

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

Date	15 November 2022
Team ID	PNT2022TMID50440
Project Name	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)	Conversation between deaf-mute people and normal people is a very challenging task. It is most difficult to communicate during the emergency period.
2.	Idea / Solution description	<ul style="list-style-type: none"><li>To design and implement a system using artificial intelligence, Data mining and image processing concepts to take input as hand gestures.</li><li>Hand gestures is converted as the voice message and convert the voice system into hand gestures are the technique useful for the conversation between deaf-mute people and normal people.</li></ul>

3.	Novelty / Uniqueness	<p>By using a convolution neural network to create a model that is recognise on different hand gestures,voice and an app is built for the use of this mode.</p> <ul style="list-style-type: none"> <li>• Artificial Intelligence developed the app called handtalk that uses neural networks and computer vision.</li> <li>• Hand Talk app automatically translates text and audio to American Sign Language (ASL) [Beta] and Brazilian Sign Language.</li> <li>• It recognizes the video of sign language and then converted into voice by the smart algorithms .</li> </ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> <li>• The main purpose of this application is to make the deaf-mute people to easy communicate like normal people and they avoid hesitation to talk freely.</li> <li>• About quater of the people with a disability are most of them experience a great difficulty with day to day activities.</li> </ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> <li>• By using the AI the specially abled people can work any job.They can revenue from their customer.</li> <li>• Business to Business (B2B) uses to work deaf and mute employees can convey the message directly according to the company.</li> </ul>
6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>• Enhanceing the deaf-mute people with their disabilities to step into a world where they facing difficulties for the communication. • The AI technology helps specially abled people to open up their knowledges and enhance the opportunities in society and independent living.</li> <li>• This technology gives hope to the specially abled people to survive in the world.</li> </ul>