Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	13 May 2022
Team ID	NM2023TMID21776
Project Name	AI enabled car parking using open cv

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Payment and Billing	Parking operator must be able to Issue bills to users on checkout.
FR-2	Space Management	User must be able to find a parking area from the list of areas, registered by parking admins.
FR-3	Time Management	User must be able to view the details of a selected parking area such as the name, worth per minute, number of total available lots.
FR-4	User Interface	Car parking system should be user-friendly and intuitive, allowing customers to easily locate available parking spaces
FR-5	Security and Surveillance	View the data of all registered parking areas.
FR-6	Maintenance	Backend management system can Accept reservation of parking lots based on availability.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-2	**Usability**	The system should be user friendly and intuitive, allowing users to easily access and use the system.
NFR-2	**Security**	The system should ensure the security and privacy of the data collected, processed and stored.
NFR-3	**Reliability**	The car parking system should be reliable, with minimal downtime or errors. The system should be designed to handle high volumes of traffic without any performance issues.
NFR-4	**Performance**	The system should perform well under various conditions, including different lighting conditions, weather conditions, and traffic volumes.
NFR-5	**Availability**	The car parking system should be scalable, with the ability to handle an increasing number of users and vehicles. The system should be designed to accommodate future growth without any significant changes to its architecture
NFR-6	**Scalability**	The system should be scalable to handle multiple parking lots of varying sizes and complexities.