

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

Date	03 October 2022
Team ID	PNT2022TMID48155
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	<b>Usability</b>	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	<b>Security</b>	Access is provided only to registered users, either through a username-password pair or via their Gmail account
NFR-3	<b>Reliability</b>	The application has an extremely low failure rate / downtime and has a clear, predictable flow of operations
NFR-4	<b>Performance</b>	The application provides accurate translations from sign-language to speech as well as from text-to-sign language

NFR-5	<b>Availability</b>	Clients can use the application to perform conversions provided they have a stable Internet connection
NFR-6	<b>Scalability</b>	The application seamlessly and efficiently handles a growing number of clients / users without any significant reduction in performance