

**PROJECT DESIGN PHASE-I  
PROPOSED SOLUTION TEMPLATE**

Team ID	PNT2022TMID36394
Project Name	Real-Time Communication System Powered by AI for Specially Abled
Maximum Marks	2 Marks

**Proposed Solution Template:**

S.No.	Parameter	Description
1.	<b>Problem Statement (Problem to be solved)</b>	To develop an automatic sign language recognition system with the help of image processing and computer vision techniques. To use natural image sequences, without the signer having to wear data gloves or coloured gloves, and to be able to recognize hundreds of signs. The motivation for this work is to provide a real time interface so that signers can easily and quickly communicate with non-signers. To efficiently and accurately recognize signed words, using a minimal number of training examples.
2.	<b>Idea / Solution description</b>	The project aim is to develop a application that converts the sign language into text or voice to communicate with normal people. And also it converts speech or text into sign language. We are making use of a convolution neural network to create a model trained on different hand gesture. This application enables specially abled people to convey their information to normal people using sign language.
3.	<b>Novelty / Uniqueness</b>	<ul style="list-style-type: none"><li>• To create user-friendly application.</li><li>• The application to recognize accurate sign language symbol.</li><li>• The application to recognize voice or text and convert it to show sign language.</li><li>• The application will accurately translate the sign language.</li></ul>
4.	<b>Social Impact / Customer Satisfaction</b>	By this solution, Specially abled people can feel free to communicate and human interaction improves.
5.	<b>Business Model (Revenue Model)</b>	This will be based on the performance of the application. If the application translates the sign language accurately then the application will be recommended by many and it will reach to many people.
6.	<b>Scalability of the Solution</b>	The solution brought by the application can satisfy the customers and the application can be improved based on customers review.