

Project Design Phase-I
Proposed Solution Template

Date	8th November 2023
Team ID	Team-591588
Project Name	ASL- Alphabet Image Recognition
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To develop an interactive Flask Application that works to recognise ASL Images using a model trained with images from the dataset. This application helps to bridge the communication gap with regards to the American Sign Language.
2.	Idea / Solution description	The solution involves development of a model that is trained with the provided dataset and is able to classify the images across 29 classes belonging to the ASL. This model shall be further implemented into a Flask App, that will provide the users with an option to either input an image or use live webcam to recognise the ASL Signs.

3.	Novelty / Uniqueness	The model is being trained using deep learning methods like VGG-16 and the most accurate one is chosen, helping to improve the accuracy. The application provides ease of use and convenience to the users by virtue of the two input methods.
4.	Social Impact / Customer Satisfaction	The solution provides a reliable means for interpreting the ASL helping the deaf and mute communities to bridge the communication gap between themselves and the people who are not familiar with ASL.
5.	Business Model (Revenue Model)	This solution can be licensed and integrated with other organizations that provide communication services. Can be partnered with other businesses which are in need of our solution.
6.	Scalability of the Solution	This solution can be easily integrated into multiple platforms making it scalable. The model can be further trained using other datasets and models as per requirement. Further cloud services can also be used to facilitate scalability as per demand.