# VSB ENGINEERING COLLEGE, KARUR

## **Computer Science and Engineering**

#### IBM NALAIYA THIRAN

#### **Project Design Phase-II**

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

Date	15 October 2022
Team ID	PNT2022TMID33317
Project Name	Project – Realtime 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, Gmail and LinkedIN
FR-2	User Confirmation	Confirmation via Email and OTP
FR-3	Image Capture Processing	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 seperate 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	For the Deaf and Dumb people convert the speech into Understandable sign Languages
NFR-2	Security	Best security system for the specially abled persons
NFR-3	Reliability	Sign Method is Relevant to use for Differently abled persons
NFR-4	Performance	Time for converting Signs into speech will be fast for real time communications.
NFR-5	Availability	Provides Automatic Recovery
NFR-6	Scalability	Deaf and Dumb People Convey the Information through their Signs for the human understandable language.