Project Design Phase I

Proposed Solution Template

Date	05 October 2022
Team ID	PNT2022TMID05416
Project Name	Real-Time Communication System Powered by AI for Specially Abled

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	• Everyone is not convenient with language used in the application . • Some people cannot understand English we can convert into their convenient language . • They are facing difficulties in understanding the language used in the system.
2.	Idea / Solution description	• Even sign language can also be translated to text message in our application using CNN. • Text to sign language convertor uses Stanford Parser text processing and JA Signing for the signing avatar. • Can change the language using google language translator tool so that people can use the application based on their specialized language. • Producing a model which can recognize Finger-spelling based hand gestures in order to form a complete word by combining each gesture. • By using this application both specially abled and normal people can translate their messages to others easily.
3.	Novelty/ Uniqueness	• This model using SSD ML algorithm recognizing the signs as words instead of old traditional translators, that are very

		slow and take too much since every alphabet as to be recognized to form the whole statement in old methods. • Normal text can also be translated into sign language
4.	Social Impact / Customer Satisfaction	• The deaf and dum people can easily translate their sign language into a human hearing voice • The normal people can also easily translate their voice into a sign language using this application
5.	Business Model (Revenue Model)	• We can generate revenue by offering subscription- For unlimited usage and Ad free. • Users who have got subscription can change the language accordingly
6.	Scalability of the Solution	• The model which is TensorFlow model that has been used can be replaced with another model as well. • The same system can be implemented for different sign languages by substituting the dataset.