

## PROJECT DESIGN PHASE-I

### PROPOSED SOLUTION

|               |   |
|---------------|---|
| Date          | 21 September 2022   |
| Team ID       | PNT2022TMID11418  |
| Project Name  | Real-Time Communication System<br>Powered by AI for Specially Abled |
| Maximum Marks | 2 Marks   |

### PROPOSED SOLUTION TEMPLATE:

| S.No. | Parameter                                | Description  |
|-------|--|--|
| 1.    | Problem Statement (Problem to be solved) | To model a system for aiding deaf and dumb people and help them to communicate in real-time.   |
| 2.    | Idea / Solution description              | We start by collecting key points from media pipe holistic and collect a bunch of data from key points We then build a LSTM model and train with our stored data which helps us to detect action with several frames. Once training is done, we can use this model for real time hand gesture detection and simultaneously convert the gesture to speech using OpenCV.           |
| 3.    | Novelty / Uniqueness                     | We will be using the latest and trending wearable technology which makes it possible to access (Web Application) easily anywhere and everywhere by the disabled person which makes the communication possible by both specially abled and normal people. We will be using the most recent convolution neural network architecture to improve the efficiency of the trained model |
| 4.    | Social Impact / Customer Satisfaction    | Helps to bridge the gaps in communication with hearing and speaking impaired people.   |
| 5.    | Business Model (Revenue Model)           | The implemented product will be marketed as a Retailer model, in which the product will be assigned an initial base price and will be updated once we bring new features to it.  |
| 6.    | Scalability of the Solution              | Bootstrapping the company at first through the founder's funds, but eventually through reinvesting the profit from servicing customers   |