

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	11 October 2022
Team ID	PNT2022TMID06610
Project Name	Project – 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	Sub Requirement (Sub-Task)
FR-1	User Input	The system gets the sign language input. The input may be image, video or live feed (depending upon the scope of the project)
FR-2	Processing	The system based on the trained model, should output the corresponding normal message.
FR-3	System Output	The system should output to the users, the normal message and voice.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
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 a considerable time so 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.