

PHASE II: HOTEL BOOKING SYSTEM

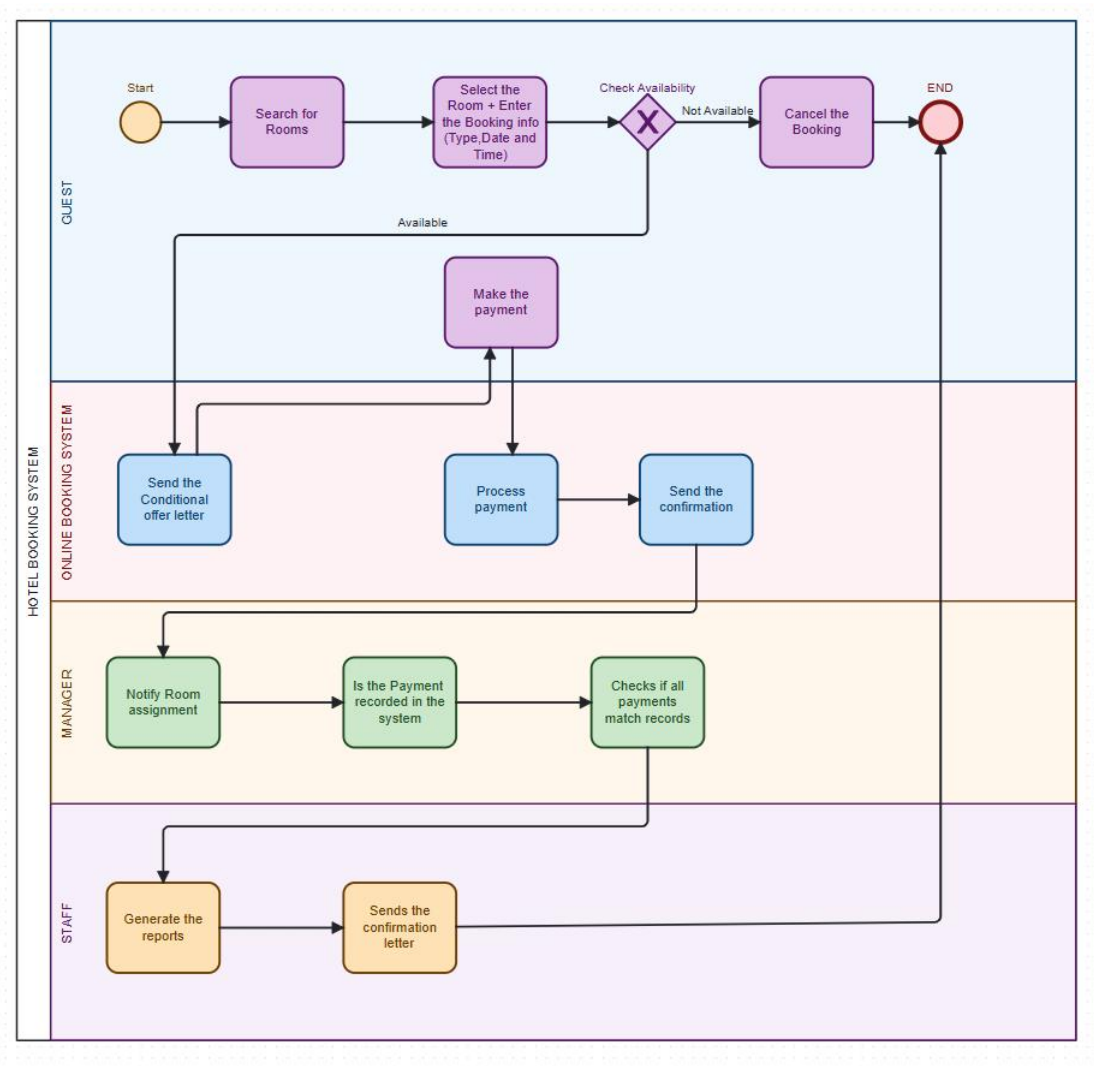
BUSINESS PROCESS MODELING.

Project Title: Hotel Booking System

Course: PL/SQL Capstone Project (INSY 8311)

Lecturer: Eric Maniraguha

Phase 2 Focus: Understanding and modeling how the system works before building the database



◆ Introduction

In this phase, we were asked to model a real-world **business process** that shows how information moves between people and systems. This is part of **Management Information Systems (MIS)**.

The main goal is to **visualize how our hotel booking system works** — step by step — and to understand how different users interact with it. We used a **process diagram with swim-lanes** to clearly show which part is done by the **Guest, System, Manager, or Staff**.

This helps us:

- Know what the system should do.
- Plan how the database will support each activity.
- Make sure everyone's role is clear.

◆ Explaining the Diagram Step by Step

The diagram is divided into **four swim-lanes**. Each swim-lane shows the actions done by a specific user or system.

1. Guest (Top Lane)

This is the person who wants to book a room.

- i. Start:** The guest begins the process.
- ii. Search for Rooms:** The guest looks for available rooms on the hotel's website.
- iii. Select Room + Enter Booking Info:** They choose a room and enter the booking details (type, date, time).
- iv. Check Availability:** The system checks if the selected room is available.

- v. ✗ If **not available**, the guest gets an option to **Cancel the Booking** → and the process ends.
- vi. ✔ If **available**, the guest is allowed to **Make the Payment**.

2. Online Booking System

This is the system that works in the background to process information and automate tasks.

- i. **Send Conditional Offer Letter:** After availability is confirmed, the system sends a conditional offer to the guest.
- ii. **Process Payment:** The system processes the payment made by the guest.
- iii. **Send Confirmation:** If the payment is successful, a confirmation is sent to the guest and the manager.

This part of the system automates most of the work and helps the hotel respond quickly.

3. Manager

The manager handles the back-end tasks to make sure everything is correct.

- i. **Notify Room Assignment:** The manager assigns the booked room to the guest.
- ii. **Check if Payment is Recorded:** The manager checks if the payment is shown in the system.
- iii. **Verify Records:** The manager also checks that the payment matches what is recorded in their official records.

This ensures there are no mistakes or missing payments.

4. Staff

The staff finalize the work and help with reporting.

Generate Reports: Staff create reports based on bookings and payments.

These reports help with planning and analysis.

Send Final Confirmation Letter: Staff send a final confirmation to the guest after everything is confirmed.

◆ **Why This Process is Useful for MIS**

This process supports **Management Information Systems (MIS)** in several ways:

- i. **Improves decision-making:** Managers can trust the system to give real-time updates.
- ii. **Automates tasks:** No need to do things manually like confirming payments or sending emails.
- iii. **Tracks data:** Reports are generated automatically, which helps the hotel analyze performance.
- iv. **Clear roles:** Everyone (guest, manager, staff) knows what they should do.

Conclusion

To sum it up, **this diagram clearly shows how the hotel booking process works** — from when a guest starts searching for a room to the final confirmation by staff. By using **swimlanes**, we made it easy to understand who does what.

This phase is very important because:

- It helps us design the system properly.

- It shows us how to organize our tables and logic in the next phase.
- It improves how the hotel works by making everything smooth and automatic.

Understanding this process will guide us as we start creating our database using PL/SQL in the coming phases.