The system shall allow the guests to search for available rooms by room type, check-in and check-out dates and price range through the OTAs or by the Mobile Guest Portal.

UC Name	*Search for Available Rooms (OTA + Mobile Guest Portal) UC-001*
Summary	*This use case describes the process of a user searching for available rooms through Online Travel Agencies (OTA) or through the Mobile Guest Portal.*
Dependency	
Actors	*Primary Actor: Guest* *Secondary Actor: OTA (e.g. Booking.com, Expedia),*
Preconditions	*1.The Guest has access to an OTA.* *2. The Hotel's room availability is synced with OTA's and is up-to-date* *3. The Mobile Guest Portal is operating.*
Description of the Main Sequence	● ***Step 1:*** *Guest visits OTA or the Mobile Guest Portal.* ● ***Step 2:*** *Guest enters search criteria and specifies room type, check-in and check-out dates, price range.* ● ***Step 3:*** *The system processes the request and retrieves available rooms based on the search criteria.* ● ***Step 4:*** *The system returns a list of available rooms.* ● ***Step 5:*** *OTA or the Mobile Guest Portal (based on where the guest is searching from) displays the list of available rooms to the guest.* ● ***Step 6:*** *Guest selects their preferred room.* ● ***Step 7:*** *If Guest searches from OTA, Guest gets redirected to the Mobile Guest Portal with pre-filled room select details. If otherwise, Guest remains in the Mobile Guest Portal.* ● ***Step 8:*** *Guest continues to complete booking.*
Description of the Alternative Sequence	***Step 4a - No Rooms Available:*** ● *Step 1: The system finds no available rooms that match the guest's criteria.* ● *Step 2: The system displays an error message with the message that there were no available rooms that match the specified criteria and suggests the guest to specify alternative criterias.*
Non functional requirements	***Performance:*** *The search shouldn't take longer than 3 seconds.*
Postconditions	1. *Guest is either redirected from the OTA or has searched directly*

	in the Mobile Guest Portal. 2. *Guest has selected a room and can proceed with booking.*

The system shall allow the guests to complete their booking on the Mobile Guest Portal either by starting a direct booking or by including the selected room from OTAs, guest account creation or login, room selection and entry of personal and payment details. The system shall then send the request for approval to the receptionist through the Mobile Guest Portal.

UC Name	*Guest Books on Mobile Guest Portal* *UC-002*
Summary	*This use case describes the process of the guest that completes booking on the Mobile Guest Portal directly or when redirected from the OTA*
Dependency	
Actors	*Primary Actor: Guest* *Secondary Actor: Receptionist*
Preconditions	1. *Either:* a. *Guest has started direct booking on the Mobile Guest Portal and has selected a room.* b. *Guest is redirected from the OTA to the Mobile Guest Portal with the selected room from the OTA.* 2. *Mobile Guest Portal is operating.*
Description of the Main Sequence	● ***Step 1:*** *Guest views booking summary that contains the selected room, dates and price from the Mobile Guest Portal.* ● ***Step 2:*** *If the guest is not logged in, the system prompts the guest to either login or create a new account.* ● ***Step 3:*** *The system validates the account details and then proceeds.* ● ***Step 4:*** *The guest enters personal and payment details and submits the booking requests.* ● ***Step 5:*** *The system validates the personal and payment details.* ● ***Step 6:*** *Upon successful verification, the system submits*

	the booking request to the receptionist ● ***Step 7:*** *The receptionist receives a notification for the new booking request* ● ***Step 8:*** *The receptionist reviews the booking details (guest details, room availability, personal and payment details).* ● ***Step 9:*** *The receptionist approves the booking request.*
Description of the Alternative Sequence	***Step 3a - Invalid Personal and Payment Details*** ● *If the personal or payment details provided by the guest are incorrect, then the system displays to the guest an error message that the details provided are not valid.* ● *The system prompts the user to enter those details again until the details are approved from the system and can proceed to the next step.* ***Step 8a - Room becomes Unavailable when Receptionist is reviewing.*** ● *The system checks room availability when the Receptionist reviews the request.* ● *If the room that is selected from the guest is no longer available, the receptionist has two options:* ○ *Suggest alternative rooms with similar criterias to the guest.* ○ *Reject the booking request.* ● *If an alternative room is offered, Guest receives a notification about the new booking suggestion.* ● *Guest either:* ○ *Accepts the booking request with the updated room.* ○ *Rejects the booking request with the updated room.*
Non functional requirements	***Performance:*** *The booking requests shall be processed within 2 seconds after submission.* ***Scalability:*** *In transit, guest search data should be encrypted.* ***Availability:*** *The Mobile Guest Portal and OTA integration should maintain 99.9% uptime*
Postconditions	1. *The receptionist has approved the booking.* 2. *The system confirms the booking and notifies the guest.* 3. *The room is reserved in the system.*

The system shall allow the guest to cancel a booking before check-in.

UC Name	*Guest Cancels Booking from Check-In* *UC-003*
Summary	*This use case describes the process of the guest cancelling a booking before check-in.*
Dependency	
Actors	*Primary Actor: Guest*
Preconditions	1. *The guest has already booked a room.* 2. *The guest is already logged into the Mobile Guest Portal.* 3. *The booking is within the allowed cancellation period* 4. *Mobile Guest Portal is operating.*
Description of the Main Sequence	● ***Step 1:*** *The guest accesses their booking details in the Mobile Guest Portal* ● ***Step 2:*** *The guest selects the option to cancel the booking.* ● ***Step 3:*** *The system verifies if the booking is within the allowed cancellation frame.* ● ***Step 4:*** *If a cancellation fee applies based on the hotel's policy, the system calculates it.* ● ***Step 5:*** *The system displays the cancellation fee to the user.* ● ***Step 6:*** *Guest chooses to accept the cancellation.* ● ***Step 7:*** *The cancellation fee is charged to the guest's stored payment method in the booking details.* ● ***Step 8:*** *The system cancels booking.* ● ***Step 9:*** *A cancellation confirmation notification is sent to the guest.*

	● ***Step 10:*** *The system marks the room as available.*
Description of the Alternative Sequence	***Step 4a - No Cancellation Fee*** 1. *If the guest cancels with a no cancellation fee policy, the system confirms no cancellation fee is required.* 2. *System proceeds with cancelling the booking without charging the Guest.* 3. *A cancellation confirmation notification is sent to the guest.*
Non functional requirements	***Usability:*** *The cancellation process should be user-friendly and require minimal steps.* ***Scalability:*** *The system should handle multiple cancellations simultaneously without delays or errors.* ***Availability:*** *The cancellation feature should be available 24/7 to allow guests to cancel at any time. In case of a system failure, the cancellation process should be queued when the system is back up again.*
Postconditions	1. *Booking is successfully cancelled* 2. *The cancellation fee is charged, if applicable.* 3. *The guest receives a confirmation notification.* 4. *The room is marked as available again.*

The system shall allow the Finance Team to calculate, process, and manage staff payroll, including tax deductions, bonuses, and compliance, overseen by the General Manager.

UC Name	*Finance Team Processes Staff Payroll* *UC-004*
Summary	*This use case case describe the process of the finance team processing staff payroll, with the General Manager as observer*
Dependency	
Actors	*Primary Actor: Finance Team* *Secondary Actor: General Manager*
Preconditions	1. *Finance Team is logged into the system and has permission*

	to process staff payroll. 2. *The system contains salary details for employees, payroll rules, and tax configuration.* 3. *General Manager has access to the payroll management section for review.*
Description of the Main Sequence	● ***Step 1:*** *Finance Team selects "Process Payroll" from the finance team's dashboard.* ● ***Step 2:*** *System shows payroll processing options with salary calculations, taxes, and bonuses and also shows employee salary details.* ● ***Step 3:*** *Finance Team selects the period for the payroll (either monthly or bi-weekly) and reviews all the details of the salary of staff.* ● ***Step 4:*** *Finance team enters or updates bonuses and deductions.* ● ***Step 5:*** *The system automatically calculates total salaries based on tax-rates, compliance rules and hotel policies.* ● ***Step 6:*** *Finance team reviews the payroll summary (checks all calculations for salaries, tax deductions, bonuses and compliance) and submits the payroll for approval.* ● ***Step 7:*** *The General Manager reviews the payroll summary and approves.* ● ***Step 8:*** *When the payroll summary is approved, the system initiates payment distribution based on the payroll.*
Description of the Alternative Sequence	***Step 2a - Missing Employee Salary, Tax data*** ● ***Step 1:*** *If employee salary or tax data is incorrect or missing, the system notifies the Finance Team* ● ***Step 2:*** *Before proceeding to the next step, the Finance Team updates the missing or incorrect data.* ***Step 6a - General Manager Requests Modifications*** ● ***Step 1:*** *General Manager rejects the payroll summary (policy violations, errors) and requests modifications.* ● ***Step 2:*** *The Finance Team receives the General Manager's feedback and makes readjustments to the payroll summary and resubmits.* ***Step 8a - Payment Failure*** ● ***Step 1:*** *If the payroll process fails due to insufficient funds, system failure or bank rejections the system should notify the finance team.* ● ***Step 2:*** *The finance team investigates the issue and reprocesses payment*
Non functional requirements	***Performance:*** *The system should process payroll data and calculations within 2 minutes for a workforce of up to 500*

	employees. ***Availability:*** *The system should be available for payroll processing during working hours and on weekends for urgent payroll adjustments, unless there is planned downtime.* ***Reliability:*** *The system should guarantee 99.9% reliability in calculating and processing payroll without errors.*
Postconditions	● *The payroll summary has been reviewed by the Finance Team and General Manager and approved in accordance to hotel regulations and policies.* ● *The system has initiated the payment distribution process based on the payroll.* ● *All payroll transaction details have been recorded into the system.* ● *Employee records are updated with the final payroll information.*

The system shall allow the Finance Team to generate financial reports, including profit and loss statements, balance sheets, and cash-flow reports.

UC Name	*Track Financial Transactions* *UC-006*
Summary	*This use case describes the process of a finance team tracking all financial transactions in the hotel (guest invoices, staff payroll) within the system.*
Dependency	
Actors	***Primary Actor:*** *Finance Team*
Preconditions	1. *Finance Team is logged into the system and has permission to track financial transactions.* 2. *The system's financial data is up-to-date.*
Description of the Main Sequence	● ***Step 1:*** *Finance Team selects "Financial Transactions" from the finance team's dashboard.* ● ***Step 2:*** *The finance team selects a transaction type to track from a list of transaction types (guest invoices, staff payroll).* ● ***Step 3:*** *The system displays a list of transactions of the selected type with their relevant details.* ● ***Step 4:*** *Finance Team can filter from the list transactions based on date, amount, or specific guests or staff.* ● ***Step 5:*** *The system displays the list of filtered transactions.* ● ***Step 6:*** *The Finance Team clicks on any transaction to view more detailed information about it (e.g. invoice breakdown for guest invoices and payroll deductions for staff payroll).*
Description of the Alternative Sequence	● ***Step 5a - No Transactions found based on filter*** ○ *If there are no transactions found based on filter criteria, the system displays a message that no transactions were found.* ○ *The finance team modifies the filters to broaden the search.*
Non functional requirements	***Reliability:*** *The system should have 99.9% reliability in displaying accurate and up-to-date financial transaction information.* ***Activity:*** *The system shall maintain an immutable audit log of all actions performed by the finance team.* ***Performance:*** *The system should display financial transactions*

	within 3 seconds of the request.
Postconditions	1. *The Finance team has reviewed and tracked all relevant financial transactions as per the search criteria they specified.* 2. *The system logs every action performed by the Finance Team for traceability.*

The system shall allow the Finance Team to generate financial reports, including profit and loss statements, balance sheets, and cash-flow reports.

UC Name	*Generate Financial Reports* *UC-005*
Summary	*This use case case describe the process of the finance team generating financial reports, including profit and loss statements, balance sheets, and cash-flow reports*
Dependency	
Actors	*Primary Actor: Finance Team*
Preconditions	3. *Finance Team is logged into the system and has permission to generate financial reports.* 4. *The system's financial data is up-to-date.* 5. *The system has predefined templates for each type of financial statement.*
Description of the Main Sequence	● ***Step 1:*** *Finance Team selects "Generate Financial Reports" from the finance team's dashboard.* ● ***Step 2:*** *The system presents the options for report types (profit and loss, balance sheets, cash flow reports).* ● ***Step 3:*** *The finance team selects the report type to generate and the date range (e.g. quarterly, annually) and confirms the report generation.* ● ***Step 4:*** *The system retrieves the financial data based on the selected parameters and processes the information.* ● ***Step 5:*** *The system generates the report and displays it to the Finance Team in a readable format.* ● ***Step 6:*** *The Finance Team has the option to export the report to PDF or Excel or can print it.*
Description of the Alternative Sequence	● ***Step 5a:*** ○ *If the system encounters a failure during the generation of the report, the Finance Team is notified.* ○ *The Finance Team chooses to retry with the report generation again.*

Non functional requirements	***Scalability:*** *The system should handle the generation of financial reports for any number of financial periods without performance degradation.* ***Security:*** *Financial data and reports must be encrypted both in transit and at rest to protect sensitive information.* ***Performance:*** *Reports with data from longer periods (e.g., 5+ years) should be generated within 30 seconds.*
Postconditions	3. *Financial report has been generated successfully, and is made available in a selected format or for printing.* 4. *The system logs the report generation activity.*