

Hotel Management System

Supervisor: *LÊ THANH NHÂN*

Semester: *02*

Batch No: *T2.2410.E0*

Group No: *02*

Order:	Full name	Roll No.
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<i>4.</i>	<i>Lê Quang Huy</i>	<i>Student1394600</i>

Month: 08 Year: 2025

This is to certify that

Mr. HỒ AN THỊNH

Mr. PHẠM ĐĂNG VINH

Mr. NGUYỄN HOÀNG PHÚC

Mr. LÊ QUANG HUY

Have successfully Designed & Developed

HOTEL MANAGEMENT SYSTEM

Submitted by:

Date Of Issue:

Authorized Signature:

Content

Acknowledge

As we understand that the eProject is a step-by-step learning environment that closely simulates the class-room and Lab based learning environment into actual implementation. It is a project implementation at your fingertips!! An electronic, live juncture on the machine that allows you to.

- ✓ Practice step by step i.e. ladder approach.
- ✓ Build a larger more robust application.
- ✓ Usage of certain utilities in applications designed by user.
- ✓ Single program to unified code leading to a complete application.
- ✓ Learn implementation of concepts in a phased manner.
- ✓ Enhance skills and add value.
- ✓ Work on real life projects.
- ✓ Give a real-life scenario and help to create applications more complicated and useful.
- ✓ Mentoring through email support.

We would like to send a great thank to our professor and others student for the adorable supports during the time in project.

Beside several mistakes we had made in the project, we hope to have more opportunities to widen our knowledge in web developing world.

We also thank you so much for your information and the “demo” project from India APTECH to help us get more reality experience in this project. Since we have gained more experience from this project, we will not stop learning anything as much as we can to be more successful in the future.

Your Sincerely,

Team Group 04.

Synopsis

Review 1

Design Plan: Hotel Management System	Document Name: Problem Definition	SWD/Form No.01/PD/Ver1.0
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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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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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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
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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
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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
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		- Assign room - Record guest data - Calculate billing
	2	Manager: - 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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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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	Project Group No: 04	LÊ THANH NHÂN
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Design Plan: Hotel Management System	Document Name: Customer Requirements Specifications	SWD/Form No.02/CRS/Ver1.0
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	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

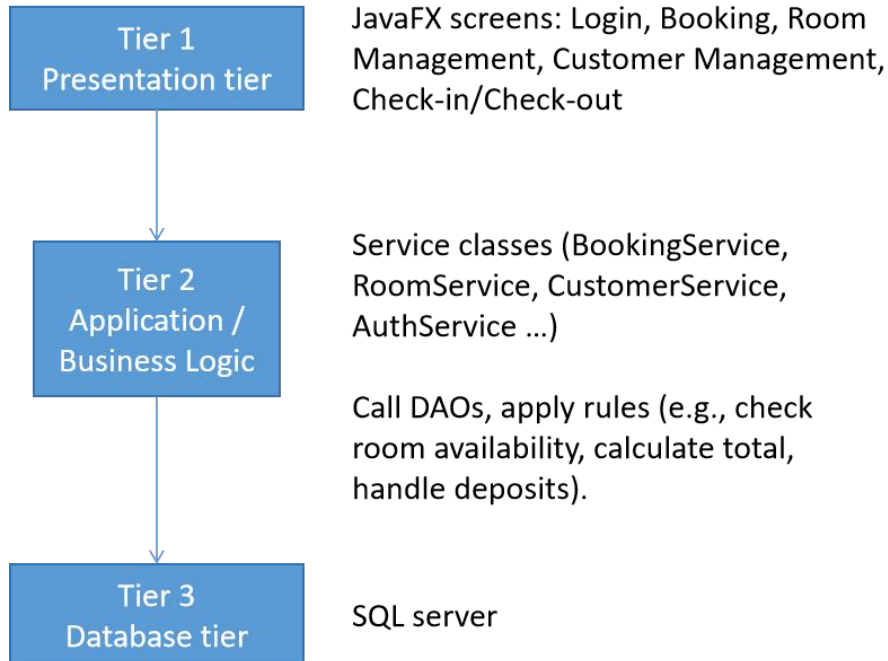
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Review 2

Design Plan: Hotel Management System	Document Name: Architecture and design of the Application	SWD/Form No.03/ARD/Ver1.0
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Architecture and design of the Application

3.1. Application Architecture



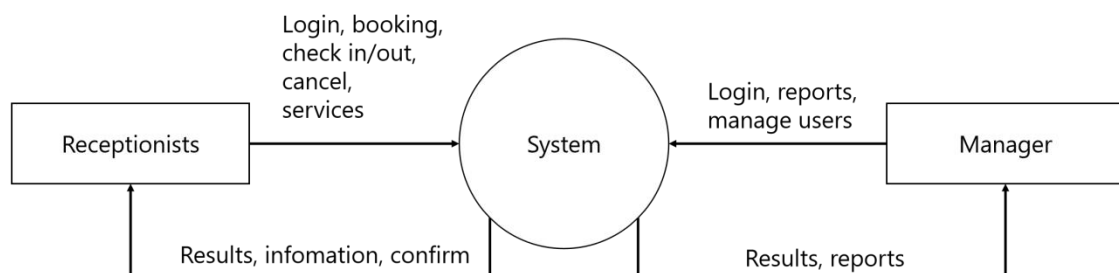
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Design Plan: Hotel Management System	Document Name: Architecture and design of the Application	SWD/Form No.03/ARD/Ver1.0
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3.2. Data Flow Diagram

3.2.1. DFD level 0

DFD Level 0

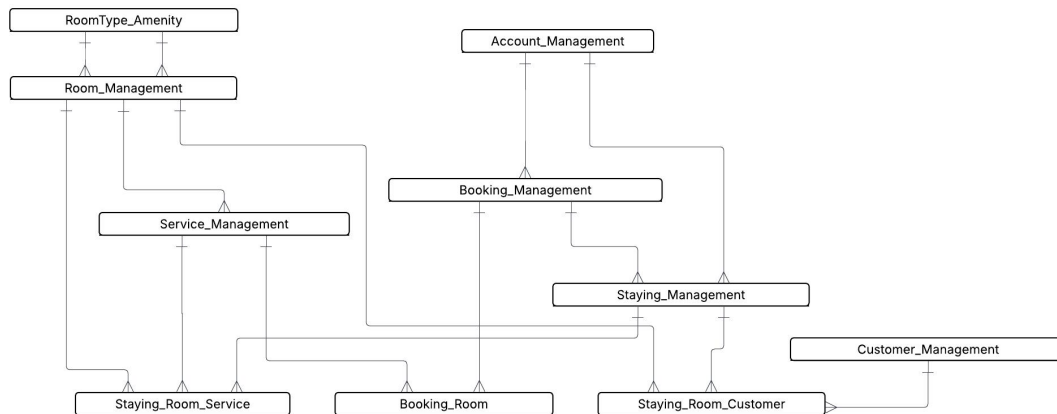


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Design Plan: Hotel Management System	Document Name: Entity Relationship Diagram	SWD/Form No.04/ERD/Ver1.0
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Entity Relationship Diagram

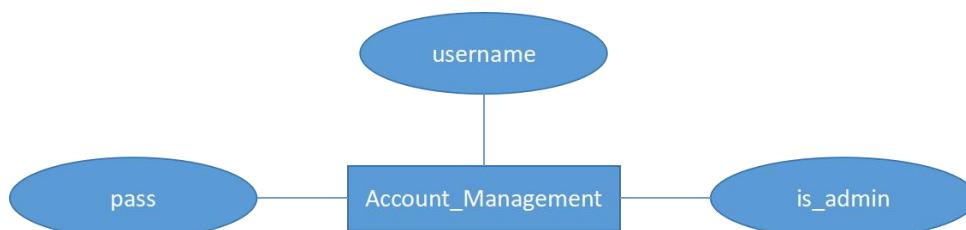
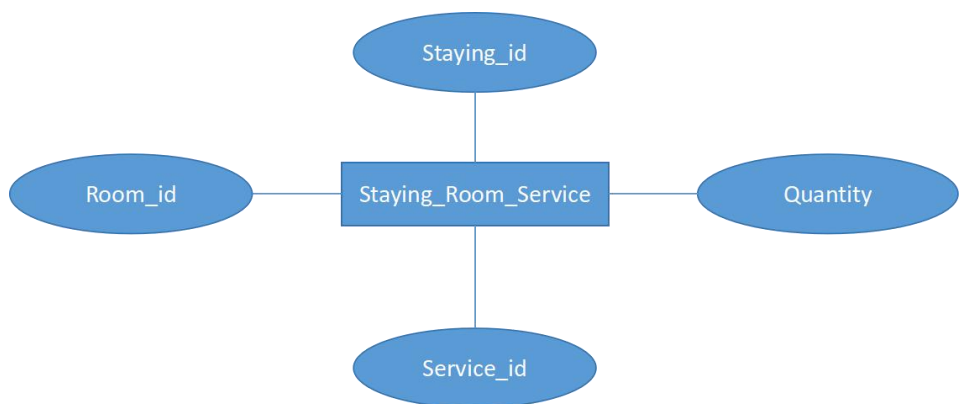
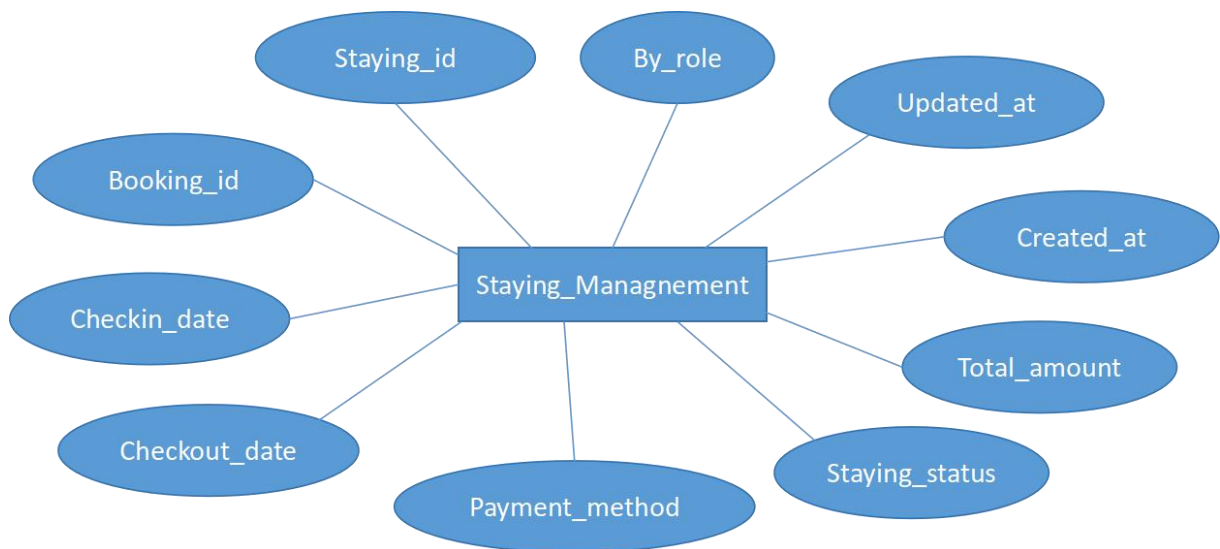
4.1. ERD



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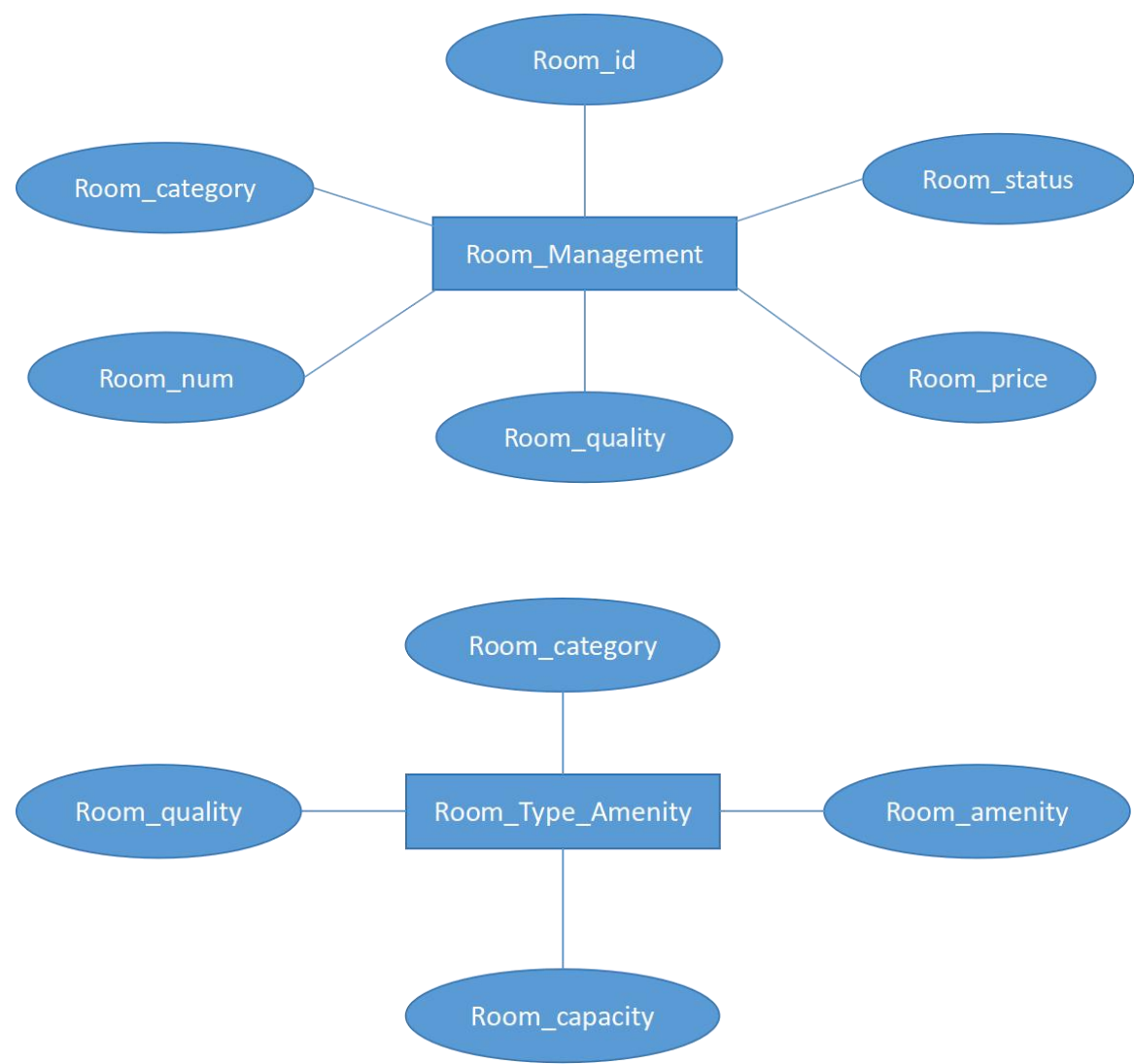
Design Plan: Hotel Management System	Document Name: Entity Relationship Diagram	SWD/Form No.04/ERD/Ver1.0
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4.2. ERD Properties



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Design Plan: Hotel Management System	Document Name: Table Design	SWD/Form No.05/TAB/Ver1.0
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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
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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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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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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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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
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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

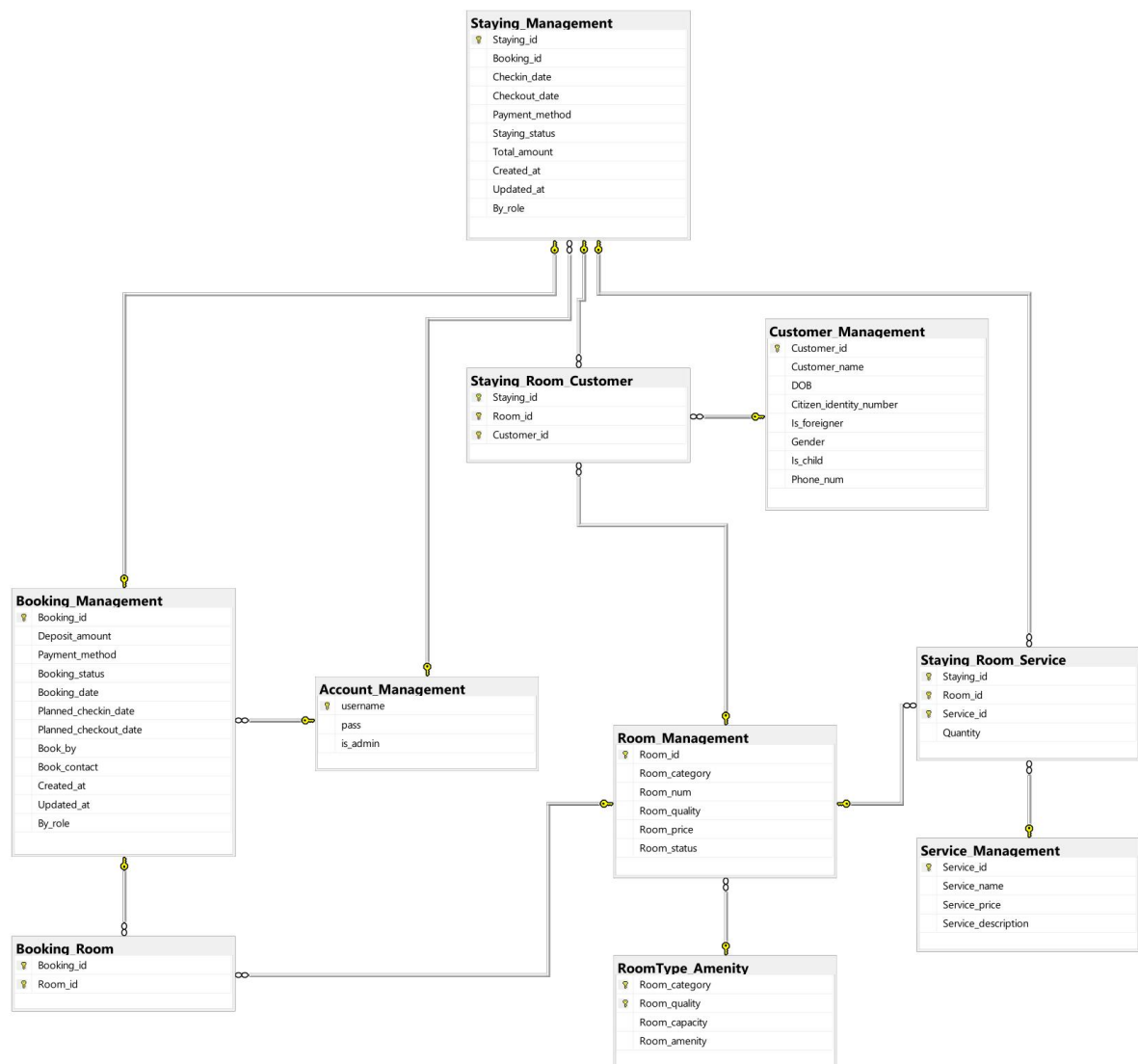
5.1.10. Booking_Room

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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5.2. Relationship Diagram

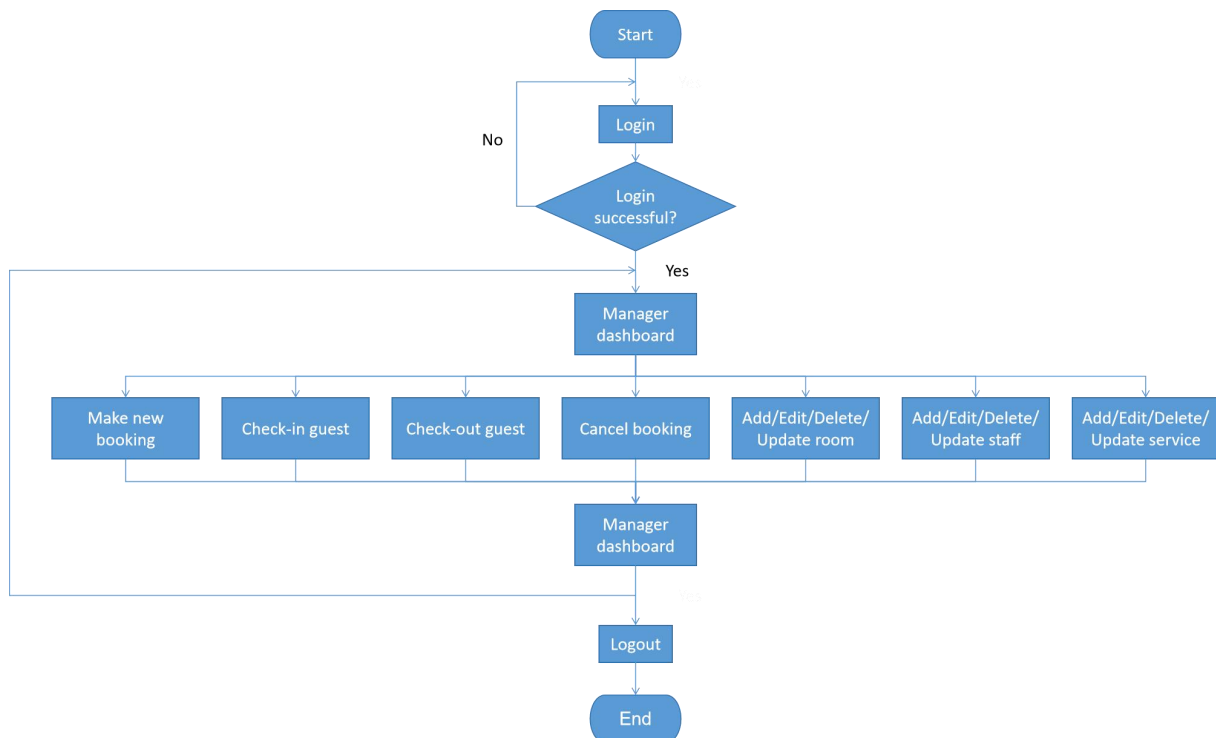


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Design Plan: Hotel Management System	Document Name: Algorithm	SWD/Form No.06/ALG/Ver1.0
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Algorithm

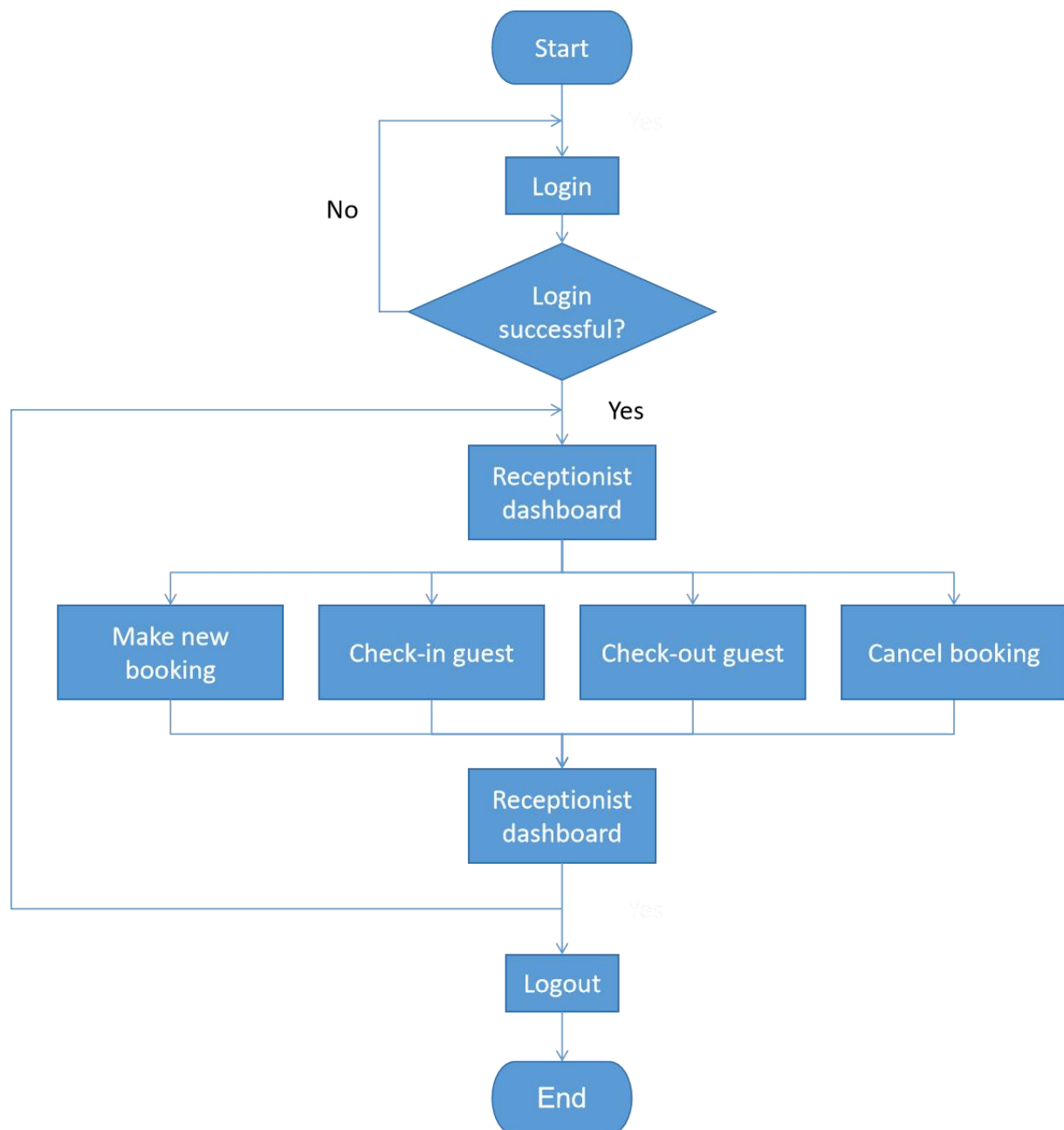
6.1. Administrator



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Design Plan: Hotel Management System	Document Name: Algorithm	SWD/Form No.06/ALG/Ver1.0
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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
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Screen shots

7.1. Booking

THE LOTUS
GRAND HOTEL

Booking

Check in

Check out

Cancel booking

Service


Room

Booking


24th August 2025

Lee | Manager

Capacity >

Check-in 

Type >

Check-out 

Room Number	Capacity	Type	Nearest Check-in	Nearest Check-out	Unit price (VND)	Availability
101	1	Standard	2025-08-24	2025-08-26	1.200.000	Available
102	2	Standard	2025-08-25	2025-08-28	1.680.000	Occupied
103	3	VIP	2025-08-24	2025-08-27	2.880.000	Available
104	1	VIP	2025-08-26	2025-08-29	2.400.000	Occupied
105	2	Standard	2025-08-24	2025-08-25	1.560.000	Available
106	3	Standard	2025-08-25	2025-08-28	1.920.000	Occupied
107	1	VIP	2025-08-27	2025-08-30	2.160.000	Available
108	2	VIP	2025-08-24	2025-08-26	2.640.000	Occupied
109	3	Standard	2025-08-26	2025-08-29	2.040.000	Available
110	1	Standard	2025-08-25	2025-08-27	1.320.000	Available
111	2	Standard	2025-08-26	2025-08-28	3.120.000	Occupied
112	3	VIP	2025-08-27	2025-08-30	3.120.000	Available

Description: Used to create a new booking with customer details and stay duration.

From: Opened from Main Menu → Booking.

To: Leads to Booking Form (detailed info) or Invoice/Payment after confirmation.

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Date		

Design Plan: Hotel Management System	Document Name: Screen shots	SWD/Form No.07/SS/Ver1.0
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7.2. Booking form

THE LOTUS GRAND HOTEL

Booking form 24th August 2025 Lee | Manager

Booking

Check in

Check out

Cancel booking

Service

Room management

List of booked rooms

Room	Capacity	Type	Check-in	Check-out	Unit price (VND)	Day x Unit Price (VND)
101	1	Standard	2025-08-30	2025-09-03	1.800.000	4 x 1.800.000
102	2	Standard	2025-08-30	2025-09-03	2.280.000	4 x 2.280.000
105	2	Standard	2025-08-30	2025-09-03	2.280.000	4 x 2.280.000
VAT (10%)						2.544.000
Total (VND)						27.984.000
Deposit (30%)						8.395.200

Customer name* Enter full name: Le Van A

Phone number* 083 xxxx xxx

ID card number xxxx xxxx xxxx

Children (under 120cm) > Select number of children

Payment method > Select payment method

Reserve or check in? > Select reserve of check in

Email (optional) LeVanA@mail.com

Notes Enter notes

Reserve **Check-in**

Description: Detailed booking information, used for editing or confirming before saving.

From: Opened after filling the Booking Screen.

To: Goes to Check-in screen once booking is confirmed.

	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
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7.3. Check-in

Customer Name	Phone Number	Room Number	Capacity	Type	Check-in (Today)	Check-out
Nguyễn Văn A	0912345678	101	2	Standard	24-08-2025	27-08-2025
Trần Thị Bích	0987654321	102	1	VIP	24-08-2025	29-08-2025
Lê Hoàng C	0901111222	201	3	Standard	24-08-2025	26-08-2025
Phạm Minh D	0933334444	202	2	Standard	24-08-2025	30-08-2025
Hoàng Gia E	0975556666	301	1	VIP	24-08-2025	25-08-2025
Đỗ Thảo F	0927777888	302	3	Standard	24-08-2025	28-08-2025
Vũ Hùng G	0949999000	401	2	VIP	24-08-2025	31-08-2025
Bùi Lan H	0961111222	402	1	Standard	24-08-2025	26-08-2025
Trịnh Quốc I	0953333444	501	3	Standard	24-08-2025	02-09-2025
Lâm Thu J	0915555666	502	2	VIP	24-08-2025	29-08-2025

Description: Used when customers arrive to confirm room assignment and check them in.


From: Accessed from Main Menu → Check-in.

To: Updates room status → leads back to Dashboard / Room Management.

	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
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7.4. Check out



Booking

Check in

Check out

Cancel booking

Service

Room management

Check out

24th August 2025

Lee | Manager

Search customer

Enter room number or customer name or phone number

Filter

Check out

Customer Name	Phone Number	Room Number	Capacity	Type	Check-in	Check-out (today)
Nguyễn Văn A	0912345678	101	2	Standard	27-08-2025	01-09-2025
Trần Thị Bích	0987654321	102	1	VIP	29-08-2025	01-09-2025
Lê Hoàng C	0901111222	201	3	Standard	26-08-2025	01-09-2025
Phạm Minh D	0933334444	202	2	Standard	30-08-2025	01-09-2025
Hoàng Gia E	0975555666	301	1	VIP	25-08-2025	01-09-2025
Đỗ Thảo F	0927777888	302	3	Standard	28-08-2025	01-09-2025
Vũ Hùng G	0949999000	401	2	VIP	31-08-2025	01-09-2025
Bùi Lan H	0961111222	402	1	Standard	26-08-2025	01-09-2025
Trịnh Quốc I	0953333444	501	3	Standard	30-08-2025	01-09-2025
Lâm Thu J	0915555666	502	2	VIP	29-08-2025	01-09-2025

Description: Used to prepare a checkout for a customer.


From: Main Menu → Checkout.

To: Opens Checkout Form.

	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
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7.5. Check out form


**THE LOTUS
GRAND HOTEL**

Booking

Check in

Check out

Cancel booking

Service

Room management

Check-out form
24th August 2025
Lee | Manager

List of booked rooms

Room	Capacity	Day	Type	Check-in	Check-out	Unit price (VND)
101	1	4	Standard	30/08/2025	03/09/2025	1.800.000
102	2	4	Standard	30/08/2025	03/09/2025	2.280.000
105	2	4	Standard	30/08/2025	03/09/2025	2.280.000
					Total	

List of service

Type	Name	List	Capacity	Unit price (VND)
Food	Breakfast	Banh Mi	1	30.000
Food	Drink	Apple juice	1	25.000
Food	Lunch	Braised meat	1	30.000
Facilities	Spa	-	1	300.000
			Total	

Room	25.440.000
Service	385.000
VAT (10%)	2.544.000 + 38.500
Total (VND)	28.407.500
Room deposit (30%)	7.632.000
Amount Due (Total - Deposit)	20.775.500

Customer name*

Phone number*

ID card number*

Children* (<1.2m) Adult

Payment*

Email

Notes

Description: Displays detailed billing for the stay and services.


From: Opened from Checkout Screen.

To: Payment confirmation → Booking closed.

	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
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7.6. Cancel



Cancel

24th August 2025

Lee | Manager

Booking

Check in

Check out

Cancel booking

Service

Room management

Search customer

Enter customer name or phone number

Filter

Cancel

Customer Name	Phone Number	Room Number	Capacity	Type	Check-in (Today)	Check-out
Nguyễn Văn A	0912345678	101	2	Standard	24-08-2025	27-08-2025
Trần Thị Bích	0987654321	102	1	VIP	24-08-2025	29-08-2025
Lê Hoàng C	0901111222	201	3	Standard	24-08-2025	26-08-2025
Phạm Minh D	0933334444	202	2	Standard	24-08-2025	30-08-2025
Hoàng Gia E	0975556666	301	1	VIP	24-08-2025	25-08-2025
Đỗ Thảo F	0927777888	302	3	Standard	24-08-2025	28-08-2025
Vũ Hùng G	0949999000	401	2	VIP	24-08-2025	31-08-2025
Bùi Lan H	0961111222	402	1	Standard	24-08-2025	26-08-2025
Trịnh Quốc I	0953333444	501	3	Standard	24-08-2025	02-09-2025
Lâm Thu J	0915555666	502	2	VIP	24-08-2025	29-08-2025

Description: Used to cancel an existing booking.

From: Main Menu → Cancel Booking.


To: Updates system and frees room in Room Management.

	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
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7.7. Service

7.7.1 Service - Food



Booking

Check in

Check out

Cancel booking

Service

Room management

Service

24th August 2025

Lee | Manager

Food

Facilities

Check

Process

Menu

Note

Breakfast

Banh Mi

30.000đ

- 1 +

Pho

50.000đ

- 0 +

Noodle

35.000đ

- 0 +

Drink

Apple juice

25.000đ

- 1 +

Water

10.000đ

- 0 +

Coca

20.000đ

- 0 +

Lunch

Rice

20.000đ

- 0 +

Braised meat

30.000đ

- 1 +

Fried fish

40.000đ

- 0 +

Dinner

Rice

20.000đ

- 0 +

Braised meat

30.000đ

- 0 +

Fried fish

40.000đ

- 0 +

Description: Manage extra services offered by the hotel (food & facilities).


From: Main Menu → Services.

To: Linked to Checkout Form for 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
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7.7.2. Service - Facilities



Booking

Check in

Check out

Cancel booking

Service

Room management

Service

24th August 2025

Lee | Manager

Food

Facilities

Check

Process

Leisure and business

Note

Spa

Body Massage - Foot Massage - Hair Care Treatment

(one ticket for all service)

300.000d

- 1 +

Opening hours: 10.30 am – 00.00 am

Room

Meeting rooms

Business meeting room with capacity of 10 - 20 people, food service, large screen TV and relax music.

500.000d

- 0 +

(once ticket per day)

Fitness Centre

Equipment includes: Dumbbells and barbells, Multi-function squat rack, Benchpress equipment and another training machine for full bodyweight training, Treadmills, Stationary bike, Elliptical trainer and more

100.000d

- 0 +

Opening hours: 06.00 am – 10.00 pm

Transfer

Airport pick up - drop off

Hotel personnel holding a placard with the guest's name on will await at the airport terminal upon the guest's arrival

150.000d

- 0 +

(one ticket for one people)

Description: Manage extra services offered by the hotel (food & facilities).


From: Main Menu → Services.

To: Linked to Checkout Form for 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
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7.8. Room management



Booking

Check in

Check out

Cancel booking

Service

Room management

Room management

24th August 2025

Lee | Manager

Booking (today)
10

Check-in (today)
50

Check-out (today)
30





















Available (today)
20

Search

Room or customer name or phone number

Filter

Search

Room	Type	Availability	Rate	Check-in	Check-out	Action
101	Standard	Available	1.200.000	24-08-2025	27-08-2025	 
102	VIP	Occupied	2.400.000	24-08-2025	29-08-2025	 
201	Standard	Available	1.200.000	24-08-2025	26-08-2025	 
202	Standard	Occupied	1.200.000	24-08-2025	30-08-2025	 
301	Deluxe	Available	1.900.000	24-08-2025	-	 
302	Deluxe	Occupied	1.900.000	24-08-2025	28-08-2025	 
401	VIP	Available	2.400.000	24-08-2025	31-08-2025	 
402	Standard	Occupied	1.200.000	24-08-2025	26-08-2025	 
501	Standard	Available	1.200.000	24-08-2025	02-09-2025	 
502	VIP	Available	2.400.000	24-08-2025	29-08-2025	 

Room detail

Room

301

Rate

1.900.000

Status

Available

Type

Deluxe

Children

0

Adult

2

Facilities

Free Wi-Fi, Free parking, Fitness center, Restaurant, Non Smoking-room

Reset

Process

Description: Manage hotel rooms (add, update, delete).

From: Main Menu → Room Management.

To: Used by Booking, Check-in, Checkout to update room availability.

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

Design Plan: Hotel Management System	Document Name: Testing document	SWD/Form No.08/TD/Ver1.0
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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

	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: 37 of 48

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
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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)
	Project Group No:	LE THANH NHAN
Signature		
Date		

Design Plan: Hotel Management System	Document Name: Final checklist	SWD/Form No.09/FC/Ver1.0
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25	Overall stability: Application does not crash under heavy or repetitive operations	
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	Prepared by (Student)	Approved by (Faculty)
	Project Group No:	LE THANH NHAN
Signature		
Date		

Design Plan: Hotel Management System	Document Name: Task Sheet	SWD/Form No.08/TS/Ver1.0
Effective Date: 15-01-2025	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	01/01/2002	01/01/2002	5	OK	
2					01/01/2002	01/01/2002	5	OK	
3		User			Checkin	01/01/2002	01/01/2002	5	OK
4						01/01/2002	01/01/2002	5	OK
1	Phạm Đăng Vinh	Admin	Room management Service management	Service_Management Room_Management	01/01/2002	01/01/2002	5	OK	
2					01/01/2002	01/01/2002	5	OK	
3					01/01/2002	01/01/2002	5	OK	
4		User			01/01/2002	01/01/2002	5	OK	
1	Nguyễn Hoàng Phúc	Admin		Accout_Management	01/01/2002	01/01/2002	5	OK	
2					01/01/2002	01/01/2002	5	OK	
3		User			Check-out	01/01/2002	01/01/2002	5	OK
4					Staff management	01/01/2002	01/01/2002	5	OK
1	Lê Quang Huy	Admin		Booking_Management Customer_Management	01/01/2002	01/01/2002	5	OK	
2					01/01/2002	01/01/2002	5	OK	
3		User			Booking	01/01/2002	01/01/2002	5	OK
4					Cancel	01/01/2002	01/01/2002	5	OK

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

Backcover