Solution Requirements

(Functional & Non-functional)

Project Name	Real-Time Communication System Powered by AI for Specially-Abled
Team ID	PNT2022TMID40385

Functional Requirements :

FR.No	Functional Requirement (Epic)	Sub Requirement (Story/Sub-Task)
FR-1	User Registration	● Registration through Web UI/E-Mail ID ● Authentication via OTP.
FR-2	User Confirmation	● Confirmation via mail.
FR-2	System	● Desktop/Mobile with a good resolution camera. ● Provides system access to capture images/video and other relevant data.
FR-3	Recognition	Given image is predicted using the Machine model
FR-3	Text conversion	Converts the sign language into a text using the Convolutional Neural Network(CNN) Model.

Non-Functional Requirements :

NFR. No.	Non-Functional Requirement (Epic)	Sub Requirement (Story/Sub-Task)
NFR-1	**Usability**	Deaf-mute people should be able to use the system with ease.The same applies for normal people who get the system's output.The system should have good UI.
NFR-2	**Security**	Even though the use-case of the system doesn't need any security feature,it must ensure that the privacy of user data be maintained and handled appropriately.
NFR-3	**Reliability**	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	**Performance**	The processing should be done in considerable time so that the conversation can go on without waiting for the system's output.
NFR-5	**Availability**	The system should be universally accessible. Since sign language is almost the same everywhere, the system can be used across the globe.
NFR-6	**Scalability**	The system should be scalable to accommodate new features and functionalities and to cater wider range of people in future.