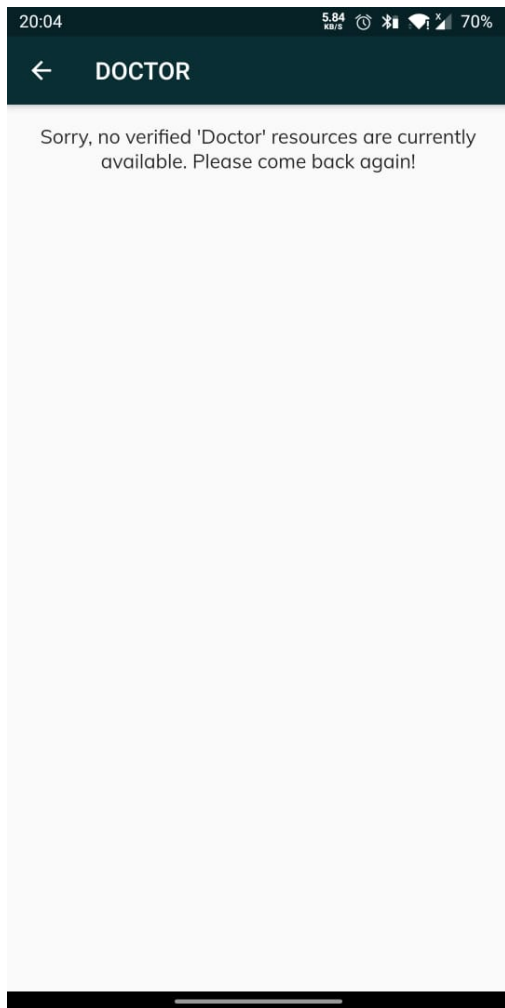
(a) Home Page

(b) Hospitals nearby
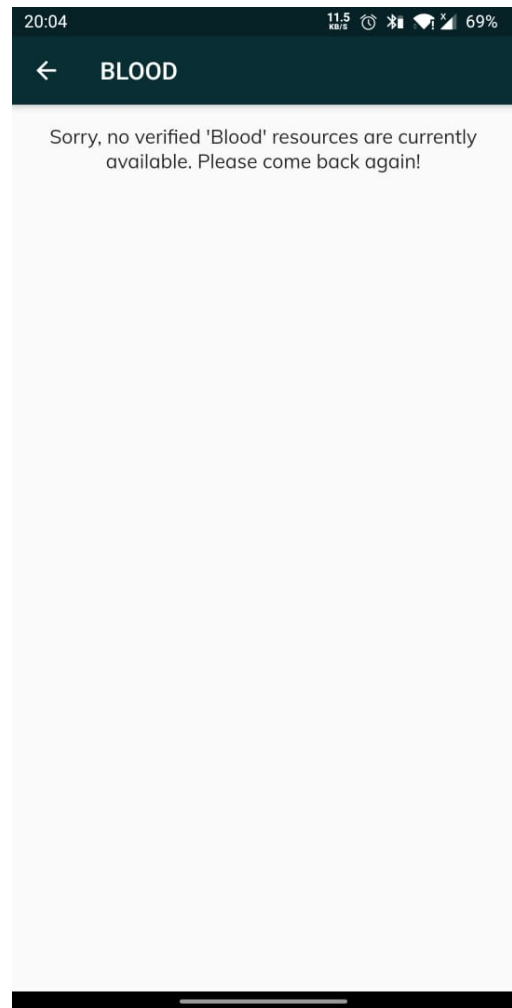
Figure 1: Put your caption here

1. **Email**: cofindadmin@gmail.com
2. **Password**: 123456

- The contact list of the nearest doctors based on location, providing the users with easy access to medical advice from professionals at the earliest.

- The application also provides with all important contacts.

- User also has the ability to add resources. However to avoid fake entries and spamming, these entries will be displayed only after any volunteer has approved. Please note that if you would like to see this functionality working please use the credentials given above for volunteer since the developers may not be able to approve a test request sent immediately.

(a) Doctors nearby

(b) Blood banks

Figure 2: Put your caption here

3 Challenges we ran into

Connecting our flutter application with Firebase was quite challenging. Although packages exist which make the connection between flutter and firebase simpler we had several issues in mapping data. At the flutter end, state management created a lot of trouble. Initially, we had not thought of integrating any CI/CD with our application since we felt it was time consuming. But as the app grew, state handling became worrisome and even broke down the entire application. This is when we realised the importance of flutter tests and CI/CD.
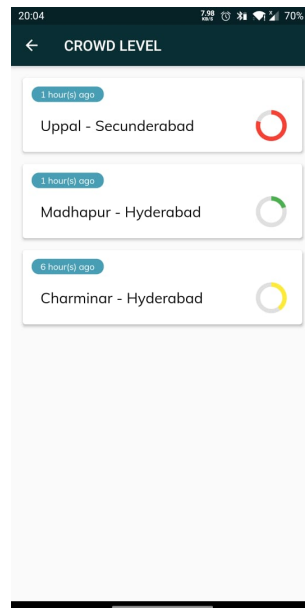
4   Accomplishments that we're proud of

CoFind - The application which we have built and are still improving will most definitely impact a lot of people - people in need. Being able to use our knowledge and skills to help the community is what we consider as our biggest accomplishment through this project. The fact that we can impact people's lives and make a positive change in the community is what is keeping our team motivated and will help us in making the application even versatile and useful in the future.

5   What's next for CoFind

We plan on implementing more useful and practical features, hopefully making the app a one-stop-shop for all COVID related support,like :

- In India over 1600 languages and dialects are spoken. To make CoFind benefit each and every citizen of India, CoFind should be available in as many languages as possible.Currently our application supports only English. App localisation would be a great addition to the app. Although the basic setup was completed, we were not able to completely localise it due to time constraints.

- A crowd severity indicator that would inform the users about crowding hotspots and areas to avoid. Places are marked safe and unsafe depending on the expected density of the crowd. The severity would be indicated by three colours: green, yellow, and red; green being the safest and red the most unsafe (Inspiration from Cherub:story of cherub project).

- The current version of CoFind provides the contact details of doctors. We plan to add a feature where people can chat and communicate with the doctors on the app itself.

- We will soon be adding the functionality to enable the user to make specific resource requests making the application even more useful and individualistic.