

## **Project Design Phase-II**

### **Solution Requirements (Functional & Non-functional)**

Date	13 October 2022
Team ID	PNT2022TMID00980
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.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Approval	Through verification mails Through phone calls Through SMS
FR-4	User Transaction	Through net banking Through UPI
FR-6	User input customization	Feeding images of hand gestures to be recognized and converted to speech Feeding multiple languages to obtain the required speech.
FR-7	User output	Audio through speakers for speech Display for image or text for hand gestures

#### **Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	<ul style="list-style-type: none"><li>• Light-weight and easily portable.</li><li>• Provided with battery of longer lifetime making it suitable for outdoor use.</li><li>• Easy to access and to get equipped with</li></ul>

		<p>little knowledge to use the technology.</p> <ul style="list-style-type: none"> <li>• Anytime anywhere access.</li> <li>• User-friendly and easy to customize.</li> </ul>
NFR-2	<b>Security</b>	<ul style="list-style-type: none"> <li>• The data fed cannot be accessed or modified without authority.</li> <li>• Highly-secure and safe to use.</li> </ul>
NFR-3	<b>Reliability</b>	<ul style="list-style-type: none"> <li>• With more content fed to the device, accuracy of conversion increases.</li> <li>• The program can be periodically checked and updated in order to have better accuracy.</li> </ul>
NFR-4	<b>Performance</b>	<ul style="list-style-type: none"> <li>• Provides quick response after conversion.</li> <li>• Consumes less power and produces more efficiency.</li> <li>• Can be customized with features like user specific hand gesture images and multiple languages.</li> </ul>
NFR-5	<b>Availability</b>	<ul style="list-style-type: none"> <li>• With connection, provides anytime and anywhere access</li> <li>• Longer battery life ensures that this can be used for longer duration continuously.</li> </ul>
NFR-6	<b>Scalability</b>	<ul style="list-style-type: none"> <li>• Able to add much more features like recording few information for future use.</li> <li>• Can be implemented with capturing instances</li> <li>• Network can also be expanded such that 2 or more devices can be connected and operated to a single network simultaneously.</li> </ul>