

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

Date	18 October 2022
Team ID	PNT2022TMID23704
Project Name	Project -Real Time Communication Systems 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	<ul style="list-style-type: none">• Registration through Form• Registration through Gmail
FR-2	User Confirmation	<ul style="list-style-type: none">• Confirmation via Email• Confirmation via OTP
FR-3	System	<ul style="list-style-type: none">• Desktop with high resolution camera.• Provides Access to capture Image through the Camera.• Provides Access to Upload the Captured image through Gallery.
FR-4	Text conversion	Converts the Sign language into a text using Convolutional Neural Network (CNN) Model.
FR-5	Sentence Translation	Recognizes the separate Signs of One-By-One and it Could provide a Translation in the situation where Signed Extract System (SEE) is provided.
FR-6	Review	Users Can Give their Feedback on the Review page about the Application.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	To convey a message to normal people, as well as convert speech into understandable sign language for the deaf and dumb people.
NFR-2	Security	Converted information using signs into speech is accessed only by the user.
NFR-3	Reliability	Sign Method is Relevant to use for Differently abled persons.
NFR-4	Performance	The time for converting signs into speech should be faster for the real time communication.
NFR-5	Availability	Provides automatic recovery as much as possible.
NFR-6	Scalability	This app enables deaf and dumb people to convey their information using signs which get converted to human-understandable language and speech is given as output.