

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

Date	28 October 2022
Team ID	PNT2022TMID28693
Project Name	Real time communication system powered by AI for specially-Abled
Maximum Marks	4 Marks

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Gmail or Registration through Mobile number
FR-2	User Confirmation	Confirmation via Email or Confirmation via OTP
FR-3	System Requirements	1.Mobile or PC or Laptop with webcam or camera 2.Minimum 1GB RAM and picture capability
FR-4	Text conversion	converts the sign language into a text using CNN model
FR-5	sentence translation	To creat sentences by recognizing the signs and pauses in the video stream.
FR-6	speech translation	TTS converts text into speech.

**Non-Functional Requirements:**

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Easy usable application for everyone.Especially useful for disabled person. It is user friendly
NFR-2	<b>Security</b>	It is also a secured application and information and images are securely stored.It must be ensured that the privacy of user data be maintained and handled appropriately.
NFR-3	<b>Reliability</b>	The translation of sign languages should be reliable. The accuracy of the system should be tested extensively to make sure that it is up to the mark.
NFR-4	<b>Performance</b>	It's performance is consistency good .The processing should be done in considerable time so that the conversation can go on without waiting for the system's output.
NFR-5	<b>Availability</b>	It is a free accessible and Universal access.Since sign language is almost same everywhere ,the system can be used across the globe
NFR-6	<b>Scalability</b>	The system should be scalable to accommodate new features and functionalities and to cater wider range of people in future