

Project Design Phase-I
Proposed Solution

Date	21 October 2023
Team ID	Team-592650
Project Name	AI Body Language Detector Using Mediapipe
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	Non-verbal cues, such as body language, play a vital role in conveying emotions, intentions, and attitudes. The ability to accurately detect and interpret body language can provide numerous benefits across a wide range of domains.
2.	Idea / Solution description	The proposed project aims to develop an AI-based Body Language Detector using the Mediapipe framework. The solution will leverage machine learning algorithms, including Logistic Regression and Ridge Classifier, to accurately classify body language
3.	Novelty / Uniqueness	The AI Body Language Detector project stands out technologically due to its utilisation of Convolutional Neural Networks (CNNs) in conjunction with the Mediapipe framework. This combination provides a powerful tool for real-time body language analysis, enabling immediate feedback in dynamic scenarios. Additionally, its customisation and adaptability for specific industries and user needs make it a versatile and user-centric solution, setting it apart in the field of body language analysis.
4.	Social Impact / Customer Satisfaction	The AI Body Language Detector offers the potential for substantial social impact by improving communication understanding, mental health support, user experiences, and security through real-time emotion and intent analysis. It also enhances customer satisfaction by providing personalised interactions in customer service, sales, and negotiations while promoting inclusivity for individuals with diverse communication needs, ultimately contributing to more empathetic and harmonious communities.

5.	Business Model (Revenue Model)	The business model for the AI Body Language Detector project encompasses both a subscription-based Software as a Service (SaaS) model and data licensing/API access. Under the SaaS model, customers, including businesses and professionals, pay recurring fees for access to the AI system. Simultaneously, data and API licensing is available for developers and organizations seeking to leverage the AI model and the Mediapipe framework in their applications, further diversifying revenue streams.
6.	Scalability of the Solution	The project exhibits robust scalability potential, underpinned by data-driven enhancements, cloud infrastructure, parallel processing, and optimised algorithms. The ability to adapt and accommodate increased demand is further bolstered through customised solutions, API and data licensing, and hardware integration. Additionally, global accessibility fosters international partnerships, enabling the project to scale effectively to meet evolving needs and diversify its applications across a variety of sectors and regions.