

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

Date	30th October 2023
Team ID	Team - 592813
Project Name	Project - AI Enabled Car Parking System using OpenCV
Maximum Marks	4 Marks

Technical Architecture:

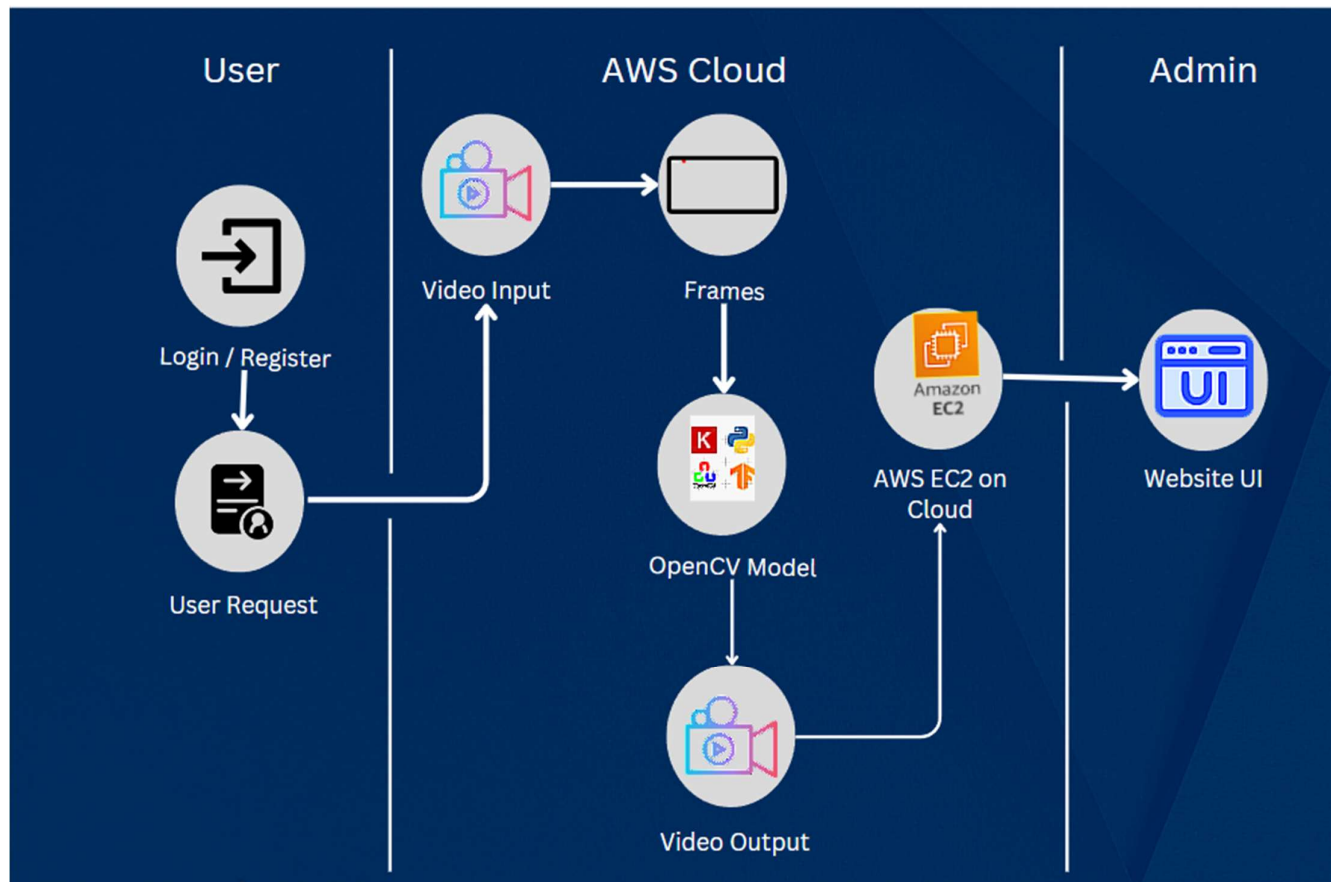


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, React JS, Bootstrap
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	OpenCV
5.	Cloud Database	Database Service on Cloud	AWS S3
6.	External API-1	Purpose of External API used in the application	Google Maps API
7.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Local / AWS

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Flask, Bootstrap, React
2.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Amazon Simple Queue Service (SQS)
3.	Availability	Justify the availability of application (e.g., use ofload balancers, distributed servers etc.)	Amazon Elastic Load Balancer (ELB)
4.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Application Performance Monitoring (APM)