**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 10 October 2022 |
| Team ID | PNT2022TMID44952 |
| Project Name | Project – Real time communication system powered by AI for specially abled |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | 1. how to easily communicate understand sign language for dump and deaf people 2. What is the learn hand gestures 3. Why read facial expression and lip movement for necessary in deaf and dump people 4. Have a new technology for dump and deaf people 5. Why interpret their hand gestures to other from make a hand held device |
|  | Idea / Solution description | 1. sign language INGLT HTK super vector 2. Sign language each country has one or sometimes more sign language 3. Hand gestures system used help with deaf and dump people and input is mapped to determined 4. Memories the finger spelling hand sign and LCD display system 5. Use knowledge of subject feature extraction and key point making |
|  | Novelty / Uniqueness | FLEX SENSOR:  **Flex sensors are attached to the gloves .These flex sensors contains the continues flow of current voltages .These sensors when bend creates a drop in voltage which in turn is recorded in microcontroller .**  **ACCELEROMETER SENSOR:**  **Accelerometer sensor measure the dynamic accelaration .When we attach aaccelerometer then we get a access which can be used for every finger direction .** |
|  | Social Impact / Customer Satisfaction | **Accelerometer** is a device that measures acceleration across three axes (x, y, z) to determine orientation i.e. hand gestures shown in Fig1 (b). The output of the accelerometer is obtained in terms of angle i.e. orientation in x, y, z directions obtained in the form of analog readings.  By the particular gesture of the flex sensor the message will display that we have saved in the Android Application database will display on LCD as well as the Android Phone and sound signal will also produce. **effective communication between the deaf/dumb & traditional individuals**. |
|  | Business Model (Revenue Model) | IMG_256 |
|  | Scalability of the Solution | Smart Gloves is proposed to bridge the barrier of communication between disabled person and normal person. Sign language is the only medium for deaf and dumb persons to share their feeling or thoughts with other but their communication is restricted to other disabled person as normal cannot understand what they wants to say.  Hand gesture recognition is a challenging problem in designing real life applications for deaf mute community. In this paper, we have presented an efficient method to recognize hand gestures captured with Kinect V1.. |