IEEE standard SRS document

I. Hotel Management System

1. Introduction:

a. Purpose:

It specifies the requirements of Hotel Management system. It is intended to be used by the software development team, quality assurance team and the hotel management.

b. Document Convention:

Bold text are used for section titles, important terms or commands. Bulleted list are used for unordered lists or steps with requirement.

c. Intended Audience & Reading Suggestion:

→ Project managers - to understand project scope, deliverables and timelines.

→ Software developer - to use as a reference for system architecture, implementation and integration.

→ All readers should begin with Introduction to understand the context, scope and terminology.

→ Developers should focus on overall description, specific requirements.

d. Project scope:

→ It supports room booking and reservation management.

It supports guest check-in and check out. Also supports Billing and payment processing.

e. References:

  IEEE Std 830-1998 for software requirement specifications. MySQL Documentation.

2. Overall Description:

a. Product perspective:

  It is a standalone system with optional integrations for payment gateways and email system. It follows a client-server model.

b. Product Functions:

  It provides room management, online and offline booking management, real-time room availability, daily and monthly reporting.

c. User classes & Characteristics:

→ Admin - full system access to manage operations
→ Receptionist - Limited access to booking, payment.
→ Guest - Limited access to booking, payment.

d. Operation Environment:

  → web-based application.
  → Runs on modern browser

Databases: MySQL

e. <u>Design and Implementation Constraints:</u>
The system must comply with PCI for payment security. The system shall use HTTPS for all transactions.

f. <u>User Documentation:</u>
- Online Help.
- Admin manual
- Guest user guide.

g. <u>Assumption & Dependencies:</u>
- Internet connection is required for online operation.
- Third party services (payment gateway) must be available.

3. <u>Specific Requirements:</u>

a. <u>Functional Requirements:</u>
* <u>User Authentication</u> - the system shall allow users to register using valid email and password.
* <u>Room Management</u> - The system shall allow admins to add, edit or remove room types.
* <u>Check-in/Check-out</u> - The system shall allow receptionists to check in a guest based on valid reservation.

b. Non-Functional Requirements:

* Performance requirement - The system shall respond to user actions within 2 sec under normal load.
* Security requirement - Passwords shall be stored using SHA-256.
* Usability requirement - The UI shall be responsive and accessible on mobile and desktop.

c. External Interface Requirements:

* User Interface - clean, intuitive interface for booking and account management.
* Hardware Interface - Barcode scanner for check-in ID verification.

d. Appendices:

⇒ Guest - A customer booking or staying at hotel.
⇒ Invoice - A bill generated for guest stay & services.
⇒ Check-in - the process of registering a guest upon arrival.

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