**Software Requirement Specification (SRS)**

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**Submitted to:**

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**Website Name: -** Mall car locator

* **Description of website**: -
  + - Mall Car Locator is a premier parking management solution offering real-time vehicle tracking and smart navigation services for shopping complexes. The system provides an integrated platform for parking space mapping, automated spot logging, and guided retrieval of parked vehicles, transforming chaotic parking lots into streamlined, user-friendly spaces.

# User’s characteristics: -

* + **Shopper (Primary User):**
  + -Registers/logs in via the website or mobile app to save parking details.
  + -Marks and retrieves their vehicle’s location using QR codes, zone mapping, or manual entry.

# Mall Staff (Operator): -

* Monitors real-time parking occupancy and zone status
* Updates parking layouts (e.g., blocked areas, reserved spots).
* Assists users with lost vehicles or system issues.

# Administrator: -

# Manage user accounts, permissions, and system configurations.

# Generates reports on parking usage patterns and peak hours.

**Database ERD**

**A diagram of a company

AI-generated content may be incorrect.**

**A diagram of a company

AI-generated content may be incorrect.Use Case Diagram**

**Functional requirements: -**

**Parking Operations: -**

|  |  |
| --- | --- |
| Name | Save Parking Location |
| ID | 133 |
| Goal | Record vehicle parking spot |
| Triggers | User parks and scans QR code |
| Input | QR code/ Zone + Spot selection |
| Output | Parking session started with timestamp |

|  |  |
| --- | --- |
| Name | Retrieve Parking Location |
| ID | 134 |
| Goal | Guide user to their vehicle |
| Triggers | User clicks "Find My Car" |
| Input | Session ID/QR code |
| Output | Display map with route to vehicle |

Admin/ Staff functions: -

|  |  |
| --- | --- |
| Name | Monitor Parking Occupancy |
| ID | 135 |
| Goal | Show real-time spot availability |
| Triggers | Staff accesses dashboard |
| Input | Zone filter (optional) |
| Output | Color-coded parking map |

|  |  |
| --- | --- |
| Name | Database Backup |
| ID | 137 |
| Goal | Secure system data |
| Triggers | Automated daily at 2 AM |
| Input | None |
| Output | Compressed backup file in cloud storage |

**Website’s main pages**

Home Page

* Landing Page when a user visits the website.

Parking Map Page

* Location based page which track user car.

Profile Page

* Profile Page is where a user or a vendor can update his information on the website (e.g. Name, address, etc.)

Category Page

* Category Page is a page that displays all the products that match the category chosen by the user.