

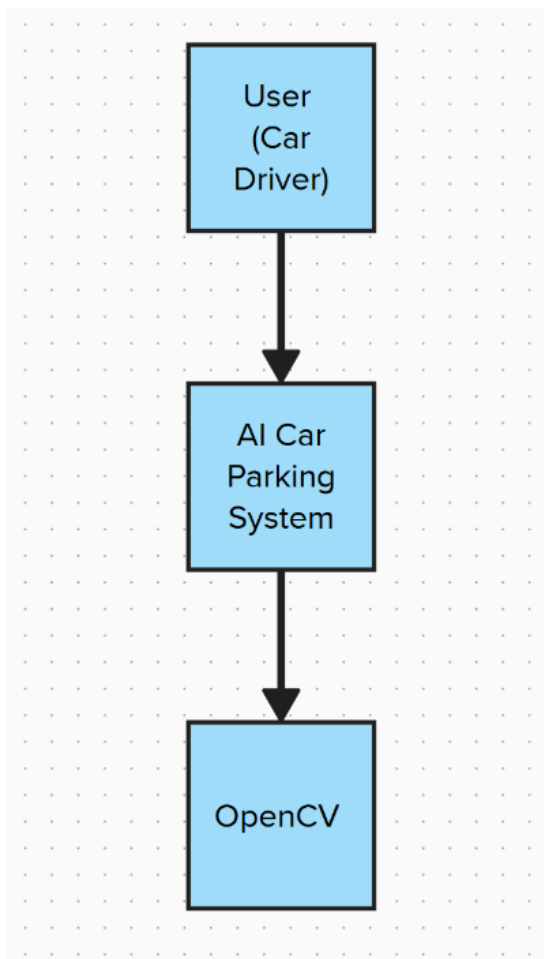
Phase-3

Project Design Phase

Data Flow Diagram & User Stories

Date	3/11/2023
Team Id	592031
Project Name	Ai Enable car parking using Open cv
Maximum Marks	4

Level 0 DFD:



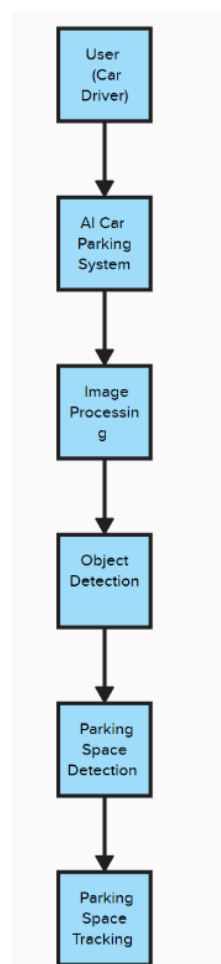
In this DFD:

The "User (Car Driver)" interacts with the "AI Car Parking System" to park their car.

The "AI Car Parking System" uses OpenCV for various computer vision tasks, such as object detection, image processing, and tracking.

OpenCV processes the camera feed data, identifies available parking spaces, and manages the parking process.

Level 1 DFD: Now, let's break down the "AI Car Parking System" further to illustrate the internal data flow:



In this Level 1 DFD:

- 1)The "AI Car Parking System" contains various subprocesses, such as "Image Processing," "Object Detection," "Parking Space Detection," and "Parking Space Tracking."
- 2)"Image Processing" involves preprocessing the camera feed data to enhance it for better analysis.
- 3)"Object Detection" identifies vehicles and objects in the camera feed.
- 4)"Parking Space Detection" identifies available parking spaces.
- 5)"Parking Space Tracking" tracks the movement of vehicles within the parking area