

ProjectDesignPhase-II
SolutionRequirements(Functional&Non-functional)

Date	18October2022
TeamID	PNT2022TMID44898
ProjectName	Project -Real Time CommunicationSystemsPoweredbyA IforSpeciallyabled
MaximumMarks	4 Marks

FunctionalRequirements:

Followingarethefunctional requirementsoftheproposedsolution.

FR No.	FunctionalRequirement (Epic)	SubRequirement (Story/ Sub-Task)
FR-1	UserRegistration	<ul style="list-style-type: none">• RegistrationthroughForm• RegistrationthroughGmail
FR-2	UserConfirmation	<ul style="list-style-type: none">• ConfirmationviaEmail• ConfirmationviaOTP
FR-3	System	<ul style="list-style-type: none">• Desktopwithhighresolutioncamera.• ProvidesAccesstocaptureImagethrough the Camera.• Provides Access to Upload theCapturedimagethroughGallery.
FR-4	Textconversion	ConvertstheSignlanguageintoatextusing Convolutional Neural Network (CNN)Model.
FR-5	SentenceTranslation	RecognizestheseperateSignsofOne-By-OneanditCouldprovideaTranslationinthe situationwhereSignedExtractSystem(SEE)isp rovided.
FR-6	Review	UsersCanGivetheirFeedbackontheReview pageabout theApplication.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	To convey a message to normal people, as well as convert speech into understandable sign language for the deaf and dumb people.
NFR-2	Security	Converted information using signs into speech is accessed only by the user.
NFR-3	Reliability	Sign Method is Relevant to use for Differently abled persons.
NFR-4	Performance	The time for converting signs into speech should be faster for the real-time communication.
NFR-5	Availability	Provides automatic recovery as much as possible.
NFR-6	Scalability	This app enables deaf and dumb people to convey their information using signs which get converted to human-understandable language and speech is given as output.