

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

Date	30 September 2022
Team ID	PNT2022TMID29664
Project Name	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 proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"><li>➤ The deaf and dumb people have difficulty in communicating with others who cannot understand sign language and misinterpreted.</li><li>➤ They unable to communicate one's own thoughts, feelings, needs, and desires is incredibly frustrating and limiting. Parents and caregivers can also become frustrated when they are unable to understand their loved one.</li><li>➤ Uneducated Deaf-Dumb people face serious problem in communication with normal people</li></ul>
2.	Idea / Solution description	<ul style="list-style-type: none"><li>➤ An efficient and fast algorithm for identification of the number of fingers opened in a gesture representing an alphabet in the sign language.</li><li>➤ Sign Language into speech using Artificial Intelligence in real time for deaf and dumb people.</li></ul>

		<ul style="list-style-type: none"> <li>➤ Sign language application provide common signs, including those for letters, numbers, and everyday words and phrases.</li> <li>➤ people can use to browse for words and phrases, some are interactive and offer games and quizzes to help people associate signs with their meanings more quickly.</li> </ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"> <li>➤ Can be used for uneducated deaf-mute people.</li> <li>➤ A very high level of accuracy.</li> <li>➤ An interactive model for disable kids.</li> </ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> <li>➤ An integrated android application to blend uneducated Deaf-Dumb people within society, and help them to communicate with normal people.</li> <li>➤ Deaf-Dumb people also have normal opportunities for learning.</li> <li>➤ Offer a great tool for parents to teach their deaf and dumb kids</li> <li>➤ Introduce Sign language keyboard.</li> </ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> <li>➤ AI-based and image recognition systems in clouds, providing customers with Software as a Service and enabling your business to rapidly evolve and grow.</li> <li>➤ Packages range from casual learning (6 hours) to unstoppable learning (20 hours).</li> <li>➤ connect with certified teachers who are Deaf/hard of hearing and allows you to learn and practice sign 1-1.</li> </ul>

6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>➤ Our model has the capacity to handle growth, especially in handling more users and evolving concurrently with business needs (app's backend, database and the hosted servers).</li> <li>➤ The solution is fully cloud-hosted, yielding scalability and on-demand service, without any requirement of the internal infrastructure or maintenance cost.</li> <li>➤ The solution is easy to integrate into another ecosystem due to the app's modular structure.</li> </ul>
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