VSB ENGINEERING COLLEGE, KARUR

Computer Science and Engineering

IBM NALAIYA THIRAN Project Design Phase-I

Proposed Solution Template

| Date | 24 September 2022 |
|---------------|--|
| Team ID | PNT2022TMID33317 |
| 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) | In our society, we have people with disabilities. The technology is developing day by day but no significant developments are undertaken for the betterment of these people. Communications between deaf-mute and a normal person has always been a challenging task. It is very difficult for mute people to convey their message to normal people. Since normal people are not trained on hand sign language. In emergency times conveying their message is very difficult. The human hand has remained a popular choice to convey information in situations where other forms like speech cannot be used. Voice Conversion System with Hand Gesture Recognition and translation will be very useful to have a proper conversation between a normal person and an impaired person in any language. The project aims to develop a system that converts the sign language into a human hearing voice in the desired language to convey a message to normal people, as well as convert speech into understandable sign language for the deaf and dumb. |
| 2. | Idea / Solution description | The goal of communication is to convey information—and the understanding of that information—from one person or group to another person or group. This communication process is divided into three basic components: A sender transmits a message through a channel to the receiver. (Figure shows a more |

| 3. | Novelty / Uniqueness | elaborate model.) The sender first develops an idea, which is composed into a message and then transmitted to the other party, who interprets the message and receives meaning. Information theorists have added somewhat more complicated language. Developing a message is known as encoding. Interpreting the message is referred to as decoding. By use of sensors specially abled person will communicate |
|----|---------------------------------------|---|
| 4. | Social Impact / Customer Satisfaction | Specially abled persons will able to communicate effectively. There will be equality |
| 5. | Business Model (Revenue Model) | Communication plays a significant role in the day-to-day life of humans. Similarly, the role of communication is crucial in the business world. If you want to survive in the business world, it is essential to communicate properly. The primary purpose of communication is to deliver a piece of information from one party to another in its original form. Communication is considered successful only if the other party receives the meaning as intended by the sender. With time, organizations have learned the importance of communication because communication doesn't only take place within the organization but also outside the organization with the customers and stakeholders. Therefore, the need to have a communication model that fulfils all requirements of the organization become essential. A communication model's role is to simplify the complex process of communication and determine where and with whom the communication takes place. |
| 6. | Scalability of the Solution | In today's fast-paced and agile business world, technology must not only be capable of keeping up with rapid changes in the communication arena, but scalable and capable of shaping it too. As your business grows and changes, you need communication technologies that are adaptable and innovative. Technologies that merge the best of the past and present to pave the way for communication of the future. |