\*Problem Statement:\*

The exponential growth of population and massive urbanization has led to an enormous problem of traffic congestion and traffic jams in most of the major cities in India. These traffic congestions result in undesirable delays in providing emergency services to patients, and often result into loss of human lives.

A major problem is accumulation of traffic on traffic light junctions. This congestion forces the ambulance to be stuck at these junctions for a long amount of time which adds up to the delay.

Briefing:

An app which on one press can call an ambulance at your location, the default hospital will be the nearest govt hospital, the user can select any other desirable hospital he wishes the ambulance to go. The app will identify the closest route from patient’s location to the hospital, and will calculate the approximate time of arrival of the ambulance at all the signals on the route and will turn them green before a minute of arrival and others red.

Features:

1. A red button which when pressed will call an ambulance for the nearest location of the patient

2. Search bar, to search hospitals near you and select desired hospital to go

3. Map which shows exact location of ambulance and time of arrival of ambulance at patients doorsteps

4. Map which shows the route between ambulance and hospital and the state of signal on route

5. It will trigger the on route signal using internet when the ambulance is a min away from the signal and turn it green to easy Infront traffic jams.

6. There will be a scale of 1-10 of whose access will be given to doctor in the ambulance, it is used to determine the severity of the patient(Every disease will be given a predetermined value which the doctor will be accustomed to)

\*Challenges:\*

1. If two ambulances arrive at a junction at same time then the algorithm will compare the severity of both emergencies and decide which ambulance to let pass. In case the scale of severity is equal, then one ambulance might have to wait till the other passes.

2. It is quite a challenge to integrate an IoT based technology to each and every traffic signal of every traffic-prone junction in the community. This task requires ample of time.





