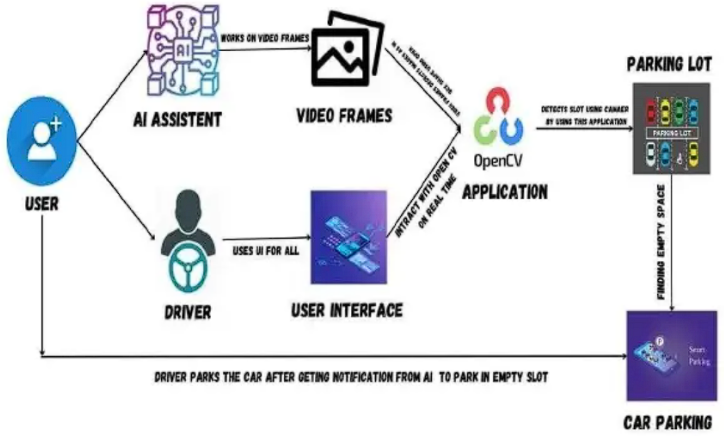
Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	26 October 2023
Team ID	Team-592328
Project Name	AI Enable Car Parking Using Opencv
Maximum Marks	4 Marks

Technical Architecture:



Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application eg web app	HTML,BootStrap
2.	Application Logic-1	Framework used for design the software	Python , python-flask
3.	Application Logic-2	Access the software in the car by the driver to detect spot	Python, Open CV
4.	Application Logic-3	Open cv is an open source platform for providing real time computer vision technology	Open CV
5.	Machine Learning Model	Uses test and trained data images and video to learn the environment	DNN (Deep Neural Network) model
6.	Infrastructure (server / cloud)	Application Development on Local system / cloud	Python-Flask

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	OpenCV, Flask	Technology of Opensource framework
2.	Scalable Architecture	Application Servers	Flask
3.	Availability	Local Website	Flask
4.	Performance	Real Time analysis with high accuracy	Open cv

References:

https://easychair.org/publications/preprint_open/hVnT

https://c4model.com/

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d