Project Design Phase-2

Solution Requirements (Functional & Nonfunctional)

Date	06 November 2022
Team ID	PNT2022TMID50743
Project Name	Project – Real Time Communication System
	Powered by AI for Specially Abled
Maximum Marks	4 Marks

Functional Requirements

FR NO.	Functional Requirement
FR-1	A camera should be used to capture the hand gestures. Deaf-mute people show hand gestures very fast during communication. So, the camera should be fast enough to capture the hand gestures.
FR-2	Sign language should be converted into human understandable voice. So that normal people can understand what deaf-mute people are trying to say.
FR-3	Voice should be converted into sign language. So that deaf-mute people can understand what normal trying to say.
FR-4	We need to integrate the above functionalities and build this project as a web application.

Non-Functional Requirements

FR NO.	Non-Functional Requirement	Description
NFR-1	Usability	We are going to use Flask UI in this application for better user experience. UI should be very simple. So that every people can easily use this application.
NFR-2	Reliability	We are going to fix a subscription cost for this application. The subscription cost should be reasonable. So that every people can afford it.
NFR-3	Performance	AI model needs some processing resources. So we need to have a decent hardware. The application should be well optimized. Load time and latency should be less.
NFR-4	Availability	It is a web application. So it should be accessible to people anywhere anytime.
NFR-5	Scalability	There are lot of deaf and mute people in our society. So definitely we can expect more number users for this application. We can also enhance this application for home automation by integrating this with Alexa smart home.