PROJECT DESIGN PHASE 2

Date	11 October 2022
Team ID	PNT2022TMID43826
Project Name	Real-time communication system powered by ai forspecially 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