

# PROJECT DESIGN PHASE 2

Date:	15 October 2022
Team ID:	PNT2022TMID37441
Project Name:	Real-time communication system powered by AI for specially - abled
Maximum Marks:	2 Marks

## Functional Requirement

System is presented as black box

Hearing impaired is the person that performs the signs

Normal hearing is the passive user of the system

The System Requirements Can Be Specified:

1. Hearing impaired person should be able to perform sign that represent digit number
2. Hearing impaired person should be able to perform sign that represent alphabet letter 29
3. Hearing impaired person should be able to perform sign that represent word
4. Hearing impaired person should be able to perform sign that represent sentence
5. Hearing impaired person should be able to see the translation of sign to text
6. Hearing impaired person should be able to change the component (number/alphabet or word/sentence) for which translation to speech is provided

### **NORMAL FLOW:**

User comes in front of camera and performs the alphabet letter

System analyzes the performed sign

System shows the sign meaning as text and speech

### **ALTERNATIVE FLOWS:**

System indicates that user is not within field of view of Kinect

1. System shows that user is not detected
2. User enters the field of view
3. System shows that user is detected

Sign not recognized:

1. System does not react to indicate that sign was not recognized
2. User performs again the alphabet letter until it is recognized

Enabling speech for this component:

1. Enable speech component