Ideation Phase
Literature Survey

Date	19 September 2022
Team ID	PNT2022TMID35906
Project Name	Signs with Smart Connectivity for Better Road Safety
Maximum Marks	4 Marks

S.No.	Title of the Paper	Author	Objective	Limitation
1	Advances in smart roads for future smart cities (2020)	Chai K. Toh, Julio A. Sanguesa, Juan C. Cano and Francisco J. Martinez	Idea discussion on energy-harvesting road, musical road, automatic-weighing road, electrified road, roads with wireless digital traffic signs, roads with automatic traffic violation detection and notification, roads that talk (V2X), roads with smart intersections, roads with fast emergency rescue, and roads with smart street lights	This paper discusses about the existing ideas
2	Smart Traffic Management System (2019)	Abubakar M. Miyim, Mansur A. Muhammed	The system follows a client-server communication structure to connect vehicles to the intersection control station. Each vehicle is treated as a job that needs to be scheduled through the intersection.	At a time, single traffic light is used for the analysis. More than one traffic light synchronization was not performed so it did not cover the whole region.
3	An Intelligent Real Time Road Sign System (2019)	Adnan Shaout, Ali Hassani	Intelligent road sign that provides real time travel time and road conditions.	Addition of the external interrupts fully demonstrates that a real time intelligent road sign can certainly be made.
4	Automatic road traffic signs detection and recognition using 'You Only Look Once' version 4 (YOLOv4) (2021)	W. H. D. Fernando, S. Sotheeswaran	The data set was labelled using image annotation tool and it was uploaded to google drive. YOLOv4 detector was trained on Google collaborators. The model was trained for 10000 epochs and achieved an average accuracy of 84.7%.	The existence of a large background, clutter, fluctuating degrees of illumination, varying sizes of traffic signs, and changing weather conditions, Traffic sign detection and recognition (TSDR) is an important but difficult process in intelligent transport systems