Ideation Phase
Empathize & Discover

Date	2nd November 2023
Team ID	Team - 591979
Project Name	ASL - Alphabet Image Recognition
Maximum Marks	4 Marks
Team members	Pujyam Sathvika, Rishika Krishna Ch

Empathy Map Canvas:

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviors and attitudes. It is a useful tool to help us better understand our users. Creating an effective solution requires understanding the true problem and the person who is experiencing it.

The users of our project would be deaf individuals who use ASL(American Sign Language) to communicate with others. We tried to put ourselves into various situations the deaf might experience and have completed the following empathy canvas map.

ASL- Alphabet Image Recognition

ASL(American Sign Language) Alphabet Image Recognition, is an image classification task that aims to recognize the ASL alphabet from images of hand signs. This project involves training a machine learning model to classify images of hand signs corresponding to the 26 letters of the English alphabet, as well as three additional classes for the signs for "space", "delete", and "nothing".

TEAM MEMBERS
Pujyam Sathvika
Ch Rishika Krishna

WHO are we empathizing with?
Who is the person we want to understand?
What is the situation they are in?
What is their role in the situation?

GOAL

What do they need to DO?
What do they need to do differently?
What job(s) do they want or need to get done?
What decision(s) do they need to make?
How will we know they were successful?

COMMUNICATION BARRIERS
Having difficulty in communicating with others

Deaf people who use American Sign language to primarily communicate with others

Trying to find effective means of communication using ASL

To follow the standardized ASL to communicate better

IMPROVED COMMUNICATION
If his/her family and friends understand their emotions

Ability to get their basic daily activities done without any hustle.

Challenges in understanding the general language people speak

What do they HEAR?
What are they hearing others say?
What are they hearing from friends?
What are they hearing from colleagues?
What are they hearing second-hand?

What do they THINK and FEEL?

PAINS
What are their fears, frustrations, and anxieties?

GAINS
What are their wants, needs, hopes, and dreams?

Get rid of communication barrier completely

Challenges in receiving effective customer service as some staff may not be trained in deaf culture/ communication methods

Support and words of encouragement during challenging times

Fear of being marked as an outcast due to their physical disability

Anxiety of being bullied or not being able to complete their daily activities

To achieve their goals(education/ employment) despite their physical disability

What do they SEE?
What do they see in the marketplace?
What do they see in their immediate environment?
What do they see others saying and doing?
What are they watching and reading?

Verbal abuse since they cannot hear because of their disability

Frustration of not being able to communicate well with others

Gaining a strong connection in deaf culture can enhance their identity in a community

Listen to experts in deaf community to advance in their career

What other thoughts and feelings might influence their behavior?

What do they SAY?
What have we heard them say?
What can we imagine them saying?

A supportive community can positively influence them into not giving up

Their preference for certain communication methods like ASL/ technology can strongly influence their behaviour

Express their needs for better devices to help them communicate

They imagine a supportive deaf community for mutual understanding

Bullies can impact their emotions and behavior a lot

What do they DO?
What do they do today?
What behavior have we observed?
What can we imagine them doing?

Educate themselves to understand such sign languages/ related technologies

Trying to understand normal people

participating in deaf community , sharing experiences with a sense of community/ belonging.