* Describe all system requirements in enough detail for designers to design a system satisfying the requirements and testers to verify that the system satisfies requirements.
* Organize these requirements in a way that works best for your project. See Appendix DAppendix D, Organizing the Requirements for different ways to organize these requirements.
* Describe every input into the system, every output from the system, and every function performed by the system in response to an input or in support of an output. (Specify what functions are to be performed on what data to produce what results at what location for whom.)
* Each requirement should be numbered (or uniquely identifiable) and prioritized.

See the sample requirements in Functional Requirements, and System Interface/Integration, as well as these example priority definitions:

**Priority Definitions**

The following definitions are intended as a guideline to prioritize requirements.

* Priority 1 – The requirement is a “must have” as outlined by policy/law
* Priority 2 – The requirement is needed for improved processing, and the fulfillment of the requirement will create immediate benefits
* Priority 3 – The requirement is a “nice to have” which may include new functionality

It may be helpful to phrase the requirement in terms of its priority, e.g., "The value of the employee status sent to DIS **must be** either A or I" or "It **would be nice** if the application warned the user that the expiration date was 3 business days away". Another approach would be to group requirements by priority category.

* A good requirement is:
* Correct
* Unambiguous (all statements have exactly one interpretation)
* Complete (where TBDs are absolutely necessary, document why the information is unknown, who is responsible for resolution, and the deadline)
* Consistent
* Ranked for importance and/or stability
* Verifiable (avoid soft descriptions like “works well”, “is user friendly”; use concrete terms and specify measurable quantities)
* Modifiable (evolve the Requirements Specification only via a formal change process, preserving a complete audit trail of changes)
* Does not specify any particular design
* Traceable (cross-reference with source documents and spawned documents).

## Functional Requirements

In the example below, the requirement numbering has a scheme - BR\_LR\_0## (BR for Business Requirement, LR for Labor Relations). For small projects simply BR-## would suffice. Keep in mind that if no prefix is used, the traceability matrix may be difficult to create (e.g., no differentiation between '02' as a business requirement vs. a test case)

The following table is an example format for requirements. Choose whatever format works best for your project.

For Example:

| **Req#** | **Requirement** | **Comments** | **Priority** | **Date Rvwd** | **SME Reviewed / Approved** |
| --- | --- | --- | --- | --- | --- |
| LMS\_BR\_01 | Allow users (clients, workers, managers, administrators) to register and create accounts with appropriate roles and access levels. | Business Process = “User Registration” | 1 | 12/05/22 | Jurgen Halili |
| LMS\_BR\_02 | Implement a secure login mechanism to authenticate users and control access to various system functionalities. | Business Process = “User Authentication” | 1 | 12/05/22 | Jurgen Halili |
| LMS\_BR\_03 | Provide functionality for clients to check the availability of rooms, view real-time prices, and make reservations. | Business Process = “Room Availability and Booking” | 1 | 12/05/22 | Jurgen Halili |
| LMS\_BR\_04 | Allow clients to request room service directly through the app, which notifies the workers responsible for the requested task. | Business Process = “Room Service” | 3 | 12/05/22 | Jurgen Halili |
| LMS\_BR\_05 | Enable clients to provide their thoughts and reviews on the hotel, workers, and managers. | Business Process = “Reviews and Feedback” | 2 | 12/05/22 | Jurgen Halili |
| LMS\_BR\_06 | Implement a notification system to alert workers about rooms requiring service/cleaning. | Business Process = “Worker Notifications” | 3 | 12/05/22 | Jurgen Halili |
| LMS\_BR\_07 | Provide managers with a dashboard to view room availability, prices, worker performance, and manage orders. | Business Process = “Manager Dashboard” | 1 | 12/05/22 | Jurgen Halili |
| LMS\_BR\_08 | Allow managers to create and assign orders/tasks to workers, specifying the room number and required tasks. | Business Process = “Order Management” | 2 | 12/05/22 | Jurgen Halili |
| LMS\_BR\_09 | Enable managers to update room prices and availability in real-time. | Business Process = “Price and Availability Management” | 2 | 12/05/22 | Jurgen Halili |
| LMS\_BR\_10 | Provide administrators with extensive control over the website and app, allowing them to update content, manage orders, and rearrange prices and accommodations. | Business Process = “Administrator Privileges” | 1 | 12/05/22 | Jurgen Halili |
| LMS\_BR\_11 | Allow guests to check-in and check-out smoothly, providing necessary details and generating invoices.  Reservation Management | Business Process = “Guest Check-in and Check-out” | 1 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_12 | Enable the hotel staff to manage and modify guest reservations, including room upgrades, date changes, and cancellations. | Business Process = “Reservation Management” | 1 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_13 | Provide a system for managing housekeeping tasks, such as assigning and tracking room cleaning schedules. | Business Process =” Housekeeping Management” | 1 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_14 | Maintain detailed guest profiles, including personal information, preferences, and past stay history for personalized service. | Business Process = “Guest Profile Management” | 1 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_15 | Generate accurate bills and invoices for guest services, including room charges, additional amenities, and taxes. | Business Process = “Billing and Invoicing” | 1 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_16 | Streamline front desk operations, including guest registration, key management, and handling guest inquiries. | Business Process = “Front Desk Operations” | 1 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_17 | Track and manage room maintenance tasks, ensuring timely repairs and maintenance to maintain guest satisfaction. | Business Process = “Room Maintenance” | 1 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_18 | Provide tools for managing events and conferences held at the hotel, including room booking, catering, and audio-visual requirements. | Business Process = Event and Conference Management” | 2 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_19 | Integrate with a loyalty program to track and reward guest loyalty, offering exclusive benefits and discounts. | Business Process = “Loyalty Program Integration” | 2 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_20 | Monitor and manage inventory levels of hotel supplies, including linens, toiletries, and other amenities, to ensure availability. | Business Process = “Inventory Management” | 2 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_21 | Generate reports and analytics on various aspects of the hotel's performance, including occupancy rates, revenue, and guest feedback. | Business Process = “Analytics and Reporting” | 2 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_22 | Provide tools for managing hotel staff, including shift scheduling, task assignment, and performance tracking. | Business Process = “Staff Management” | 2 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_23 | Enable online booking functionality through the hotel's website and integrate with online travel agencies to manage room availability and rates. | Business Process = “Online Booking and Channel Management” | 2 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_24 | Support the booking and management of group reservations, including room allocation, group billing, and reporting. | Business Process = “Group Reservations ” | 2 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_25 | Allow guests to interact with the system in their preferred language and display rates and invoices in different currencies. | Business Process = “Multi-language and Multi-currency Support” | 3 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_26 | Develop a mobile application for guests to easily access hotel services, make reservations, and receive notifications. | Business Process = “Mobile Application” | 3 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_27 | Integrate the hotel management system with the POS system to track and manage payments for additional services like restaurants and spas. | Business Process = “Integration with Point of Sale (POS) System” | 3 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_28 | Implement robust security measures and access control to safeguard guest information and ensure system integrity. | Business Process = “Security and Access Control ” | 3 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_29 | Integrate with third-party services such as payment gateways, online review platforms, and online travel agencies for seamless operations. | Business Process = “Third-party API Integration” | 3 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_30 | Provide a platform for guests to submit feedback and complete surveys, helping the hotel management understand and improve guest satisfaction. | Business Process = “Online Guest Feedback and Surveys” | 3 | 19/05/22 | Jurgen Halili |
| LMS\_BR\_31 | Enable the management and tracking of room amenities, such as minibar items, in-room entertainment, and special requests, ensuring prompt restocking and fulfillment of guest preferences. | Business Process = “Room Amenities Management ” | 2 | 19/05/22 | Jurgen Halili |

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