8/4/24

Week - 1

2. Hotel Management System (SRS)

~~1. Introduction~~

Problem Statement:-

Traditional hotel management processes often rely on manual methods, leading to inefficiencies, errors, and delays. To address these challenges, there is a need for a comprehensive Hotel Management System (HMS) that automates various tasks, including reservation management, guest services, billing, inventory control, and reporting. The goal is to develop a robust HMS that enhances operational efficiency, improves guest satisfaction, and enables hotel staff to focus on delivering exceptional servic

i] Introduction:

1.1 :- Purpose of this document:-

To provide a comprehensive understanding of the requirements and functionalities of the HMS.

1.2 :- Scope of this document:-

Describes the intended users, features, and benefits of the HMS, along with development cost & time estimates.

1.3 :- Overview:-

Gives a brief summary of the HMS, outlining its primary functions such as room booking, check-in/out, and billing.

ii] Functional Description:-

- Objective:- To automate and streamline hotel operations, improving efficiency and guest experience.

- User characteristics :- Front desk staff, housekeeping, guests

- Features:
  - Room booking -> Allows guests to book rooms
  - check-in/out -> Facilitates the check in/out for guests
  - Inventory Management -> housekeep status, amenities
  - Billing -> Generates invoices, processes payments, & manages accounts.
  - Importance -> Enhances guest satisfaction, increase revenue
  - User community -> Includes hotel staff & guests, with varying levels of access & privileges.

iii] Functional Requirements:

- Room Booking:
  Users can search for available rooms based on criteria such as date, room type & occupancy.
- Users can select rooms & proceed with the booking process,
- check in/out
- Inventory management
- Generates invoices for room charges, & taxes.

iv] Interface Requirements:

- User Interface:
  -> Intuitive interfaces for staff and guests, accesible via web browsers or mobile apps.

- payment Integration:-
  -> Integration with payment gateways for secure online payments.

- Communication:
  -> Email notifications, feedback requests, reminders

v] Performance Requirements:-

- Response time:
  → System should respond promptly to user requests, with minimal latency.

- Availability:-
  → System should be available 24/7, with scheduled maintenance windows communicated in advance.

- Scalability:-
  → Ability to handle peak loads during high-demand periods

vi] Design Constraints:-

- Hardware/Software limitations:
  → compatibility with existing hardware & software infrastructure.
  → Support for multiple platforms (windows, macOs..)

- Regulatory Compliance:
  - compliance with data protection regulations and industry standards.

vii] non-Functional Attributes:-

- Encryption of sensity data (eg:- credit card details)
- Role based access control to restrict unauthorized access.

- Reliability:-
  → System should be robust and resilient, with fail over mechanisms to prevent downtime.

- Usability:-
  → Intuitive user interfaces, with clear navigation &

helpful tooltips.

- Scalability:-
  → Architecture should support horizontal scaling to accomodate growth in user base and transaction volume.

viii] Preliminary Schedule and Budget:

- Schedule :-
  → Estimated timeline for development, testing & deployment phases.
- Budget :-
  → Cost estimates for development resources, Software licenses and Infrastructure.