Software Requirement Specification (SRS)

1. Hotel management System

Introduction :-

1.1 Purpose of the Document: The purpose of this document is to outline the requirements and specification for the development and specification for the development of a hotel management system. It will provide a clear understanding of the project objectives, scope and deliverables.

1.2 Scope of this Document: The document defines the overall working and main objectives of the total management system. It includes a description of the development cost and the required for the project.

1.3 Overview: The Hotel management System is a Software solution designed to stream line hotel operations including reservation management, guest check-in /check-out room assignment, billing and reporting

2. General Description: The Hotel management system will catch to the needs of hotel staff and management providing features such as room booking, guest profile, inventory management and financial reporting

It will be accessible to users with varying level of technical experties

3. functional Requirements
   3.1 transcation management
   * Authorize and Process credit card payments in real time
   * support transaction types purchase refund pre-authentication and security
   3.2 fraud detection & security
   * use encryption to protect sensitive customers and transaction Data
   * support multi-faster authentication for enhanced security
   3.3 Billing & reporting
   * generate invoice for merchant based on transaction fees and commissions
   * provides real time financial report analytics and summaries

4. Interface Requirements
   4.1 user interface
   * intitive and user friendly dashboard for merchant and administrators
   * Accessible via web browsers mobile devices and desktop application
   4.2 Integration interface
   * integration with payment gateway for source transaction processing

- Apps for third-party applications
  to connect and process payments

5. Performance Requirements
   5.1 Response time:- the system should
   authorize and respond to transaction
   within 2-3 sec
   5.2 Scalability: Handle a minimum of
   10,000 concurrent transaction during
   peak hours
   5.3 Data Integrity:- ensure consistency
   and accuracy of transaction data
   across all modules

6. Design constraints
   6.1 Hardware limitation
      . The system should be compatible
      with standard server infrastructure
      POS terminals and cloud environment
   6.2 software development
      . utilize relational data base system
      for data storage and programming
      language and frameworks conducive
      to unit modelling

7. Non-functional Attributes
   7.1 security:- Implementation robust
   encryption, authentication and authorized
   machisms

   7.2 Reliability:- ensure high availability
   . y and fault to serance to minimize
   down time

7.3 Scalability: Design System to accomodate further growth in Transaction volumes and new paymas methods

7.4 Portability: Support deployment on multiple platform

7.5 Usability:- Provide a user-friendly and intuitive interface with clean navigation

7.6 Responsibility :- use modular code design to faciliate enhancements & maintanance

7.7 Compatibility
. The system shall ensure accurate and consistent data storage and retrieval

8. Preliminary Scheduling and Budget for development of the hotel management system is estimated this includes project planning development testing and development process