

Project Design Phase-I
Proposed Solution

Date	24 September 2022
Team ID	PNT2022TMID28482
Project Name	Project - 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)	<ul style="list-style-type: none"> ➤ Dumb people are usually face some problems on normal communication with other people in society. ➤ Our goal is to design a human computer interface system that can accurately identify the language of the deaf and dumb.
2.	Idea / Solution description	<ul style="list-style-type: none"> ➤ The system proposed to develop and build an intelligent system that uses image processing, machine learning and artificial intelligence concepts to make visual inputs of hand gestures of sign language and to create an easily recognizable form of outputs.
3.	Novelty / Uniqueness	<ul style="list-style-type: none"> ➤ When user will start recognition activity and give various hand gestures in front of camera, sign will be detected and speech will be produced to announce detected sign.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> ➤ User will do different hand gestures in front of camera. ➤ User will able to see video, recognized sign on GUI.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> ➤ First the application is tested with few people. ➤ Further improvements can be done in the implementation of the communicator with other sign language such as American Sign Language, recognition of emotions in sign language and language Translation.
6.	Scalability of the Solution	<ul style="list-style-type: none"> ➤ Hand gestures of deaf peoples by normal peoples this system is proposed. System gives output in the form of sound.