Project Design Phase-I
Proposed Solution

Date	22 September 2022
Team ID	PNT2022TMID35886
Project Name	Real-Time Communication System Powered by AI for Specially-Abled
Maximum Marks	2 Marks

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The main objective is to build a communication system which enables communication between a speech-hearing impaired and a normal person.
2.	Idea / Solution description	The proposed solution uses a Deep Neural Network architecture that recognizes a sign language symbol. The image of the symbol or sign made by a person is captured via a webcam, which is then fed into the model. The model segments the hands present in the image and classifies the image into one of the signs, which is then turned into audible voice output using various Python libraries. This whole system will also be deployed as a web application with a friendly user interface for real time recognition of sign language as well as a stand alone sign language to text converter.
3.	Novelty / Uniqueness	The proposed model is more efficient and can also be accessible by lots of people since it will be deployed on the internet with a user-friendly interface.
4.	Social Impact / Customer Satisfaction	This model introduces the gateway for deaf,dumb and the blind. It's difficult to educate the public about the language of disabled people and this model will actually make communication easier and bridge the gap between people.
5.	Business Model (Revenue Model)	This model will be made easily accessible to the general public and satisfies their existing needs and also provides for their new needs. The cost will be user friendly,with different updates,cost may vary.
6.	Scalability of the Solution	With adequate funding and manpower, the proposed model can be scaled up, which would make it a more sophisticated system that can recognize multiple sign languages and also convert into multiple normal languages.