

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

Date	16 October 2022
Team ID	PNT2022TMID01172
Project Name	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.

<b>FR No.</b>	<b>Functional Requirement (Epic)</b>	<b>Sub Requirement (Story / Sub-Task)</b>
FR-1	User Registration	Registration through Gmail
FR-2	User Confirmation	Confirmation via Email
FR-3	User Communication	Communication can be done through pc or mobile camera.
FR-4	User requirement	Option should be shown for hand sign to text and voice conversion and vice versa.
FR-5	Communication requirement	Tutor can be made available to have one to one teaching for user.
FR-6	Regulatory requirements	App shutdown in case of cyber attack
FR-7	Reporting	If any issues found in the application, automatically it will be notified to the developer.
FR-8	Compliance to rules or law	Terms and conditions, private policy, End user subscription agreement.

## Non-functional Requirements:

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

<b>FR No.</b>	<b>Non-Functional Requirements</b>	<b>Description</b>
NFR-1	<b>Usability</b>	The camera captures all expressions including facial expressions and hand gestures which can be easily used by all age groups. It can be used by deaf-mute people and their care takers.
NFR-2	<b>Security</b>	The system is more secure and information of the customers is also maintained confidentially.
NFR-3	<b>Reliability</b>	The system is very liable, it can last for long amounts of time if well maintained.
NFR-4	<b>Performance</b>	The performance of the model is efficient. The cost-effective nature of the system makes it extremely liable. The latency is very less for the conversion process.
NFR-5	<b>Availability</b>	The solution is suitable for different languages and can be used in many countries. It can be trained for all the available sign languages. This model can be used at any time anywhere.
NFR-6	<b>Scalability</b>	The system gives output rapidly. It also predicts quickly when it gets so many inputs at a time. It predicts different types of sign language at a time. Upto 25000 users can be use this model at a time.