



## **Problem Statements**

### **EIH-PS1: Smart Ambulance Booking**

Ambulance services are important for Health & Medical facilities. Requirement is to build a mobile app similar to Ola / Uber cab services. But it will be for Ambulance services. This app will have Ambulance driver's register their availability and location. Both Executive at Emergency Helpline and User's on the other hand on App's Client interface will book an ambulance. This will promise a fast and reliable ambulance service in case of emergency.

Teams are expected to come up with a Web or Mobile app in which

1. User can register and book ambulance from any location anytime(24\*7).
2. Easy Payment method.
3. Nearest hospital information should be incorporated.

### **EIH-PS2: Smart Attendance**

Taking attendance of the class and managing it, is a time consuming job for a teacher. The objective of the your solution would be to make a teacher's life easier in managing class attendance through a web or mobile app so that he or she can concentrate more on academic deliveries.

Consider a hypothetical situation where a teacher will call the roles placing his mobile phone near his mouth and will record the entire roll call process. As the attending students' response of the roll calls would not be recorded properly due to distance, hence the teacher will explicitly say "absent" loud and clear for the students who are not attending the class.

You are expected to come up with a Web or Mobile app which can

1. Capture upload if needed) and process the attendance
2. Generate attendance monitoring reports

### **EIH-PS3: Smart Grievances Management based on Geo Fencing**

Consider that you are moving to your institute from your place and you notice some big potholes in the road. Then and there you open an app, click the photo of the potholes, tag some comments and just post this problem or grievance. As soon as you post your observation, based on your current position, the notification along with the images and

comments will reach corresponding municipal authority. You should not be bothered to find out where and whom to reach out for this grievance.

After one or two days, suppose you receive a notification from a specific municipal authority that the problem reported by you has been solved. You get an image of the road condition fixed and a note of thanks for cooperating with the municipality. Now you are happy, you just share this notification to social media with your own words just to mark that good things still happen in this world.

But beyond your end, just imagine what is going on in the other side.

At the start, all the municipal authorities will mark their territory to geo fence their jurisdiction.

Within that fence suppose the contact point of municipality X has received your notification. He will forward (after an initial screening based on the merit of the problem is posted) this notification up to his or her reporting authority for decision making. Competent authority will act on your observation and will forward the fate of your problem back to you.

You are expected to come up with a Web and/or Mobile app which can

1. Empower Municipal Authorities to Geo-Fence their jurisdiction.
2. Empower citizens to post problems/observation/grievances which should go to the matched Municipal Authority as per the Geo Fencing in place.

#### **EIH-PS4: Single Window Public Transport System**

The problem statement demands an App-based system to design a ticketing systems for public transport systems like Train, Metro rail, Bus and Cab, through a single mobile app and provide information about traffic overcrowding and alternative path solution.

The teams should design a system such that

1. The system should connect the public transport systems like Train, Metro rail, Bus and Cab and develop a ticketing systems through a single mobile app for seamless travel with total time estimation.
2. The app should also provide route congestion alerts to the users.

#### **EIH-PS5: Smart Credential Validation**

The problem statement demands an App or Web-based system that concentrates on a cryptography-based single sign-on solution that enables users to securely access applications without entering the login credentials. The Application further enables a user to securely sign transactions in decentralized environments also.

The teams should design a system such that

1. The app/web system should validate user credentials using mobile interface, in line with SBI YONO. For example, since the person is already logged into his/her account using his mobile, hence he should be able to scan the QR Code generated in the web application and log in without providing the credentials in the desktop/laptop/web. The QR matching in the web with the app should clear the channel.
2. OR, in the app, the person can generate a code for remote logging, and login in the web using the code. The code must have a time block within which it has to be used; same as the case of OTP.

**EIH-PS6: Smart Talking Gestures**

The problem statement demands a means of communication between two persons, one of whom is deaf and dumb. The process requires Sign Language which is assumed to be known by the deaf and dumb person but absolutely unknown to the other. The app should aid as a translator. Whatever the normal person says must be mapped to the sign language by the app OR whatever sign the differently abled person generates must be converted into proper audio.

1. The system should be able to generate gestures for voice.
2. The system should be able to generate voice for gestures.

**EIH-PS7: Common Corporate Social Responsibility (CSR) Portal**

Description:-Different Corporate Sectors involve with various social responsibilities individually. Due to lack of resources and budgets, it limits their ability to perform these activities on larger scale or remote areas. Some small scale organisations wish to do some social welfare but due to lack of knowledge they cannot participate in social welfare program . So idea is to develop an organised Common CSR portal where different corporate or individuals can come together and collectively provide valuable service to society.

1. NGO or any needy organisation can register and explain their needs.
2. Individual corporate sectors can register and fixed their budget for help.

**EIH-PS8: Smart Birth Registration and Vaccination Monitoring**

Description:-There are different services which are linked to Birth and Death of an individual. If these services are integrated together it will help individuals. Maternity Nursing home register's child birth to Municipal Office Then Parent / guardian can one time enter the name of their child and get a print of Birth Certificate after few days. No need to visit MO.

1. Parent's should be registered with hospital and with the local borough.
2. Records of all vaccine given at birth time should be maintained.