Project Design Phase-I
Proposed Solution Template

Date	28 October 2022
Team ID	PNT2022TMID39233
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)	In our society, we have people with disabilities. The technology is developing day by day but no significant developments are undertaken for the betterment of these people. Communications between deaf-mute and a normal person has always been a challenging task. It is very difficult for mute people to convey their message to normal people. Since normal people are not trained on hand sign language. In emergency times conveying their message is very difficult. The human hand has remained a popular choice to convey information in situations where other forms like speech cannot be used. Voice Conversion System with Hand Gesture Recognition and translation will be very useful to have a proper conversation between a normal person and an impaired person in any language.

2.	Idea / Solution description	The project aims to develop a system that converts the sign language into a human hearing voice in the desired language to convey a message to normal people, as well as convert speech into understandable sign language for the deaf and dumb. We are making use of a convolution neural network to create a model that is trained on different hand gestures. An app is built which uses this model. This app enables deaf and dumb people to convey their information using signs which get converted to humanunderstandable language and speech is given as output.

3.	Novelty / Uniqueness	Building mobile tools with data isn't as easy as importing an XML feed of your latest headlines. But if you're going to spend thousands of dollars developing a mobile app anyway, you might as well spend a little more to build a real application that helps solve problems and makes advertisers take notice.
4.	Social Impact / Customer Satisfaction	These apps are using only for solve the problems. There are many different types of disabilities, and there are also many different ways in which people may use AI. The use of artificial intelligence is a boon for speciallyabled people. Technology had opened up new opportunities and created jobs where none had existed before, such as speech to text software that helped one woman find her voice after she was paralysed in an accident. Artificial Intelligence can help those with disabilities accomplish tasks they never thought possible; here are just a few ways we've seen AI technology impact lives: Facial recognition and predictive texting tools
5.	Business Model (Revenue Model)	Building mobile tools with data isn't as easy as importing an XML feed of your latest headlines. But if you're going to spend thousands of dollars developing a mobile app anyway, you might as well spend a little more to build a real application that helps solve problems and makes advertisers take notice.

6.	Scalability of the Solution	With the help of machine tasks that usually requires human intelligence, such as voice and speech synthesis, visual perception, predictive text functionality, judgement, and a variety of other tasks, AI can assist individuals with disabilities by making a significant distinction in their ability.