

Project Design Phase-I - Solution Fit Template

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Team ID	PNT2022TMID23501
Project Name	Real time communication powered by AI for specially abled
Maximum Marks	4 Marks

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Define CS, fit into CC	<p>1. CUSTOMER SEGMENT(S) CS</p> <ul style="list-style-type: none"> -The Deaf and dumb person who can't able to communicate with the normal people. -Normal persons who can't understand the sign language of the deaf and dumb persons.. 	<p>6. CUSTOMER CONSTRAINTS CC</p> <ul style="list-style-type: none"> -Have a cell phone. -Have an sign translation app -Normal people have an headset to hear the translated signs as voice. 	<p>5. AVAILABLE SOLUTIONS AS</p> <ul style="list-style-type: none"> -Sign detection and translation is there.But if the normal person don't know the sign language it is difficult to communicate with deaf and dumb. -Sometimes the translation should be fault. -It doesn't convert to the users preferred language. 	Explore AS, differentiate
Focus on J&P, tap into BE, understand RC	<p>2. JOBS-TO-BE-DONE / PROBLEMS J&P</p> <ul style="list-style-type: none"> -Deaf and dumb persons are highly introverted not able to communicate freely. -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 -Creating an app which enables deaf and dumb people to convey their information using signs which get converted to human-understandable language and speech is given as output. 	<p>9. PROBLEM ROOT CAUSE RC</p> <ul style="list-style-type: none"> -Dumb people use hand signs to communicate, hence normal people face problem in recognizing their language by signs made. Hence there is a need of the systems which recognizes the different signs and conveys the information to the normal people. 	<p>7. BEHAVIOUR BE</p> <ul style="list-style-type: none"> -People uses a different apps for sign translation , but there is no faultless translation.So our proposed solution will be translated into their preferred language and faultless. -They will get a solution for their disability. -They can communicate freely between the deaf and dumb persons and the normal persons. 	Focus on J&P, tap into BE, understand RC
Identify strong TR & EM	<p>3. TRIGGERS TR</p> <ul style="list-style-type: none"> - Few friends who can understand them with this proposed system. -Deaf and dumb people Unable to express their feelings by words.so this sign language will be recognised and translated correctly. <p>4. EMOTIONS: BEFORE / AFTER EM</p> <p>Before:They considered themselves mentally and educationally deficient even if they are talented.</p> <p>After: Communicate freely with this solution.</p> <p>-The app should be user-friendly even an illiterate person can use it.</p>	<p>10. YOUR SOLUTION SL</p> <ul style="list-style-type: none"> -Developing 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. -Our proposed system includes a number of technologies like voice to text conversion speech to text conversion. Being a completely software based application, the app uses Google- speech API to achieve that result. 	<p>8.CHANNELS OF BEHAVIOUR CH</p> <p>8.1 ONLINE</p> <ul style="list-style-type: none"> -After Sign recognition , Voice translation should be provided in user preferred language. -Images taken and processed by web camera will avoid the background disturbance and objects. <p>8.2 OFFLINE</p> <ul style="list-style-type: none"> -The Deaf and dumb person can able to understand the normal person speech through the system.They can communicate freely. 	Identify strong TR & EM