**PROJECTDESIGNPHASE2**

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| Date | 15October2022 |
| TeamID | PNT2022TMID51451 |
| ProjectName | real-time communication system powered by ai for specially abled |
| MaximumMarks | 2 Marks |

**FunctionalRequirement**

* **System**ispresentedasblackbox
* **Hearingimpaired**isthepersonthatperformsthesigns
* **Normalhearing**isthepassiveuserofthesystemThe

SystemRequirementsCanBeSpecified

1. Hearingimpairedpersonshouldbeabletoperformsignthatrepresentdigitnumber
2. Hearingimpairedpersonshouldbeabletoperformsignthatrepresentalphabetletter29
3. Hearingimpairedpersonshouldbeabletoperformsignthatrepresentword
4. Hearingimpairedpersonshouldbeabletoperformsignthatrepresentsentence
5. Hearingimpairedpersonshouldbeabletoseethetranslationofsigntotext
6. Hearingimpairedpersonshouldbeabletochangethecomponent(number/alphabetorword/se ntence)forwhichtranslationto speechisprovided

# NORMALFLOW

* Usercomesinfrontofcameraandperformsthealphabetletter
* Systemanalyzestheperformedsign
* Systemshowsthesignmeaningastextandspeech

# ALTERNATIVEFLOWS

 **SystemindicatesthatuserisnotwithinfieldofviewofKinect**

1. Systemshowsthatuserisnotdetected
2. Userentersthefieldofview
3. Systemshowsthatuserisdetected

 **Signnotrecognized**

1. Systemdoesnotreacttoindicatethatsignwasnotrecognized
2. Userperformsagainthealphabetletteruntilitisrecognized  **Enablingspeechforthiscomponent**:

1.Enablespeechcomponent