**Functional Requirements**

1. **User Management**
   * Allow users to register and log in.
   * Assign roles (administrator or student).
   * Enable administrators to manage user accounts (create, update, delete).
2. **Room Management**
   * Add, edit, or remove rooms in a dormitory.
   * View details about each room.
   * Assign users to rooms based on bookings.
3. **Dormitory Management**
   * Add and configure dormitory details, including location, number of rooms.
   * Support for multiple dormitories in the system.
4. **Booking Management**
   * Enable users to book rooms based on availability.
   * Allow administrators to approve, reject, or modify bookings.
   * Generate and view a list of all current and past bookings.
5. **Payment Processing**
   * Allow users(administrator) to register payments for accommodation.
   * Provide a payment history.
6. **Reporting and Analytics**
   * Generate reports on room occupancy rates, payment statuses, and user activity.
   * Provide insights into system usage and dormitory performance metrics.

**Non-Functional Requirements**

1. **Performance**
   * The system should support at least 500 concurrent users without performance degradation.
2. **Scalability**
   * Support the addition of new dormitories and rooms without system downtime.
3. **Security**
   * Ensure secure authentication and authorization.
4. **Usability**
   * The system should has a user-friendly interface for web platform.
   * Ensure accessibility compliance.
5. **Reliability**
   * Maintain 99.9% system uptime.
   * Automatically back up data daily.
6. **Maintainability**
   * The system should use modular design to facilitate updates and feature extensions.
   * Provide clear documentation for developers and administrators.
7. **Compliance**
   * Adhere to local regulations, such as data protection laws.