

Project Initialization and Planning Phase

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| Date | 19 June 2025 |
| Team ID | SWTID1750316859 |
| Project Name | ASL- Alphabet image Recognition |
| Maximum Marks | 3 Marks |

Define Problem Statements :

ASL-Alphabet Image Recognition aims to develop a robust system capable of recognizing and interpreting American Sign Language (ASL) alphabet signs from static images. The primary goal is to bridge the communication gap between the deaf and hard-of-hearing community and individuals who are unfamiliar with sign language. This system can significantly improve accessibility in various domains including education, professional settings, and everyday social interactions.

| Problem Statement (PS) | I am (Customer) | I'm trying to | But | Because | Which makes me feel |
|------------------------|---|------------------------------------|--|---------------------------------------|----------------------------|
| PS-1 | a student who wants to learn sign language | learn the ASL alphabet efficiently | I struggle with memorizing hand signs | there aren't enough interactive tools | frustrated and unmotivated |
| PS-2 | a person trying to communicate with a deaf friend | understand what they are signing | I don't know ASL and can't interpret hand gestures | I never learned sign language | helpless and disconnected |