Project Design Phase – I
Problem –Solution Fit

Date	30 September 2022
Team ID	PNT2022TMID29664
Project Name	Real-Time Communication System Powered by AI for Specially Abled
Maximum Marks	2 Marks

1.CUSTOMER SEGMENT

Who is your customer?

- ✓ Deaf people who eager to learn.
- ✓ Dumb (Mute) people who wants to expression their thought.
- ✓ Parents of deaf-mute kids.
- ✓ Children of disabled parents.

6.CUSTOMER CONDTRAINTS

What constrains prevent your customers from taking action or limit their choices of solution?

- ✓ Network issues may delay to access the feature
- ✓ Improper sign language will lead the people to misunderstood.

5.AVAILABLE SOLUTIONS

Which solution are available to the customer when they face the problem or need to get the job done? What pro & cons do these solution have?

- ✓ Sign to alphabet conversation
- ✓ Word conversation in multilanguage.
- ✓ Train common word and phrases

Pros:
- ✓ Convert the sign into voice with emotion

Cons:
- ✓ During sign to text conversation there may be an error.
- ✓ There may be chance of misunderstanding word in voice to text conversation.

2. JOBS-TO-BE DONE/PROBLEMS

Which jobs-to-be-done do you address for your customers?

- ✓ No need of the translator for communication between deaf-mute people and normal people.
- ✓ Reduce the time to express their thoughts.
- ✓ Reduce cost used for translator.

9. PROBLEM ROOT CAUSE

What is the real reason that this problem exists? What is back story behind the need to do this job?

- ✓ Deaf-mute is a birth disorder.
- ✓ Sometimes it occurs due to aging factor and accidents.
- ✓ Normal people are not so patient to understand deaf-mute people thoughts.

7. BEHAVIOUR

What does your customer do to address the problem and get the job done?

- ✓ Taking the hand gesture image with good quality and uploading it for conversion.
- ✓ Make use of text to voice conversion option while communicating with others.

3. TRIGGERS

What triggers customers to act?

- Customer doesn't need human translator to communicate with normal people.

- Instant result for the conversion of sign language to human understandable language.

- Interactive sessions.

4. EMOTIONS: BEFORE/AFTER

How do customers feel when they face a problem or a job before and afterwards?

BEFORE:
- Feeling **MORE DEPRESSED** when unable express thoughts and feelings.
- Feeling **FRUSTRATED** and **REGRETFUL** while unable to recognize people speech
- Parents feeling **DOWNHEARTED** when can't teach their disable kids.

AFTER:
- Customers can feel **INDEPENDENT** and **CONFIDENT.**
- **UNPRESSURIZED** as
- they can share their thoughts.
- Parents, relatives and friends of disable people are **HAPPY**

10. YOUR SOLUTION

If you are working on an existing business write down your current solution first fill in the canvas and check how much it fits reality

- Accurate conversion will be available
- Interactive and user-friendly solution to make it accessible
- Elimination of human error and fast functionality
- Provide common signs, including those for letters, numbers, and everyday words and phrases.

8. CHANNEL OF BEHAVIOR

8.1 ONLINE

What kind of actions do customers take online?

- Accessing required conversions using application.

- Uploading the image of hand sign.

- Quick access of Al based algorithm.

8.2 OFFLINE

What kind of actions do customers take offline?

- Taking the hand sign picture properly without any blur.

- Parents make kids to practice in this application.

- Children of elderly disabled people helps to teach their parents.