



**SMART INDIA  
HACKATHON  
2022**

# **Basic Details of the Team and Problem Statement**

**Ministry/Organization Name** : Department of Empowerment of Persons with Disabilities (Divyangjan) ,  
Ministry of Social Justice and Empowerment

**PS Code** : RK758

**Problem Statement Title** : Enabling Communication Strategies For Persons With Hearing Impairment

**Team Name** : We Hear You

**Team Leader Name** : Renuka Ramdas Magar

**Institute Code** : 1-15937511

**Institute Name** : Mahatma Gandhi Mission's College Of Engineering , Nanded

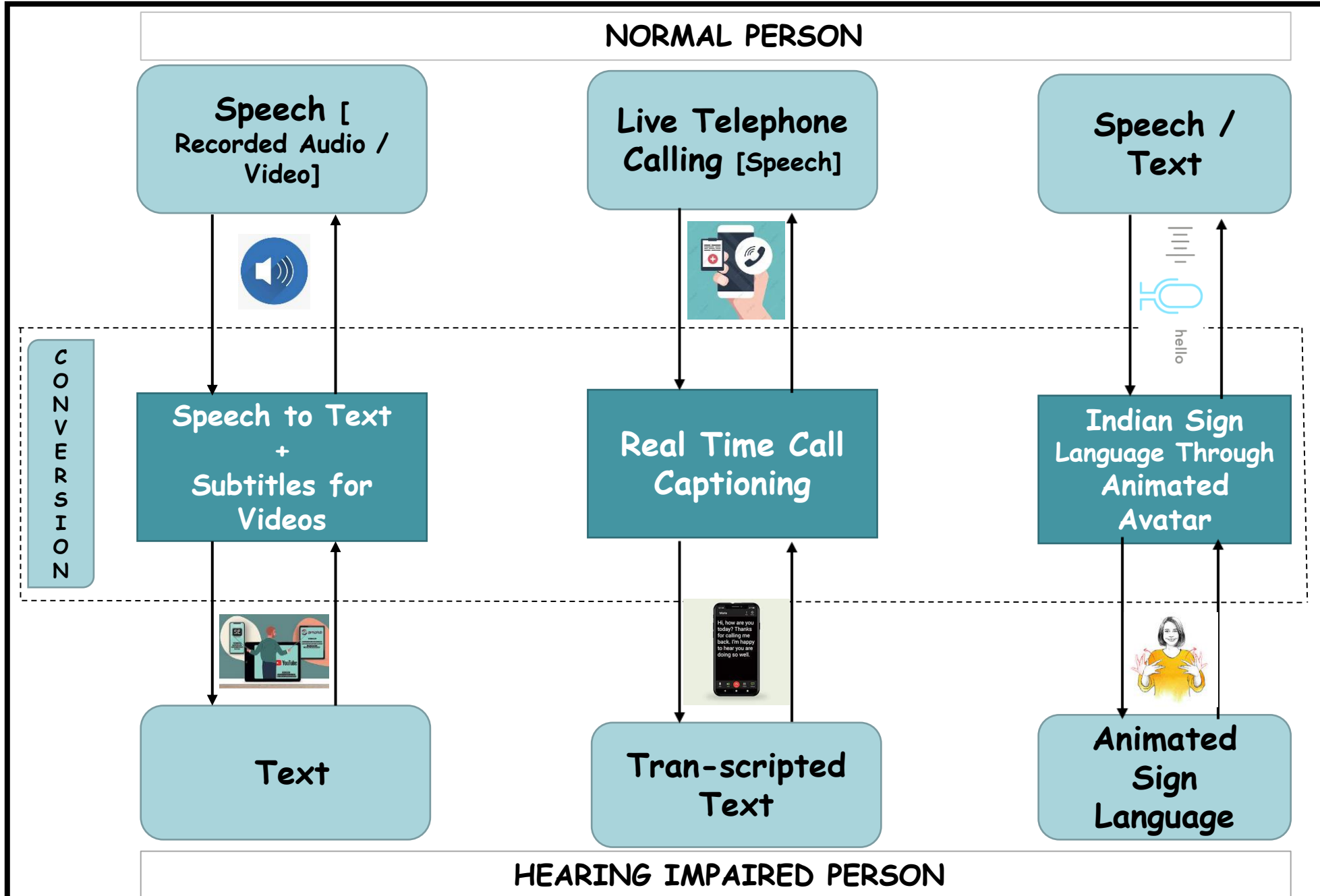
**Theme Name** : Smart Education

# Our Solution

## DESCRIPTION :

We are going to develop an android application which will perform open and close captioning in videos , real time call captioning over a phone line and Indian sign Language animated model. This application will be a solution for communication with Persons having Hearing Impairment ...!

## Flowchart



# Further Details

## Technology Stack :

### Front End :



### Software (IDE) :



### Back End :



## Dependencies :

- Our mobile app depends on the support provided by the government to spread awareness about this application and advantages.
- Microphone , Media / Storage , Manage Calls permissions needs to be accessed throughout the devices.

## Use Cases :

### Independence in communication :

It will help to remove the barriers in communication between normal humans and a deaf persons.

- ✓ Our application's end user can be Deaf and Dumb people as well as a normal person.
- ✓ If a normal person is speaking to a deaf person who is talking in sign language so he can use our application's feature of sign language to text convertor.

## Features :

- ✓ **Convert speech to text .**
- ✓ **Provides real-time call to text .**
- ✓ **Provides Subtitles for videos .**
- ✓ **In live video call , Convert text / audio to animated sign language Vice – versa.**
- ✓ **Provides facility to send text messages on telephone**

Link Of work done till now :

<https://github.com/WeHearYou>

# Team Member Details

**Team Leader Name** : Renuka Ramdas Magar

Branch : BTech

Stream : ETC

Year : III

**Team Member 1 Name** : Sambodhi Sunil Dhanajkar

Branch : BTech

Stream : ETC

Year : III

**Team Member 2 Name** : Prerna Baban Lokade

Branch : BTech

Stream : ETC

Year : III

**Team Member 3 Name** : Pornima Digambar Bamne

Branch : BTech

Stream : ETC

Year : III

**Team Member 4 Name** : Martand Maheshrao Pangrekar

Branch : BTech

Stream : ETC

Year : III

**Team Member 5 Name** : Purushottamsingh Rajpalsingh Jakrewale

Branch : BTech

Stream : ETC

Year : III

**Team Mentor 1 Name** : Mr. D. J. Tuptewar

Category : Academic

Expertise : Image Processing

Domain Experience (in years) : 10

VLSI Embedded System

**Team Mentor 2 Name** : Mrs. S. S. Joshi

Category : Industry

Expertise : Python Development

Domain Experience (years): 6

