

Project Design Phase-I Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID09332
Project Name	Real-Time Communication System Powered by AI for Specially Abled
Maximum Marks	2 Marks

Proposed Solution Template:

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Matching people with speech and hearing problems with normal people has always been a difficult task. People with language disabilities have difficulty getting their message across to normal people. Because normal people don't understand sign language. Communication in times of crisis is a pain. Not everyone can tolerate artificial sign language interpreters. People with speech and hearing problems may miss out on many opportunities because they cannot speak or speak orally in situations such as meetings.
2.	Idea / Solution description	<ul style="list-style-type: none"> ➤ Real-time detection and conversion of login to voice/text and voice/text in the registration system will be very useful for appropriate conversations between lay and disabled people. ➤ Design and implement a system using artificial intelligence, convolutional neural networks, computer vision and image processing, taking gestures as inputs and converting them into speech/text.
3.	Novelty / Uniqueness	<ul style="list-style-type: none"> ➤ An app called "Mozhi" that uses computer vision, Artificial Intelligence convolutional neural network and image processing. ➤ It recognizes the image of sign language from the speaker and then translates it into speech/text.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> ➤ Disabled people experience a great deal of difficulty with day-to-day activities. ➤ The primary aim of this application is to make speech-impaired individual work independently.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> ➤ AI can create income through direct customers and collaborate with health care sector and produce income from their customers.

		➤ Speech-hearing impaired employees of B2B services can use the app to pass messages concurring on to the organization.
6.	Scalability of the Solution	➤ AI innovation assists the specially abled with opening up new doors for availability consideration in the public eye and independent living. ➤ It might also open the door to more cutting-edge and creative innovations to the most challenging problems faced by the specially abled.