

Project Initialization and Planning Phase

Date	20 Sep 2024
Team ID	739648
Project Name	GuardianEye:YOLO-Based Smart Helmet Detection System For Enhanced Safety In Real-Time
Maximum Marks	3 Marks

Define Problem Statements (Customer Problem Statement Template):

The YOLOv5-Based Smart Helmet Detection System is designed to enhance safety by detecting helmet usage in real-time with high accuracy and speed. Leveraging the YOLOv5 deep learning model, the system identifies individuals without helmets among workers or motorcyclists, ensuring compliance with safety regulations. This real-time solution reduces the risk of accidents and promotes a safer working or commuting environment.

Example:

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A safety-conscious individual or organization (e.g., factory manager, traffic authority).	Detect helmet usage in real-time for workers or motorcyclists using YOLO-based systems.	Current detection systems are not real-time, lack accuracy, or are resource-intensive.	Ensuring safety compliance is critical to reduce accidents and save lives.	Concerned, as lack of compliance could lead to injuries, fines, or fatalities.