PROJECT DESIGN
PHASE 2

Date	11 October 2022
Team ID	PNT2022TMID01168
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 systemThe System Requirements

Can Be Specified

- Hearing impaired person should be able to perform sign that represent digit number
- Hearing impaired person should be able to perform sign that represent alphabet letter 29
- Hearing impaired person should be able to perform sign that represent word
- Hearing impaired person should be able to perform sign that represent sentence
- Hearing impaired person should be able to see the translation of sign to text
- Hearing impaired person should be able to change the component (number/alphabet orword/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**

- System shows that user is not detected
- User enters the field of view
- System shows that user is detected

- **Sign not recognized**

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

- **Enabling speech for this component**:

1. Enable speech component