

Hotel Management System

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Semester: *02*

Batch No: *T2.2410.E0*

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Month: 08 Year: 2025

This is to certify that

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Mr. **LÊ QUANG HUY**

Have successfully Designed & Developed

HOTEL MANAGEMENT SYSTEM

Submitted by:

Date Of Issue:

Authorized Signature:

Content

Acknowledgement.....	i
Synopsis.....	ii

Review 1

1. Problem Definition.....	1
1.1 Background.....	1
1.2 Problems Identified.....	1
1.3 Problem Statement.....	2
2. Customer Requirements Specifications.....	4
2.1 Functional Requirements.....	4
2.2 CRS/Requirements Specifications.....	6
2.3 Customer Acceptance Criteria.....	6
2.4 Project Plan.....	7

Review 2

3. Architecture and Design of the Application.....	10
3.1 Application Architecture.....	10
3.2 Data Flow Diagram.....	11
4. Entity Relationship Diagram (ERD).....	12
4.1 ERD.....	12
4.2 ERD Properties.....	13
5. Table Design.....	17
5.1 Table Schemas.....	17
5.2 Relationship Diagram.....	23
6. Algorithm.....	24

6.1 Administrator.....	24
6.2 Staff.....	25
Review 3	
7. Screenshots.....	27
7.1 Booking.....	27
7.2 Booking Form.....	28
7.3 Booking Details.....	29
7.4 Check-in Management.....	30
7.5 Check-in Details.....	31
7.6 Customer Management.....	32
7.7 Services Management.....	33
7.8 Room Management.....	34
7.9 Account Management.....	35
8. Testing Document.....	36
9. Final Checklist.....	37
10. Task Sheet.....	40

Acknowledge

Synopsis

Review 1

Design Plan: Hotel Management System	Document Name: Problem Definition	SWD/Form No.01/PD/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 1 of 41

Problem Definition

1.1. Background

The Lotus Grand Hotel is a 45-room mid-sized hotel in Hồ Chí Minh city, Vietnam. The hotel has four floors with a mix of Standard and Deluxe rooms. It caters to tourists, business travelers, and families. Despite a growing customer base, the hotel relies heavily on manual systems for reservations, check-in/check-out, and billing.

1.2. Problems Identified

1.2.1. Reservation & Availability Issues

Bookings are recorded manually in spreadsheets and paper forms, causing double-bookings.

Guests often call to check availability, but staff cannot answer accurately without manually checking records.

1.2.2. Slow Check-In/Check-Out

Guests wait while staff manually verify reservations, calculate bills, and write invoices.

Delays cause dissatisfaction and poor reviews.

1.2.3. Room Status Confusion

Housekeeping updates are not real-time; front desk does not always know which rooms are clean or out of service.

This causes delays in assigning rooms to waiting guests.

1.2.4. Poor Financial Oversight

Revenue and expenses are recorded separately in spreadsheets.

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Design Plan: Hotel Management System	Document Name: Problem Definition	SWD/Form No.01/PD/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 2 of 41

Management cannot generate daily occupancy or revenue reports efficiently.

1.2.5. No Security or Accountability

Paper records make it impossible to trace which employee handled a reservation or payment.

Mistakes or fraud cannot be tracked.

1.3. Problem Statement

1.3.1 General Requirements

- The hotel requires a desktop-based room management system to manage 45 rooms at The Lotus Grand Hotel.
- The system must allow staff to check which rooms are empty or occupied in real-time.
- The system must store basic guest information (full name, date of birth, phone number, email, check-in date, check-out date).
- The system must allow simple booking, check-in, and check-out operations.
- The system must allow staff accounts with different access rights (administrator, receptionist).

1.3.2. Functional Requirements

The receptionist should be able to:

- Register a guest and assign them to a room.
- View which rooms are available or occupied.
- Update check-in and check-out status.
- Search for guest information by name or room number.

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Design Plan: Hotel Management System	Document Name: Problem Definition	SWD/Form No.01/PD/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 3 of 41

The manager should be able to:

- Create and manage staff accounts.
- Manage and edit room information (e.g., room number, capacity, room type (standard or VIP)).
- View system activity logs.

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Design Plan: Hotel Management System	Document Name: Customer Requirements Specifications	SWD/Form No.02/CRS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 4 of 41

Customer Requirements Specifications

Based on the issues above, the hotel management has defined the following requirements for the Hotel Management System:

2.1. Functional Requirements

2.1.1. Reservation Management

Create, edit, cancel reservations.

Check real-time room availability to prevent double-booking.

Support walk-in reservations.

2.1.2. Guest Management

Store guest information (name, DOB, contact, ID).

Maintain guest history (previous stays, preferences).

2.1.3. Room & Housekeeping Management

Show room status (Vacant, Occupied).

Track maintenance periods and reasons for out-of-service rooms.

2.1.4. Check-In/Check-Out

Simple workflow for check-in and check-out.

Auto-generate guest invoices with tax and service charges.

Allow early check-out or stay extension.

2.1.5. Billing & Payments

Create folios with line items (room rate, extras, service charges).

Record payments (cash, card, transfer).

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Design Plan: Hotel Management System	Document Name: Customer Requirements Specifications	SWD/Form No.02/CRS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 5 of 41

Issue refunds or adjustments with manager approval.

2.1.6. Reporting

Generate reports: occupancy rate, revenue summary, housekeeping status.

Export reports to PDF and CSV for sharing.

2.1.7. User Management & Security

Role-based access (Front Desk, Manager).

Audit log for key operations (reservations, payments, cancellations).

Secure authentication with username & password.

2.2. CRS/Requirements Specifications

Client/Project Undertaken:		
1.	List of inputs to the system	
	1	Receptionist: - Guest registration data (name, DOB, check-in/out dates) - Room assignment - Reservation creation/cancellation - Payment info
	2	Manager: - Add/edit/delete staff accounts - View reports
2.	List of outputs expected from the system	
	1	Receptionist: - Updated room status (occupied or empty) - Guest list - Reservation confirmation - Invoice / receipt
	2	Manager: - Staff account updates - Occupancy and revenue reports
3.	Overview of processes involved in the system	
	1	Receptionist: - Check room availability

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Design Plan: Hotel Management System	Document Name: Customer Requirements Specifications	SWD/Form No.02/CRS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 6 of 41

		<ul style="list-style-type: none"> - Assign room - Record guest data - Calculate billing
	2	Manager: <ul style="list-style-type: none"> - Validate staff data - Generate occupancy & revenue reports

Admin/Project Undertaken:		
1.	List of inputs to the system	
		System configuration
		User account roles
2.	List of outputs expected from the system	
		Updated system configuration
		Role permissions applied
3.	Overview of processes involved in the system	
		Validate admin actions
		Apply system settings
Hardware and software required for implementing the project		
1	Operating System: Windows 10 or higher.	
2	Hardware: Dual-core CPU, 2GB RAM or better.	
3	Software: JavaFX-based desktop application with Microsoft SQL server database.	
4	Unicode Fonts: Arial, Tahoma, Times New Roman, Lucida Console.	

2.3. CRS/Customer Acceptance Criteria

Sinh viên dùng cấu trúc để mô tả sau:

Given [precondition] **when** [action] **then** [result]

S.No	Customer's Acceptance Criteria
1	Given the manager is logged into the system When they view the dashboard Then they should see the current occupancy status of all rooms.
2	Given the receptionist is logged into the system When they check in a guest with valid details Then the system should mark the selected room as “occupied” and save the guest’s info.

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Design Plan: Hotel Management System	Document Name: Customer Requirements Specifications	SWD/Form No.02/CRS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 7 of 41

3	Given the administrator has access rights When they create a new staff account Then the system should add the staff account with the assigned role and login credentials.
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2.4. Project Plan

1. Project Details		
+	Name of the Client:	
	The Lotus Grand Hotel	
+	Date of Project Plan:	
	Start: 20 th August 2025	
+	Project Vision/Objectives:	
	The system aims to simplify and digitalize the management of the hotel's 45 rooms, covering both standard and VIP categories. The vision is to reduce manual errors, improve staff efficiency, and provide quick access to customer and room information.	
+	Scope:	
	Develop a desktop-based hotel management system. Core features: - Room availability tracking (occupied, vacant, under maintenance). - Guest information storage (name, date of birth, contact). - Basic booking/check-in/check-out handling. Out of scope: - Online booking integration. - Mobile application support. - Complex payment gateway integration.	
+	Our understanding of the client organization:	
	The Lotus Grand Hotel is a medium-sized hotel with 45 rooms, ranging in capacity from 1 to 3 guests per room. Rooms are classified as Standard or VIP. The hotel requires a system that allows staff to quickly manage room status, record guest details, and assist with smooth daily operations.	
+	Project Organization with Responsibilities and Authorities:	
	- Client (Hotel Manager): Provides requirements, validates system features, final approval. - Reception Staff: End-users of the system; responsible for check-in/check-out operations. - Project Team (Developers/Students): Responsible for system design, coding, and	
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Design Plan: Hotel Management System	Document Name: Customer Requirements Specifications	SWD/Form No.02/CRS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 8 of 41

	testing. - Project Leader: Coordinates tasks, ensures deliverables are on time. - Instructor (Supervisor): Oversees project progress, provides guidance, ensures academic standards are met.
2. Project Initiation/Requirement Documents	
	- Design Documentation - Installation Guide - User Guide
3. Deliverables	
	- Design Documentation - Installation Guide - User Guide (include of maintenance Manual) - Source Code
4. Project Dependencies	
	JavaFX for the graphical user interface. Microsoft SQL Server for database management. JDK for running the Java application. Windows OS as the target deployment environment.
5. Major Project Milestones	
	- Review 1 - Review 2 - Review 3
6. Quality Plan	
+	Review Activities:
	- Review meeting - Development meeting
+	Testing Activities:
	Final meeting
+	Backup and recovery strategies:
	Finale meeting

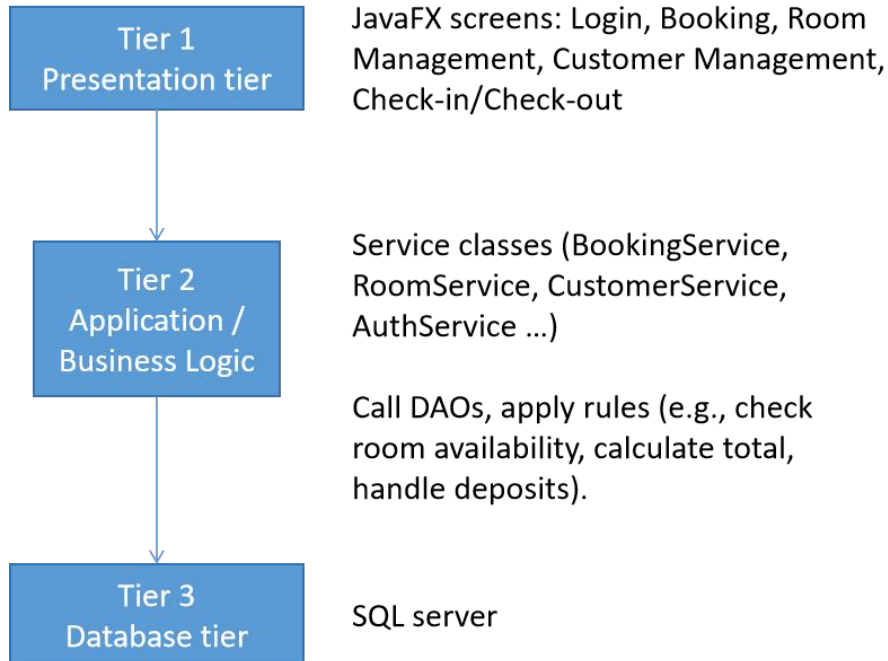
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Review 2

Design Plan: Hotel Management System	Document Name: Architecture and design of the Application	SWD/Form No.03/ARD/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 10 of 41

Architecture and design of the Application

3.1. Application Architecture



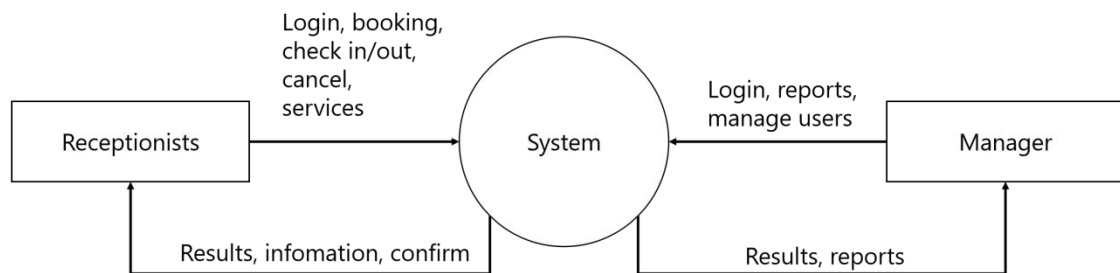
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Effective Date: 20-08-2025	Version 1.0	Page No: 11 of 41

3.2. Data Flow Diagram

3.2.1. DFD level 0

DFD Level 0

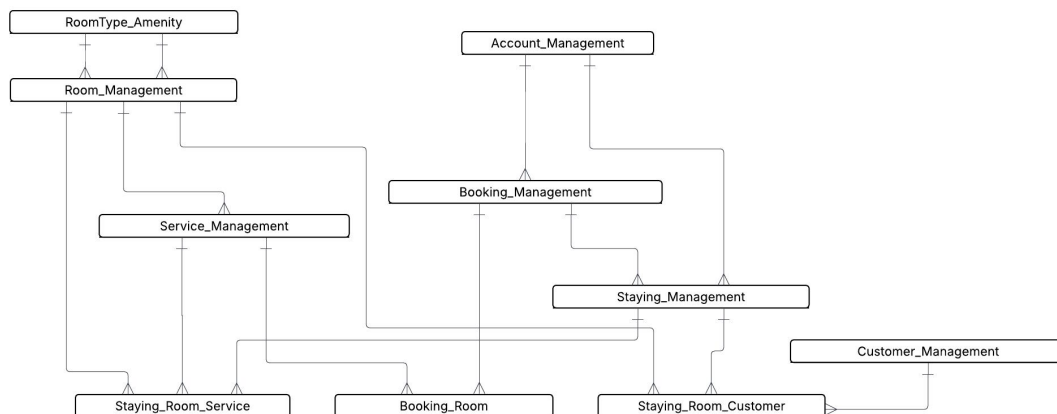


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Design Plan: Hotel Management System	Document Name: Entity Relationship Diagram	SWD/Form No.04/ERD/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 12 of 41

Entity Relationship Diagram

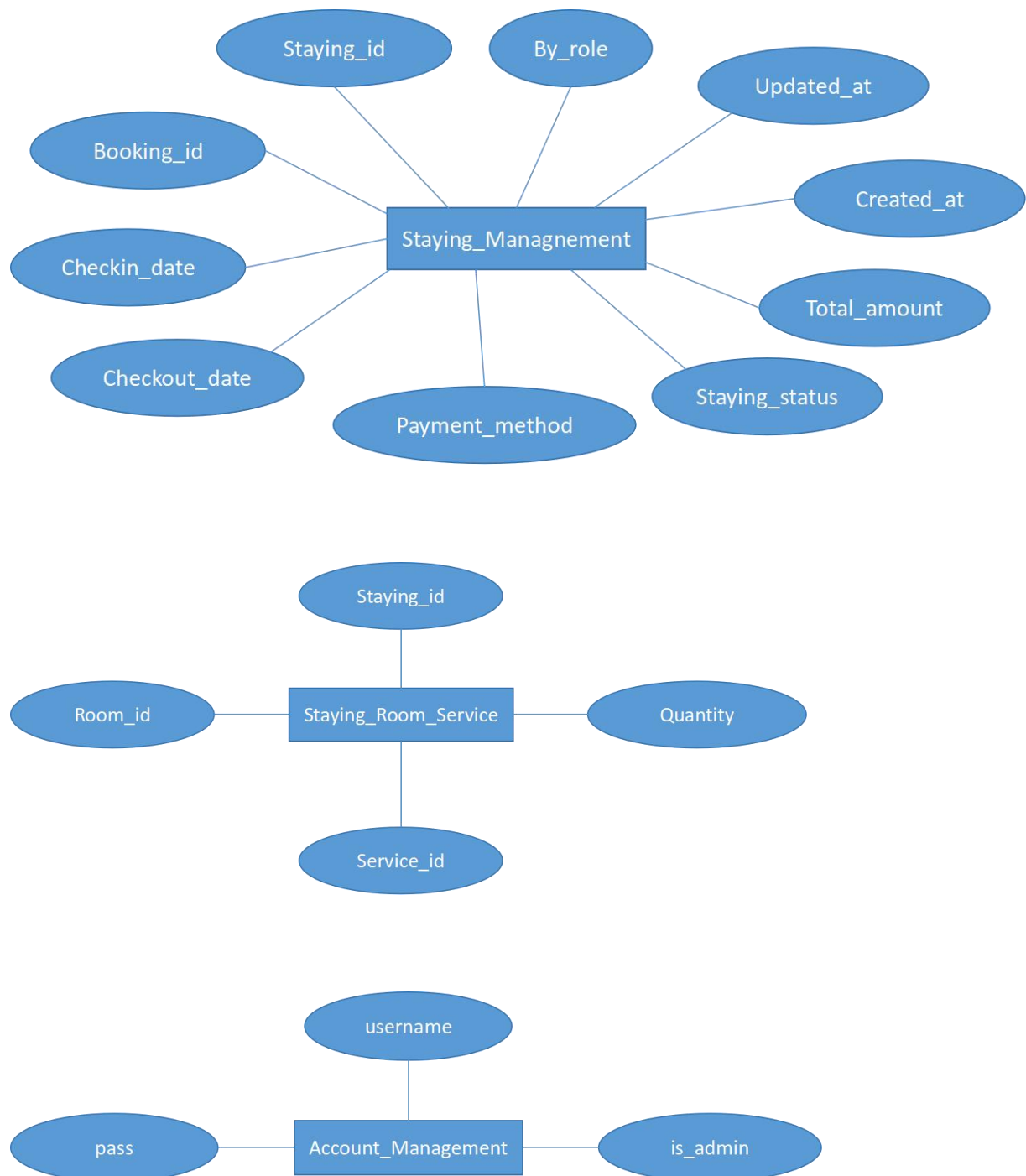
4.1. ERD



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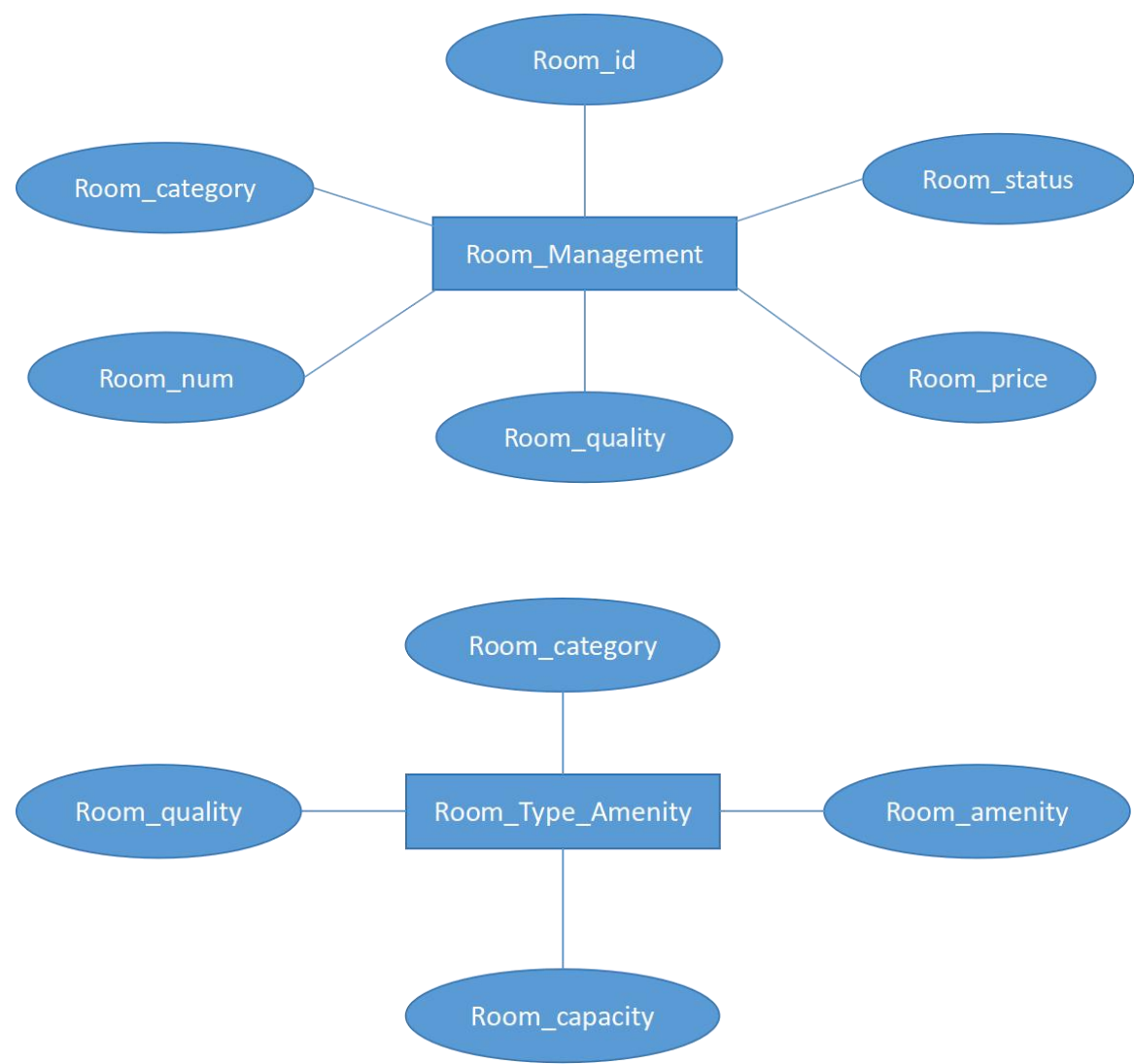
Design Plan: Hotel Management System	Document Name: Entity Relationship Diagram	SWD/Form No.04/ERD/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 13 of 41

4.2. ERD Properties



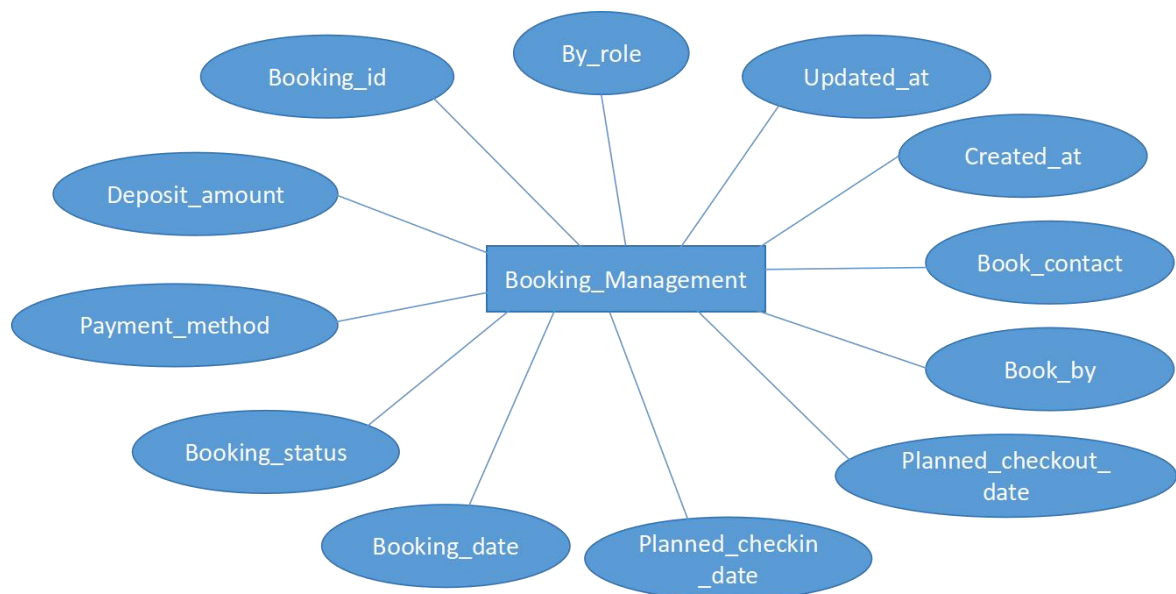
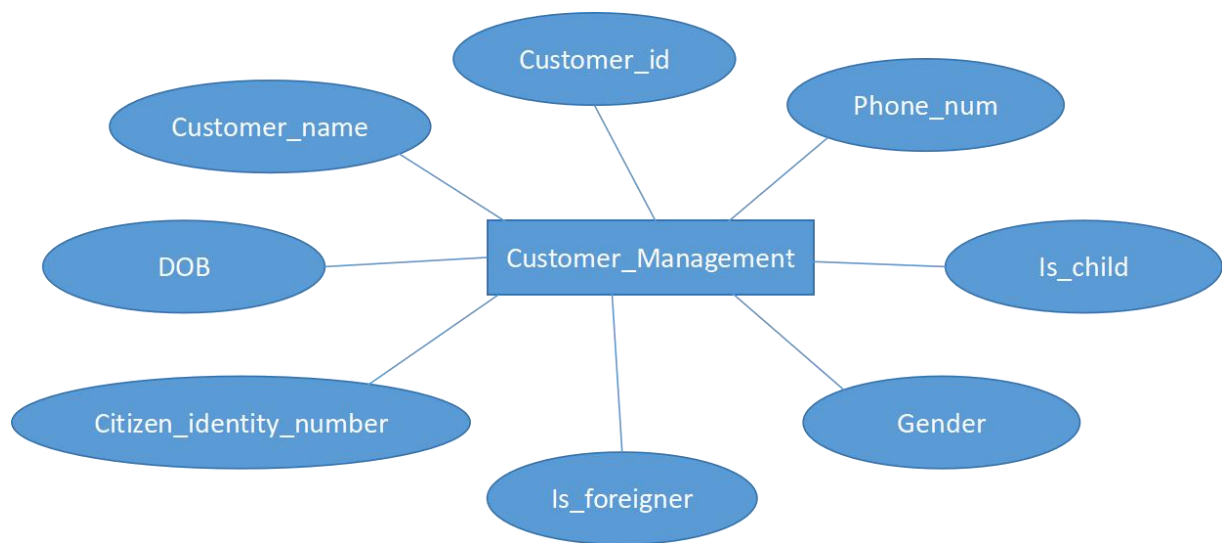
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Effective Date: 20-08-2025	Version 1.0	Page No: 14 of 41



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Design Plan: Hotel Management System	Document Name: Entity Relationship Diagram	SWD/Form No.04/ERD/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 15 of 41



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Design Plan: Hotel Management System	Document Name: Entity Relationship Diagram	SWD/Form No.04/ERD/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 16 of 41



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Design Plan: Hotel Management System	Document Name: Table Design	SWD/Form No.05/TAB/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 17 of 41

Table Design

5.1. Table Design

5.1.1. Staying_Management

Column name	Data type	Keys	Constraints	Description
Staying_id	nvarchar(100)	PK	NOT NULL	Unique ID for each staying record
Booking_id	nvarchar(100)	FK, UNIQUE	References Booking_Management	Links staying to booking
Checkin_date	datetime		NOT NULL	Actual check-in date
Checkout_date	datetime		NOT NULL	Actual check-out date
Payment_method	nvarchar(50)		NOT NULL	Payment method used
Staying_status	tinyint		NOT NULL, DEFAULT 0	0 = occupied, 1 = checked out
Total_amount	int		NOT NULL, DEFAULT 0	Total bill amount
Created_at	datetime		NOT NULL	Record creation time
Updated_at	datetime		NOT NULL	Last update time
By_role	nvarchar(100)	FK	References Account_Management	User who created the record

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Design Plan: Hotel Management System	Document Name: Table Design	SWD/Form No.05/TAB/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 18 of 41

5.1.2. Staying_Room_Service

Column name	Data type	Keys	Constraints	Description
Staying_id	nvarchar(100)	PK, FK	References Staying_Management	Related staying
Room_id	nvarchar(100)	PK, FK	References Room_Management	Related room
Service_id	nvarchar(100)	PK, FK	References Service_Management	Related service
Quantity	int		NOT NULL, DEFAULT 0	Number of times service used

5.1.3. Account_Management

Column name	Data type	Keys	Constraints	Description
username	nvarchar(100)	PK	NOT NULL	User login ID
pass	nvarchar(100)		NOT NULL	User password
is_admin	bit		NOT NULL	1 = Admin, 0 = Normal user

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Design Plan: Hotel Management System	Document Name: Table Design	SWD/Form No.05/TAB/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 19 of 41

5.1.4. Room_Management

Column name	Data type	Keys	Constraints	Description
Room_id	nvarchar(100)	PK	NOT NULL	Unique ID for room
Room_category	nvarchar(50)	FK	References RoomType_Amenity (with Room_quality)	Room type (single, double, suite)
Room_num	nvarchar(100)	UNIQUE	NOT NULL	Displayed room number
Room_quality	nvarchar(50)	FK	References RoomType_Amenity (with Room_category)	Quality type per category
Room_price	int		NOT NULL	Room price
Room_status	tinyint		NOT NULL	0 = Empty, 1 = Occupied, 2 = Cleaning

5.1.5. RoomType_Amenity

Column name	Data type	Keys	Constraints	Description
Room_category	nvarchar(50)	PK	NOT NULL	Room category (single, double, suite)
Room_quality	nvarchar(50)	PK	NOT NULL	Quality type for category
Room_capacity	int		NOT NULL	Max occupancy capacity
Room_amenity	nvarchar(300)		NOT NULL	Amenities provided

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Design Plan: Hotel Management System	Document Name: Table Design	SWD/Form No.05/TAB/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 20 of 41

5.1.6. Customer_Management

Column name	Data type	Keys	Constraints	Description
Customer_id	nvarchar(100)	PK	NOT NULL	Unique customer ID
Customer_name	nvarchar(100)		NOT NULL	Full name
DOB	date		NULL allowed	Date of birth
Citizen_identity_number	nvarchar(50)	UNIQUE	NULL allowed	National ID (nullable for kids)
Is_foreigner	bit		NOT NULL	1 = Foreigner, 0 = VN
Gender	bit		NOT NULL	1 = Male, 0 = Female
Is_child	bit		NOT NULL, DEFAULT 0	1 = Child, 0 = Adult
Phone_num	nvarchar(20)		NOT NULL	Contact number

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Design Plan: Hotel Management System	Document Name: Table Design	SWD/Form No.05/TAB/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 21 of 41

5.1.7. Booking_Management

Column name	Data type	Keys	Constraints	Description
Booking_id	nvarchar(100)	PK	NOT NULL	Unique booking ID
Deposit_amount	int		NOT NULL	Deposit amount
Payment_method	nvarchar(50)		NOT NULL	Payment method
Booking_status	tinyint		NOT NULL	4=Received,3=Late,2=Active,1=Cancelled(hotel),0=Cancelled(customer)
Booking_date	datetime		NOT NULL	Booking creation date
Planned_checkin_date	datetime		NOT NULL	Scheduled check-in
Planned_checkout_date	datetime		NOT NULL	Scheduled check-out
Book_by	nvarchar(100)		NOT NULL	Booker's name
Book_contact	nvarchar(50)		NOT NULL	Contact info
Created_at	datetime		NOT NULL	Record creation
Updated_at	datetime		NOT NULL	Record last update
By_role	nvarchar(100)	FK	References Account_Management	Staff who created booking

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Design Plan: Hotel Management System	Document Name: Table Design	SWD/Form No.05/TAB/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 22 of 41

5.1.8. Service_Management

Column name	Data type	Keys	Constraints	Description
Service_id	nvarchar(100)	PK	NOT NULL	Unique service ID
Service_name	nvarchar(100)		NOT NULL	Service name
Service_price	int		NOT NULL	Price per service
Service_description	nvarchar(100)		NULL allowed	Description of service

5.1.9. Staying_Room_Customer

Column name	Data type	Keys	Constraints	Description
Staying_id	nvarchar(100)	PK, FK	References Staying_Management	Related staying
Room_id	nvarchar(100)	PK, FK	References Room_Management	Related room
Customer_id	nvarchar(100)	PK, FK	References Customer_Management	Related customer

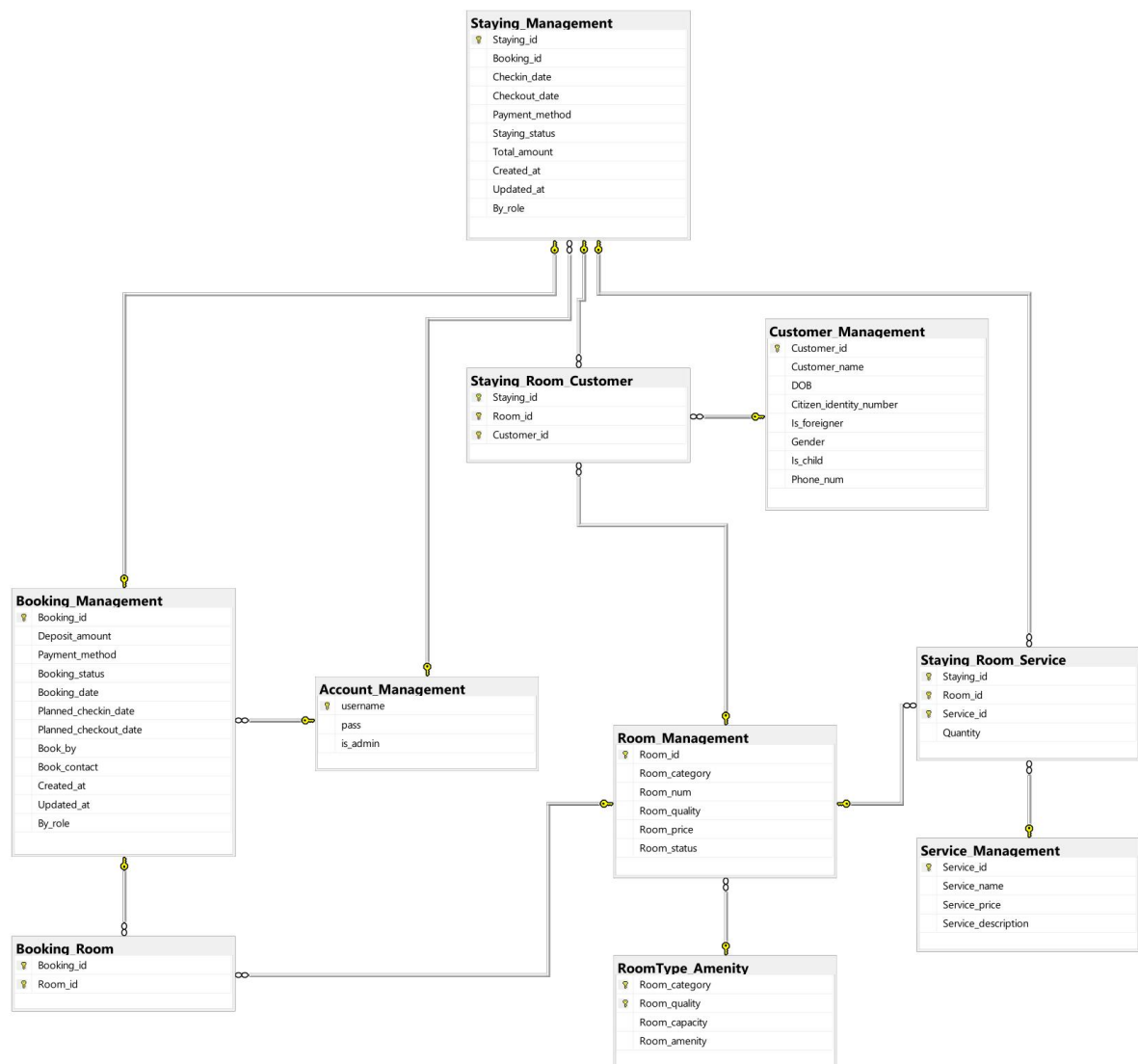
5.1.10. Booking_Room

Column name	Data type	Keys	Constraints	Description
Booking_id	nvarchar(100)	PK, FK	References Booking_Management	Related booking
Room_id	nvarchar(100)	PK, FK	References Room_Management	Related room

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Design Plan: Hotel Management System	Document Name: Table Design	SWD/Form No.05/TAB/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 23 of 41

5.2. Relationship Diagram

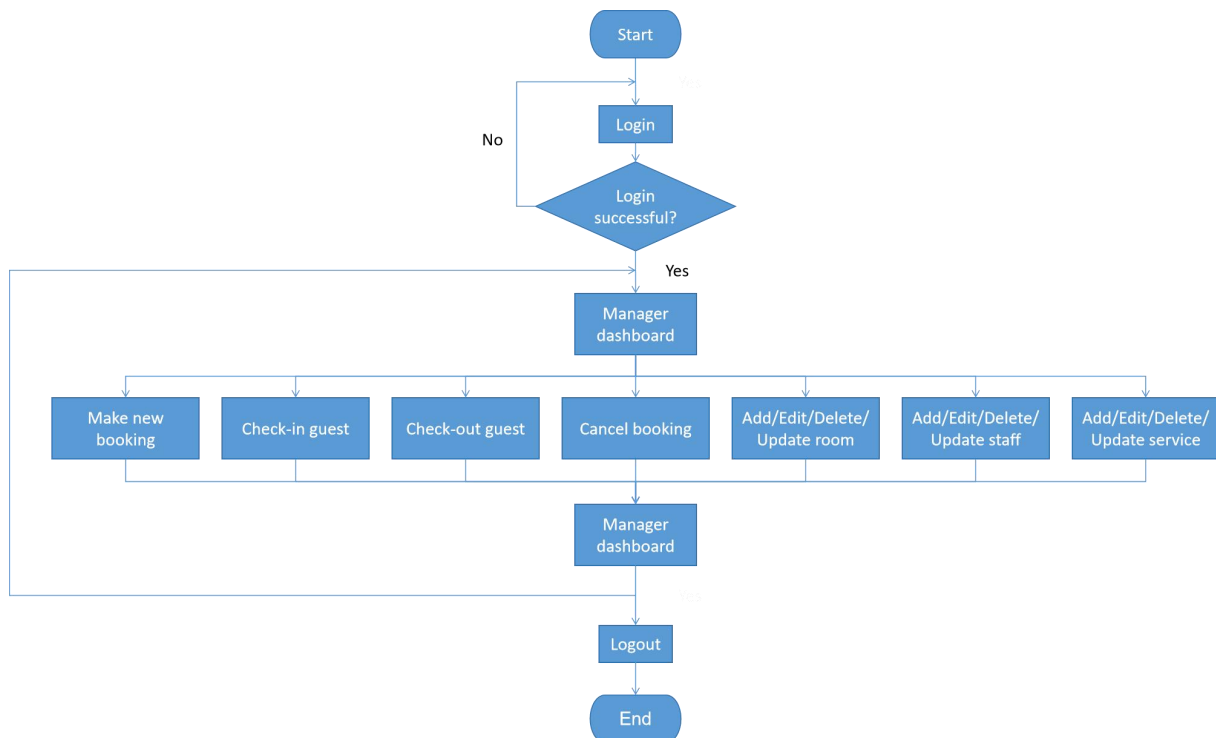


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Design Plan: Hotel Management System	Document Name: Algorithm	SWD/Form No.06/ALG/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 24 of 41

Algorithm

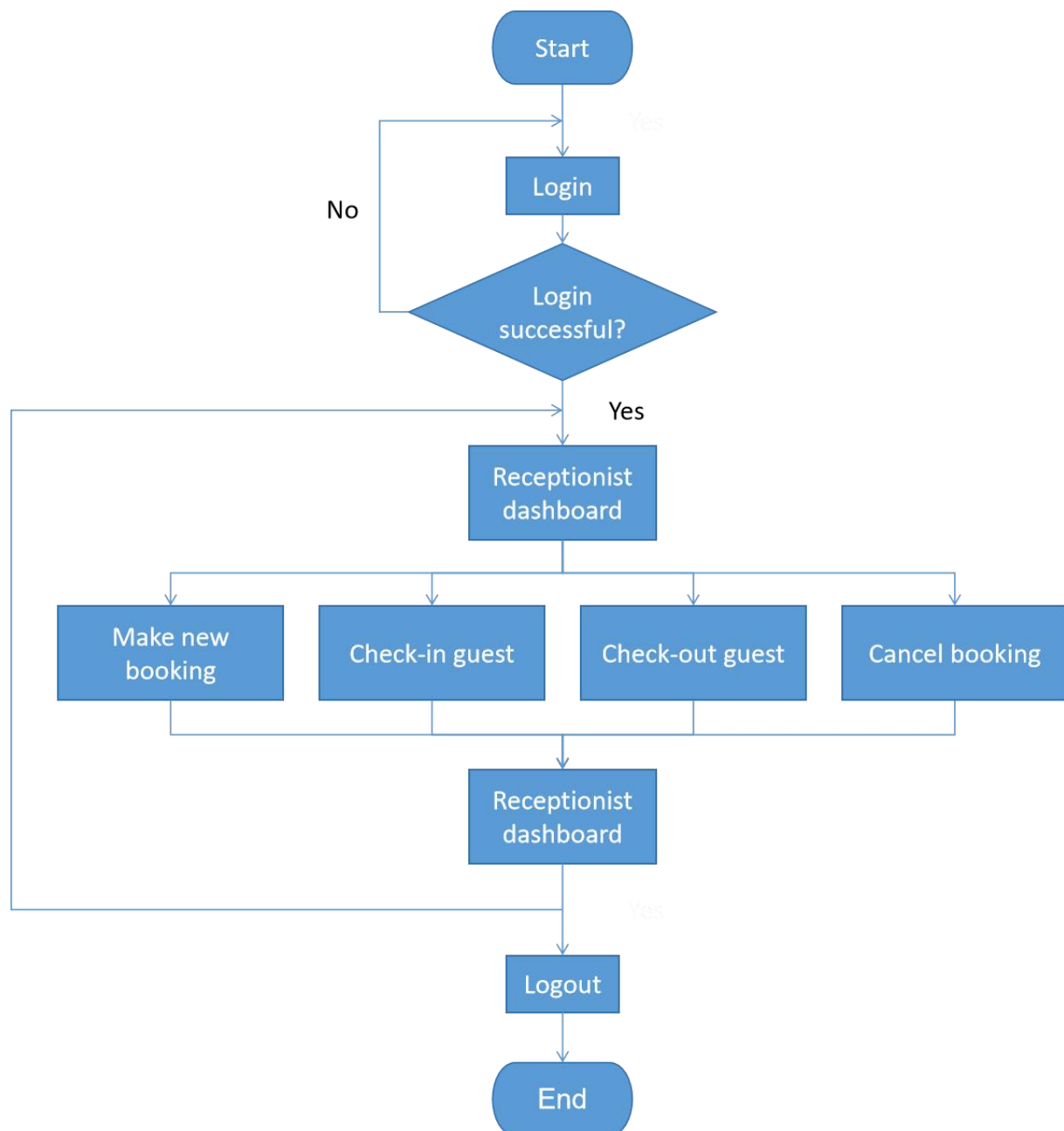
6.1. Administrator



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Design Plan: Hotel Management System	Document Name: Algorithm	SWD/Form No.06/ALG/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 25 of 41

6.2. Staff



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Review 3

Design Plan: Hotel Management System	Document Name: Screen shots	SWD/Form No.07/SS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 28 of 41

7.2. Booking form

New Booking

Booker: Phone:

Deposit: Payment: ☒ Cash ☐ Card ☐ Online

Check-in: Check-out:

Room No	Category	Quality	Price
No content in table			

Description: Used by staff to create a new booking by selecting check-in/check-out dates, room type.

From: Opened from Booking Management when creating a new booking.

To: Does not lead directly to another tab; once created, the booking can later be opened in Booking Details for viewing, editing, or deletion.

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Design Plan: Hotel Management System	Document Name: Screen shots	SWD/Form No.07/SS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 29 of 41

7.3. Booking details

Update Booking

Booker: Phone:

Deposit: Payment: ☒ Cash ☐ Card ☐ Online

Check-in: Check-out:

Room No	Category	Quality	Price
101	Single	Standard	500000

Description: Shows detailed customer information, stay duration, and selected rooms for a booking. Allows staff to edit, remove rooms, or delete the booking.

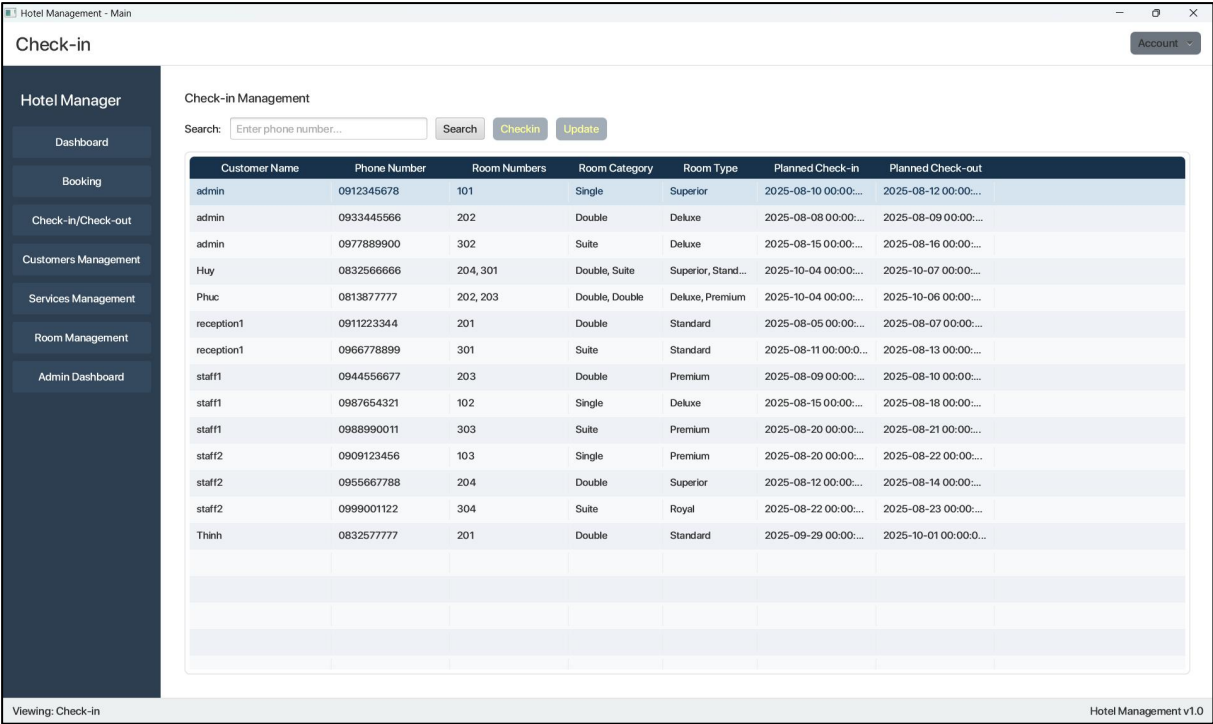
From: Opened from Booking Management (by selecting an existing booking).

To: Does not lead directly to another tab; related processes (like check-in) are handled separately in Check-in Management.

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Design Plan: Hotel Management System	Document Name: Screen shots	SWD/Form No.07/SS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 30 of 41

7.4. Check-in management



Description: Used to monitor and record real-time check-in time for customers.

From: Opened from Main Menu → Check-in Management.

To: Leads to Check-in Details for managing room assignments, services, and billing.

	Prepared by (Student)	Approved by (Faculty)
	Project Group No:	LE THANH NHAN
Signature		
Date		

Design Plan: Hotel Management System	Document Name: Screen shots	SWD/Form No.07/SS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 32 of 41

7.6. Customer management

Hotel Manager

Dashboard

Booking

Check-in/Check-out

Customers Management

Services Management

Room Management

Admin Dashboard

Customers Management

Account

Customer Name:

Date of Birth:

Identity Number:

Phone Number:

☐ Is Foreigner ☐ Male ☐ Is Child

Add

Update

Delete

Clear

ID	Name	Date of Birth	Identity Number	Foreigner	Gender	Child	Phone
C1	Nguyễn Văn A	1985-01-10	123456789	false	true	false	0912345678
C10	Phan Thị J	1991-12-25	445566778	false	false	false	0988990011
C11	Trịnh Văn K	1980-04-30	223344556	false	true	false	0999001122
C2	Trần Thị B	1990-05-21	987654321	false	false	false	0987654321
C3	Lê Văn C	1982-07-12	112233445	false	true	false	0909123456
C4	Phạm Thị D	1995-11-01	556677889	false	false	false	0911223344
C5	Ngô Văn E	1978-03-08	667788990	false	true	false	0933445566
C6	Hoàng Thị F	1988-08-18	334455667	false	false	false	0944556677
C7	Đặng Văn G	1992-02-20	998877665	false	true	false	0955667788
C8	Bùi Thị H	1987-09-15	776655443	false	false	false	0966778899
C9	Vũ Văn I	1993-06-05	889900112	false	true	false	0977889900

Viewing: Customers Management

Hotel Management v1.0

Description: Stores and manages customer profiles, including contact information.

From: Opened from Main Menu → Customer Management.

To: Can be linked with Check-in Management when a customer is selected.

	Prepared by (Student)	Approved by (Faculty)
	Project Group No:	LE THANH NHAN
Signature		
Date		

Design Plan: Hotel Management System	Document Name: Screen shots	SWD/Form No.07/SS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 33 of 41

7.7. Services management

Hotel Manager

Dashboard

Booking

Check-in/Check-out

Customers Management

Services Management

Room Management

Admin Dashboard

Services Management

Account

Service Name:

Price (VND):

Description:

Add

Update

Delete

Clear

ID	Service Name	Price (VND)	Description
S1	Dọn phòng	50000	Dọn phòng 2 lần/ngày
S10	Tư vấn sự kiện	100000	Tư vấn tổ chức sự kiện riêng
S11	Ăn tối	150000	Ăn tối tại nhà hàng khách sạn
S2	Giặt ủi	70000	Giặt ủi 5kg quần áo
S3	Đưa đón sân bay	150000	Đưa đón sân bay tận nơi
S4	Massage	200000	Massage thư giãn 60 phút
S5	Ăn sáng	100000	Ăn sáng buffet tự chọn
S6	Tour du lịch	300000	Tour du lịch 1 ngày
S7	Thuê xe	250000	Thuê xe 7 chỗ cả ngày
S8	Dọn minibar	50000	Thêm đồ uống và snack vào minibar
S9	Spa	400000	Spa VIP 90 phút

Viewing: Services Management

Hotel Management v1.0

Description: Used to define and manage the list of available services (laundry, meals, tours, etc.) that the hotel provides.

From: Opened from Main Menu → Services Management.

To: Does not link directly; services are later assigned to specific rooms/customers through Check-in Details.

	Prepared by (Student)	Approved by (Faculty)
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Signature		
Date		

Design Plan: Hotel Management System	Document Name: Screen shots	SWD/Form No.07/SS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 34 of 41

7.8. Room management

Hotel Manager

Dashboard

Booking

Check-in/Check-out

Customers Management

Services Management

Room Management

Admin Dashboard

Room Management

Room Number: Quality:

Price (VND): Category:

Status:

Add Room

Update

Delete

Clear

Manage Room Types - Amenities

Room ID	Room No.	Category	Quality	Price (VND)	Status	Amenities	Capacity
R1	101	Single	Superior	500000	Available	Giường đơn, TV, Wifi, Tủ lạnh, Ban...	1
R10	303	Suite	Premium	2200000	Available	Phòng khách, Giường đôi, TV, Wifi...	2
R11	304	Suite	Royal	3000000	Available	Phòng khách, Giường đôi, TV, Wifi...	2
R2	102	Single	Deluxe	700000	Available	Giường đơn, TV, Wifi, Tủ lạnh, Mái...	1
R3	103	Single	Premium	900000	Available	Giường đơn, TV, Wifi, Tủ lạnh, Ban...	1
R4	201	Double	Standard	800000	Available	Giường đôi, TV, Wifi, Tủ lạnh	2
R5	202	Double	Deluxe	1000000	Available	Giường đôi, TV, Wifi, Tủ lạnh, Mini ...	2
R6	203	Double	Premium	1200000	Available	Giường đôi, TV, Wifi, Tủ lạnh, Mini ...	2
R7	204	Double	Superior	1400000	Available	Giường đôi, TV, Wifi, Tủ lạnh, Mini ...	2
R8	301	Suite	Standard	1500000	Available	Phòng khách, Giường đôi, TV, Wifi...	2
R9	302	Suite	Deluxe	1800000	Available	Phòng khách, Giường đôi, TV, Wifi...	2

Viewing: Room Management

Hotel Management v1.0

Description: Used to define and manage the list of rooms in the hotel (room numbers, types, statuses). Booked or occupied rooms are marked unavailable.

From: Opened from Main Menu → Room Management.

To: Does not link directly; rooms are selected during Booking Form and later assigned to customers through Check-in Details.

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Date		

Design Plan: Hotel Management System	Document Name: Testing document	SWD/Form No.08/TD/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 36 of 41

Testing document

Sr.No	Features Tested	Remarks
1	Test cases (Check-in, Check-out, Booking, Cancel booking, Payment)	Pass
2	Test plan (Strategy for modules: Booking, Room, Customer, Staff)	Pass
3	Test scenarios (Cases: successful booking, cancellation, payment failure)	Pass
4	Test report (Results of hotel system module testing)	Pass
5	Requirements Specification (Requirements: manage guests, rooms, staff, invoices)	Pass
6	Functional Specification (Functions: Booking, Payment, Room management)	Pass
7	Use-Case Reports (Use cases: Customer booking, Manager report, Staff assignment)	Pass
8	Project plan(Hotel system project timeline)	Pass
9	Design Specifications (ERD, UI mockup, Database schema)	Pass
10	Prototype (Demo interfaces: Booking form, Dashboard, Cancel booking form)	Pass
11	User's Manuals (Guides for Staff/Manager usage)	Pass
12	Business Functions and Rules (Policies: booking rules, room pricing, refund rules)	Pass
13	Project or Business Risk Assessment (Risks: data loss, system overload)	Pass
14	Responsibilities (Roles: Manager, Staff, Developer, Tester)	Pass
15	Approvals (Confirmation from stakeholders/customers)	Pass

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	Project Group No:	LE THANH NHAN
Signature		
Date		

Design Plan: Hotel Management System	Document Name: Final checklist	SWD/Form No.09/FC/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 37 of 41

Final checklist

Sr.No	Aspect Tested	Suggestion/Remarks
1	Application launches successfully on all target machines (Windows)	
2	Login screen functions correctly: Test with valid/invalid credentials	
3	User roles: Admin/Receptionist/Staff permissions display and work correctly	
4	Dashboard displays correct information (available rooms, bookings, revenue, etc.)	
5	Room management: Add, edit, delete, and search rooms work as expected	
6	Customer management: Add, edit, delete, and search customers work correctly	
7	Booking system: Room booking, cancellation, and room change functions work correctly	
8	Billing/Payment module: Total calculation, invoice printing, and payment processing are correct	
9	Check-in/Check-out process: Functions are complete and accurate	
10	Reports: Revenue, customer, and room reports display accurate data	
11	Database connectivity: Connection with database (SQL Server) is stable	

	Prepared by (Student)	Approved by (Faculty)
	Project Group No:	LE THANH NHAN
Signature		
Date		

Design Plan: Hotel Management System	Document Name: Final checklist	SWD/Form No.09/FC/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 38 of 41

12	Validation: Input fields validate correctly (email, phone number, dates, etc.)	
13	Error handling: Clear error messages are shown when issues occur (connection, invalid input, etc.)	
14	UI/UX: JavaFX interface is responsive, user-friendly, and displays correctly on various resolutions	
15	Performance: Application loads quickly, screen transitions are smooth, no lag	
16	Search & Filters: Searching and filtering for rooms, customers, and bookings work correctly	
17	JavaFX controls: Buttons, menus, and TableViews work as expected	
18	Security: Password encryption and secure login implemented	
19	Backup/Restore functionality: Data backup and restore features work correctly	
20	Cross-platform testing: Application runs on multiple operating systems (if required)	
21	Exception logging: Logs record errors properly for debugging	
22	Installer/Executable packaging: .jar or .exe installer runs smoothly	
23	Third-party libraries: All dependencies (JavaFX, JDBC, Hibernate, etc.) integrate without errors	
24	Future feature placeholders: Unimplemented buttons or menus display proper messages	

	Prepared by (Student)	Approved by (Faculty)
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Signature		
Date		

Design Plan: Hotel Management System	Document Name: Final checklist	SWD/Form No.09/FC/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 39 of 41

25	Overall stability: Application does not crash under heavy or repetitive operations	
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Signature		
Date		

Design Plan: Hotel Management System	Document Name: Task Sheet	SWD/Form No.08/TS/Ver1.0
Effective Date: 20-08-2025	Version 1.0	Page No: 40 of 41

No	Member	Contents		Table Name	Activity Plan	Date of Preparation of Activity Plan		
					Planned Start Date	Actual Start Date	Actual Days	Status
1	Hồ An Thịnh	Admin		Staying_Management	20/08/2025	20/08/2025		
2					20/08/2025	20/08/2025		
3		User	Checkin		20/08/2025	20/08/2025	45	OK
4			Assign customers and services Print bill		20/08/2025	20/08/2025	45	OK
1	Phạm Đăng Vinh	Admin	Room management	Service_Management Room_Management Customer_Management	20/08/2025	20/08/2025	45	OK
2			Service management		20/08/2025	20/08/2025	45	OK
3			Customer management		20/08/2025	20/08/2025	45	OK
4		User			20/08/2025	20/08/2025		
1	Nguyễn Hoàng Phúc	Admin	Accout management	Accout_Management	20/08/2025	20/08/2025	45	
2					20/08/2025	20/08/2025		
3		User	Print bill		20/08/2025	20/08/2025	45	OK
4					20/08/2025	20/08/2025		OK
1	Lê Quang Huy	Admin		Booking_Management	20/08/2025	20/08/2025		
2					20/08/2025	20/08/2025		
3		User	Booking		20/08/2025	20/08/2025	45	OK
4			Cancel booking		20/08/2025	20/08/2025	45	OK

	Prepared by (Student)	Approved by (Faculty)
	Project Group No: 04	LE THANH NHAN
Signature		
Date		

Backcover