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

Date	20 October 2022
Team ID	PNT2022TMID49261
Project Name	Project: Real-Time Communication System Powered by AI for Specially-Abled
Maximum Marks	4 Marks

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-3	System	• Desktop/ Mobile with good resolution camera. • Provides system access to capture images/ video and other relevant data.
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:

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 be ensured 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 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.