

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

Date	16 October 2022
Team ID	PNT2022TMID40612
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 (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Login	Login through Form Login through Gmail
FR-4	Image Upload	Image Upload via Drag & Drop Image Upload by choosing from local file subsystem
FR-5	Text Entry	Text Entry by Copy-Paste Text Entry by Typing
FR-6	Conversion	Sign-Language to Speech Conversion Text to Sign-Language Conversion
FR-7	Activity Log	View list of active users View log of translations performed

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The application can be used by clients without prior knowledge of machine-learning algorithms. Basic knowledge of text-entry and file directory subsystem is sufficient
NFR-2	Security	Access is provided only to registered users, either through a username-password pair or via their Gmail account
NFR-3	Reliability	The application has an extremely low failure rate / downtime and has a clear, predictable flow of operations

NFR-4	Performance	The application provides accurate translations from sign-language to speech as well as from text-to-sign language
NFR-5	Availability	Clients can use the application to perform conversions provided they have a stable Internet connection
NFR-6	Scalability	The application seamlessly and efficiently handles a growing number of clients / users without any significant reduction in performance