Project Design Phase-I Proposed Solution Template

Date	26 September 2022
Team ID	PNT2022TMID23360
	Real-Time Communication System Powered by AI for Specially Abled
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the 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. Communication 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 in 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 human-understandable language and speech is given as the output.
3.	Novelty / Uniqueness	Creating an interactive and user- friendly dashboard

4.	Social Impact / Customer Satisfaction	 web camera will avoid the background disturbance & Objects An alarm button can be setup for any emergency uses for the specially abled person Collect various data necessary for training and testing Fault tolerant and handling the exceptions efficiently. Making a modular software for quicker response. A global community chat forum can be created so that people can share their thoughts and opinions Chatbot for Help Through examples of artificial intelligence technology solutions, discover how accessibility for people with disabilities can be enhanced!
5.	Business Model (Revenue Model)	The business model is based on accurate translation of the sign language and get the user an effective communication with a specially abled person without even knowing the sign language and collecting data on images related to sign language and storing in image database for even more vast usability of data to users .The main channel of our app is to provide the communication medium to the users .The target audience of the app are the users who wanted to communicate without any hitch . As the communication is the means of living our app provides the best experience to all athe users which is major the business model of our project and reach many people.
6.	Scalability of the Solution	The Results brought by the application will have accurate results