

Project Design Phase-I
Proposed Solution

Date	15 November 2023
Team ID	Team-592536
Project Name	AI Body Language Detector Using Mediapipe
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Current body detection technologies often lack the nuanced understanding required for emotion detection, particularly in real-world scenarios. Identifying emotions such as anger, fear, or happiness is a complex task that existing systems struggle to perform accurately. This limitation hinders the potential applications of body detection technology in various fields, including mental health, customer service, and security.
2.	Idea / Solution description	Our proposed solution involves leveraging the capabilities of the Mediapipe framework to enhance body detection with emotion recognition. By integrating advanced machine learning models for emotion detection, we aim to provide a comprehensive system that not only identifies human bodies but also discerns emotional states. This integration of emotion recognition into body detection technology will open up new possibilities for applications in mental health monitoring, customer experience optimization, and improved security measures.
3.	Novelty / Uniqueness	What sets our solution apart is the integration of Mediapipe, a powerful and versatile framework, into the body detection process. By using this framework for accurate pose estimation and combining it with emotion recognition models, our system offers a novel approach to understanding and responding to human emotions in real time. This unique combination sets our solution apart in the field of body detection.

4.	Social Impact / Customer Satisfaction	Implementing emotion recognition within body detection has the potential for significant social impact. In mental health monitoring, our system can contribute to early intervention by identifying signs of distress or emotional instability. In customer service applications, businesses can enhance customer satisfaction by adapting their interactions based on customer emotions. Moreover, in security contexts, the system can contribute to identifying potential threats by recognizing suspicious behaviour associated with specific emotions.
5.	Business Model (Revenue Model)	Our business model involves offering emotion enhanced body detection as a service to industries such as mental health, customer service, and security. Revenue will be generated through subscription-based models, licensing fees, and customized solutions tailored to specific industry needs. Collaborations with mental health institutions, customer service providers, and security agencies will be essential for market penetration and revenue growth.
6.	Scalability of the Solution	Designed for scalability, our solution can adapt to various industries and scenarios. Leveraging cloud-based infrastructure and efficient emotion recognition models, our system can process data in real-time, making it suitable for deployment in diverse environments. This scalability ensures that our technology can be seamlessly integrated into existing workflows, expanding its reach across different sectors and applications.