Hotel Management System (HMS)

① Problem ~~System~~ Statement :- Manual Hotel operations lead to inefficiency and errors. HMS automates tasks for better accuracy & service.

② Introduction:-

Purpose:- Defines requirements for HMS to guide development and ensure stakeholder alignment.

~~Overview~~ Scope:- A web based system to manage bookings, billing, staff, check-in/out, and reporting.

Overview:- Covers system features, interfaces, performance constraints, & a high-level budget & timeline.

③ General Description :- Modular system with booking, billing, housekeeping, and reporting. Designed for admins, staff, and customers.

④ Functional Requirements :-

Users can register, book/cancel rooms, check in/out, view bills and generate reports.

⑤ ~~Interface~~ Interface Requirements :-
Performance

System supports 500+ users with <3s response time and 99.5% uptime.

Daily backups complete within 15 minute and are stored securely.

⑥ __Interface Requirements:-__

WEB UI is responsive and user-friendly, optimized for desktop and mobile.
Use RERT APIs, MySQL/PostgreSQL, and supports HTTPS for secure communication.

⑦ __Design Constraints:-__

Developed using lamp on MERN stack. Compliant with GDPR and PCI-DSS. Supports multilingual UI and must work on all major browsers.

⑧ __Non-functional Attributes:-__

Secure, reliable, and available 24/7. Encrypted login and role based access.

⑨ __Schedule and budget:-__

3 months total : 3 weeks design, 8 weeks development, 4 weeks testing & deployment.
Estimated budget ~ ~~Rs~~ 25 Lakhs, covering dev, QA, hosting & support.