

Project Design Phase-I

Proposed Solution

| | |
|---------------|---|
| Date | 30 September 2022 |
| Team ID | PNT2022TMID15084 |
| Project Name | Project - 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) | <ul style="list-style-type: none"> ➤ Dumb people are usually face some problems on normal communication with other people in society. ➤ Our goal is to design a human computer interface system that can accurately identify the language of the deaf and dumb. |
| 2. | Idea / Solution description | <ul style="list-style-type: none"> ➤ The system proposed to develop and build an intelligent system that uses image processing, machine learning and artificial intelligence concepts to make visual inputs of hand gestures of sign language and to create an easily recognizable form of outputs. |
| 3. | Novelty / Uniqueness | <ul style="list-style-type: none"> ➤ When user will start recognition activity and give various hand gestures in front of camera, sign will be detected and speech will be produced to announce detected sign. |
| 4. | Social Impact / Customer Satisfaction | <ul style="list-style-type: none"> ➤ User will do different hand gestures in front of camera. ➤ User will able to see video, recognized sign on GUI. |
| 5. | Business Model (Revenue Model) | <ul style="list-style-type: none"> ➤ First the application is tested with few people. ➤ Further improvements can be done in the implementation of the communicator with other sign language such as American Sign Language, recognition of emotions in sign language and language Translation. |
| 6. | Scalability of the Solution | <ul style="list-style-type: none"> ➤ Hand gestures of deaf peoples by normal peoples this system is proposed. System gives output in the form of sound. |