

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

Date	03 October 2022
Team ID	PNT2022TMID30994
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 Form Registration through Gmail or Mobile Number
FR-2	User Confirmation	Confirmation via Email or Confirmation via OTP
FR-3	System Requirements	1. PC or Laptop with Webcam or Camera 2. Minimum 2GB RAM and Picture capture capability
FR-4	Text Conversion	Converts the Sign language into a text using Convolutional Neural Network (CNN) Model.
FR-5	Sentence Translation	To create sentence(s) by recognizing the signs and pauses in the input video stream.

**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 a user friendly UI.
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>	Its 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
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