

Project Design Phase-I Solution Architecture

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Team ID	NM2023TMID19411
Project Name	Project – AI Enable car parking using CV

Solution Architecture:

Solution architecture is a complex process – with sub many process - that bridges the gap between car parking traffic problems in urban areas and technological solutions. Its goals are to:

- Find the best tech solution to solve existing traffic problems.
- Use OpenCV to check if the pixel colour of a spot aligns with the colour of an empty parking spot. This is a simple approach but prone to errors.
- Use object detection to identify all cars and then check if the location of the car overlaps with a parking spot.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, car driver to park their car with minimum wastage of time with accurate information of the availability of the space to work.

Example - Solution Architecture Diagram:

