

# Project Design Phase-I

## Solution Architecture

Date	05 May 2023
Team ID	NM2023TMID21776
Project Name	AI-Enabled Car Parking Using OpenCV
Maximum Marks	4 Marks

### Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions.

Its goals are to:

- To establish an efficient Car Parking using the OpenCV system with the necessary architecture.
- That architecture includes video input, OpenCV Algorithm, Image Processing, AI Data Processing, and data from parking Areas.
- In this architecture solution algorithm, OpenCV is used to detect and recognize vehicles and license plates, while the cloud-based parking management system uses AI algorithms
- To provide real-time information on parking availability and guide drivers to available parking spaces.

### Example - Solution Architecture Diagram

