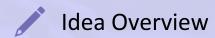# Need For Blood

IDEA PROPOSED BY-

TEAM NAME:COVID COMBATTANATES
TEAM MEMBERS:HIRDAN AGGARWAL,NITYA GUPTA
TEAM ID:1915
THEME: TACKLE EMERGENCIES

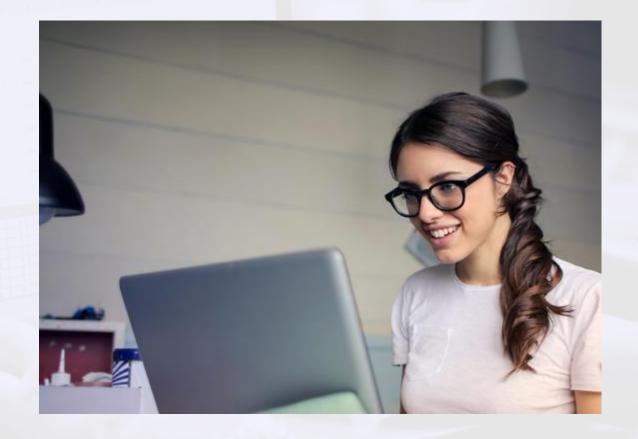# Idea Outline

- ✏️ Idea Overview
- 🧪 Technical Flow/Flowchart
- 📖 Tech Stack
- 🔬 Merits and Demerits
- ⚗️ Future Scope and Limitations

Idea Overview

As we know, one of the most pressing concerns in India today is the alarmingly high number of deaths due to the sheer lack of availability of blood units. Despite being a nation with a population of 1.2 billion, India faces an average blood shortage of 3 million units. According to a recent World Health Organization (WHO) report, only nine million units are collected annually, while the requirement is for 12 million units. Even more pathetic is that most of the public is not aware about how to get the blood in case of emergency and nothing is available to help the citizens of Delhi with the real time info about the availability of the required blood units. Let us suppose there are two blood banks Blood Bank A and Blood Bank B. Now a person X needs blood of blood group A+, let us assume that he contacts Blood Bank A but they deny due to non-availability. Now let us say Blood Bank B has the respective bottle but till the person comes in contact with that blood bank it might be too late. This situation would not have arrived if the Blood Bank already knew which blood bank has the required blood bottle. It would have been even more convenient for the person who is need of blood if he gets to know the details of the blood bank which has the required bottle just on a single click. It would actually save a lot of time and eventually will help in saving a lot of lives. The above situation explains it all. Yes, you thought it right, we will be making an app to make this possible.

Technical Flow/Flowchart

The app will be designed in such a way that it will have two pages one for user portal and one for blood bank portal. The blood bank page will first have two options login and registration. On the registration tab the respective blood bank will have to provide all the details required. Upon successful registration it will ask to fill the respective number of bottles of each blood group available on the registration day. From that day the Blood Bank will have to update the number of bottles as soon as there is some deletion or addition in the blood bottles. This value would need to be updated on a regular basis. This would in turn help the government to check which blood bank is not maintaining a proper record and which blood bank is doing black marketing of blood bottles. On the other hand, user page will let the person who is in need of blood to select the required blood group and it will get the complete details of the blood bank which are having the bottle of the respective blood group and based on his location the list of blood bank will be sorted from nearest to farthest . So, it will actually save a lot of time of the patient and can even save his/her life.

Tech Stack

The Tech Stacks that will be used are-
- Flutter
- Dart
- Google Maps API
- Firebase Console for backend and database

Merits and Demerits

Merits-
1. It can help in keeping track on the activity of blood bank.
2. It will help in saving lives of the people.

Demerits-
1. Server Issue

Future Scope

The app would provide real-time blood availability information to the public or even to the various hospitals. This platform will interlink all the blood banks in the city and that they will accordingly update their status daily.This will even filter the location of blood banks according to the location of the user. With this app, we wish to bring about a change in this state of affairs from a tragic scenario to a positive one.