Car Parking Management System

By

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**Identify the business Application and Database**

The Company has 5 plots near major industry offices and they have decided to convert these plots into parking space for the employees. The purpose of this project is to create a Car Parking Management System. This system will help in keeping track of all the occupied and vacant slots of parking plots. The software is being developed from admin perspective. The admin will add the information about the cars being parked and manage the ticketing of these car parking lots. The web application will be developed using Spring Boot and the database will be managed using NoSQL.

The UI will allow the admin to add new car information into the system. The system will calculate the ticking fee based on no of hours the car was parked for. The system will show a daily report of incoming/outgoing cars. The tables identified for the system as of now are as follows:

1. Parking Lot -- LotId, Size, Price
2. Car -- CarId, OwnerId, LotId, CarSize, EntryDate/Time, ExitDate/Time
3. Owner -- OwnerId, FirstName, LastName, ContactNum
4. Admin -- Username, Password

**Identifying potential stakeholders**

The potential stakeholders for this system are as follows:

1. State Department of Transportation: This system will help them in managing and improving the transportation networks.
2. City or County Transportation or Public: Improves coordinate with local transportation planning efforts including transit development
3. Privately Owned/Parking Vendors: Provide the information and linkages required to

develop large-scale public and private facility networks

1. City Police Departments: The system will help reduction in uniformed police services to enforce illegal parking and/or control intersections in close proximity to major attractions

**Business Scenario**

Following are the points that are taken into consideration:

* The company want to have a managing system that is paperless, easy to manage, and wants to have information of all the parking lots in one system.
* The system should monitor the parking area and get information about the parking tickets and create daily reports.
* Technology can help make the log reporting and tracking simpler, more efficient, and less cumbersome for staff.
* The information is available in real-time, so everyone has what they need when they need it.
* The records and logs easily cross-referenced so they can be easily accessed by the management.