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Mini Enterprise Architecture Plan

System Title:

Hotel Reservation and Management System

Business Architecture

Goal:

The main goal of this system is to make hotel bookings faster, easier, and more organized for both customers and hotel staff. It helps manage room availability, reservations, and customer information in one system.

Main Business Processes:

- Appointment booking and approval
- Room reservation and cancellation
- Check-in and check-out processing
- Payment and billing management
- Report generation for hotel performance

Users/Roles:

- **Customer** – Books rooms, views available rooms, and makes payments.
- **Receptionist** – Confirms reservations, manages check-ins and check-outs.
- **Admin/Manager** – Manages rooms, pricing, staff accounts, and system reports.

Data Architecture

Main Data Entities:

- **Customers**
- **Rooms**
- **Reservations**

Data Relationships:

- One customer can have many reservations.
- One room can be reserved by many customers, but only one at a time.
- Each reservation is linked to a specific room and customer.

Application Architecture

Modules or Components:

- **Booking Module** – Handles room search and reservation requests.
- **Room Management Module** – Updates room availability and details.
- **Payment Module** – Processes online or in-person payments.
- **Report Module** – Generates daily or monthly reports for management.

Technology Architecture

Hardware:

- Desktop computers (for reception and admin)
- Smartphones or tablets (for customers)
- Hotel server or cloud storage
- Printers (for receipts and reports)

Software:

- Frontend: HTML, CSS, JavaScript
- Backend: PHP or Python
- Database: MySQL or PostgreSQL
- Tools: Visual Studio Code, XAMPP, or similar

Network:

- The system will use the **Internet** for online access and **local network** for hotel internal operations.

Security & Integration

- Use **login authentication** for staff and customers.
- **Data encryption** for passwords and payment details.
- **Backup system** for hotel records.
- Can integrate with **online payment systems** or third-party booking platforms.

Summary

The Hotel Reservation and Management System will simplify hotel operations by providing an all-in-one platform for booking, payments, and reporting. It will save time, reduce errors, and improve customer satisfaction by allowing quick and easy reservations both online and onsite.