**REQUIREMENT STUDY**

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**Requirement collection documents**

**Functional Requirements:**

Requirement-1: Vehicle Entry and Exit Management

Requirement-2: Parking Space Allocation

Requirement-3: Reservation System

Requirement-4: Real-Time Availability Tracking

Requirement-5: Multi-Level Facility Support

Requirement-6: Payment and Billing

Requirement-7: Report Generation

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| **Requirement ID** | **Requirement Description** | **Source** | |  | | --- | |  |  |  | | --- | | **Require. Type** | | **Test Case ID** | **Test case description** | **status** | **comment** |
| REQ-001 | The system will record vehicle entry and exit times, and issue tickets for vehicles based on time parked. | SRS Document | Functional | TC-001 | Verify that vehicle entry, exit times, and tickets are managed correctly. | Pending | Ensure accuracy in ticket issuance and time tracking. |
| REQ-002 | |  | | --- | | The allocation of parking spaces will be automatic based on vehicle size. |  |  | | --- | |  | | SRS Document | Functional | TC-002 | |  | | --- | |  |  |  | | --- | | Verify that parking spaces are allocated automatically based on vehicle size. | | |  | | --- | |  |  |  | | --- | | Pending | | |  | | --- | |  |  |  | | --- | | Ensure efficient space utilization. | |
| REQ-003 | Users will be able to book parking spaces through mobile and web interfaces in advance. Reserved spaces will be blocked until used or canceled. | SRS Document | Functional | TC-003 | Verify that reservations are handled correctly and reserved spaces are blocked. | Pending | Ensure proper handling of reservations and cancellations. |
| REQ-004 | |  | | --- | |  |  |  | | --- | | The system will update users on parking space availability and display updates on signage, web, and mobile apps. | | SRS Document | Functional | TC-004 | |  | | --- | |  |  |  | | --- | | Verify real-time updates on parking space availability and accurate signage display. | | Pending | Ensure timely and accurate availability updates. |
| REQ-005 | TThe system will guide vehicles to appropriate levels, distributing the parking load evenly across all levels. | SRS Document | Functional | TC-005 | |  | | --- | | 5 |  |  | | --- | | Verify that vehicles are guided correctly and parking load is distributed evenly across levels. | | Pending | Test multi-level support for parking management |
| REQ-006 | |  | | --- | |  |  |  | | --- | | The system will accept multiple payment methods and issue invoices for parking fees. | | SRS Document | Functional | TC-006 | Verify that the system processes payments and issues invoices correctly. | Pending | Test different payment methods and invoice generation. |
| REQ-007 | |  | | --- | |  |  |  | | --- | | Admins will be able to generate reports on usage, revenue, and space utilization with export options in PDF or Excel formats. | | SRS Document | Functional | TC-007 | Verify that reports are generated accurately and can be exported in various formats. | Pending | Ensure report accuracy and proper export functionality. |