

**Project Design Phase-I**  
**Proposed Solution Template**

Date	24 September 2022
Team ID	PNT2022TMID02287
Project Name	Project - 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)	Sign Language is a visual means of communicating using gestures, facial expressions, and body language with specially-abled. Since normal people are not trained in sign language, in times of emergency conveying their message is very difficult. Hence, there is a need for a system that recognizes different signs and empowers them in communicating with normal people.
2.	Idea / Solution description	The idea is to create an end-end application that predicts the ISL signs from a live video and translates the same to voice such that conversing is at ease.
3.	Novelty / Uniqueness	We use a stopping symbol to group the letters into a word and generate a sentence and the resulted prediction is converted into speech to convey the information in a convenient manner
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>● Communication is achieved without the help of additional human intervention.</li><li>● No additional hardware support is needed to use the application</li></ul>

		<ul style="list-style-type: none"> <li>● Improve their career opportunities in the industry</li> <li>● Can provide instant results to users</li> </ul>
5.	Business Model (Revenue Model)	<p>We can associate the application with organizations to provide support for the specially abled. Creating an association with other medical applications to utilize our product in their app. Can be used to sell to a news agency as a replacement for human translation.</p>
6.	Scalability of the Solution	<p>Since this is a web app people can access the application from any device(Mobile, Desktop, laptop, etc.), and used by everyone across the world. As it is hosted in IBM Cloud, it could be scaled up and down as per demand.</p>