

Requirement Analysis Document

1. Introduction

1.1 Purpose

The purpose of this document is to define the functional and non-functional requirements for the **Guest Management System**. The system will streamline the process of guest registration, tracking, and management in an organization.

1.2 Scope

The Guest Management System (GMS) will allow organizations to manage guest visits efficiently. It will provide features for guest check-in/check-out, visitor badge generation, host notifications, and reporting. The system will be web-based and accessible via desktop and mobile devices.

1.3 Objectives

- Simplify guest registration and check-in process
- Enhance security by maintaining a digital guest log
- Provide real-time notifications to hosts
- Generate visitor reports for analysis
- Ensure compliance with security policies

2. Functional Requirements

2.1 User Roles

1. **Guest:** A visitor who registers to meet a host.
2. **Host:** An employee who invites and manages guests.

3. **Receptionist/Admin:** Manages guest registrations and approvals.
4. **Security Personnel:** Monitors visitor logs and access permissions.

2.2 Features

2.2.1 Guest Registration

- Guests can register online or at a self-service kiosk.
- Required details: Name, Contact, Purpose of Visit, Host Name, and Expected Time.
- Guests receive a confirmation email/SMS with a QR code for check-in.

2.2.2 Guest Check-in/Check-out

- QR code scanning for seamless check-in.
- Manual check-in option available.
- Check-out confirmation via QR scan or receptionist validation.

2.2.3 Badge Generation

- Auto-generated visitor badge with name, photo, and host details.
- Printable badge option for receptionists.

2.2.4 Host Notification

- Real-time notification to the host via email/SMS upon guest arrival.
- Option to accept or decline the guest visit.

2.2.5 Security & Compliance

- Maintain digital logs of all visitors.
- Store photo IDs for verification.
- Restrict access for unauthorized visitors.

2.2.6 Reporting & Analytics

- Daily/weekly/monthly visitor reports.

- Logs of frequent visitors and peak visit hours.
- Exportable data for auditing purposes.

3. Non-Functional Requirements

3.1 Performance

- System should support concurrent check-ins without delay.
- Notifications should be sent within 5 seconds of check-in.

3.2 Security

- Secure login and role-based access control.
- Encrypted storage of visitor data.

3.3 Availability

- System should be accessible 24/7.
- Cloud-based deployment for high availability.

3.4 Usability

- Intuitive UI for guests and receptionists.
- Mobile-friendly design for on-the-go check-ins.

4. Constraints & Assumptions

- The system will be deployed on a cloud-based infrastructure.
- QR code scanners will be available at entry points.
- Visitors must provide a valid ID for verification.

5. Future Enhancements

- Facial recognition for faster check-in.

- Integration with third-party security systems.
- AI-based visitor tracking for enhanced security.

6. Conclusion

This document outlines the key requirements for the Guest Management System, ensuring a smooth and secure guest registration and tracking process. The system will enhance security, provide detailed visitor logs, and improve the overall guest experience.