# **Product Backlog**

# **High Priority**

- **US11: Manage Hotels:** As an Admin, I want to add and manage hotels within the system so that hotel information is accurate and reflective of available inventory
  - **US11.1:** Provide an intuitive interface for admins to add new hotels with necessary details like name, location, contact information, and amenities.
  - **US11.2:** Enable updating and editing of existing hotel information to ensure accuracy.
  - US11.3: Allow removal of hotel listings to maintain an up-to-date inventory.
- US09: Managing Rooms: As an Admin, I want to add and manage rooms so that I can optimise usage and costs
  - US09.1: Allow detailed entry of new room information including type, price, capacity, and special features.
  - US09.2: Facilitate easy updates to existing room details to keep information current.
  - **US09.3:** Provide functionality to remove rooms that are no longer available or in service.
- US12: Manage Accounts: As an Admin, I want to add, update, or remove user accounts so that I can ensure account information is accurate, secure, and up-to-date.
  - US12.1: Allow the creation of new user accounts so that I can grant system access to authorized users.
  - **US12.2:** Enable updating of existing user details so that I can keep account information current and accurate.
  - US12.3: Provide functionality to remove user accounts so that I can maintain security and restrict access when necessary.
  - **US12.4:** Ensure that all account modifications are logged so that I can track changes for auditing purposes.

- **US02: Booking a Hotel Room:** As a Guest, I want to securely book a hotel room in real-time so that I have my accommodation confirmed to my liking
  - US02.1: Display comprehensive room details, including images, descriptions, pricing, and available dates.
  - US02.2: Offer guests the ability to select additional services such as breakfast, airport transportation, or special accommodations.
  - US02.3: Issue immediate booking confirmations and receipts upon successful payment transactions to assure guests of their reservations.
- US08: Register/Login: As a User, I want to authenticate myself by logging in or creating a new account through signup so that I can book a room:
  - US08.1: Provide a registration option for new users so that I can create an account to access hotel booking services.
  - **US08.2:** Enable secure login with valid credentials so that I can access my account safely.
  - US08.3: Implement verification via a PIN for new signups so that I can ensure account security.
  - US08.4: Notify users of successful login so that I can confirm access to my account.
  - US08.5: Redirect users to the homepage upon successful authentication so that I can start browsing and booking rooms immediately.

# **Medium Priority**

- US01: Searching and Filtering Hotels: As a Guest, I want to search and filter hotels so that I can quickly find suitable accommodation.
  - US01.1: Allow guests to search hotels by entering location, check-in/check-out dates, and specific preferences (room type, budget, etc.).
  - **US01.2:** Enable filtering of search results based on amenities (Wi-Fi, breakfast, swimming pool, etc.) to enhance guest convenience.
  - US01.3: Provide sorting options by price, user ratings, or proximity to major landmarks or airports to streamline decision-making.
- **US13: Adjust Prices:** As Hotel Management, I want to modify room pricing so that I can maintain competitive pricing and manage revenue effectively.

- US13.1: Allow real-time adjustments to room pricing so that I can respond to changing market conditions.
- US13.2: Provide an option to set automatic pricing rules based on predefined conditions so that I can streamline pricing updates.
- US13.3: Ensure price changes are logged and documented so that I can maintain a history of adjustments for auditing and analysis.
- **US03: Managing Bookings:** As a Guest, I want to manage my bookings so that I can adjust my travel plans easily and avoid miscommunication with the Hotel
  - US03.1: Provide guests with easy access to view their booking history and upcoming reservation details.
  - US03.2: Implement automated notifications via email or SMS to inform guests promptly of any booking changes, modifications, or cancellations.
- US010: Viewing Booking Data: As Hotel Staff, I want to access detailed booking data so that I can improve customer service and operational management.
  - US010.1: Facilitate quick retrieval of booking information based on guest name, booking dates, or room numbers for efficient customer service.
  - US010.2: Provide access to detailed guest profiles to personalize guest services and improve customer satisfaction.
- **US15: Process Payment:** As Hotel Management, I want to process and verify payments so that I can ensure all financial transactions are handled securely and accurately.
  - US15.1: Integrate with secure payment gateways so that I can process transactions reliably.
  - US15.2: Validate and confirm payment details before processing so that I can prevent errors or fraud.
  - **US15.3:** Update booking statuses automatically upon successful payments so that I can ensure accurate records.
  - US15.4: Maintain detailed logs of all transactions so that I can support auditing and financial reconciliation.

# **Low Priority**

- **US04: Providing Feedback:** As a Guest, I want to submit feedback about my stay so that service quality can be enhanced
  - US04.1: Allow guests to submit detailed reviews and ratings for hotels and rooms post-stay.
  - **US04.2:** Enable uploading of multimedia (photos/videos) with reviews to enhance feedback authenticity and usefulness.
  - US04.3: Provide the option for guests to edit or update previously submitted reviews
- **US014: Generating Reports:** As Hotel Management, I want to generate detailed performance reports so that I can monitor progress
  - US014.1: Generate comprehensive occupancy and revenue reports to help management analyze performance.
  - US014.2: Allow reports to be exported in widely used formats such as Excel and PDF for better accessibility and review.
- US05: Facilitating Group Bookings: As a Travel Agent, I want to manage bulk room reservations so that I can efficiently arrange group bookings
  - **US05.1:** Enable travel agents to manage bulk reservations efficiently.
  - US05.2: Allow easy assignment and management of individual rooms within group reservations.
  - US05.3: Implement a flexible system for applying and managing group discounts.
- US06: Selecting Favourites/ Adding to the WishList: As a Guest, I want to select and save hotels or specific rooms for future bookings so that I can reduce searching and filtering time
  - **US06.1:** Allow guests to add hotels or rooms to their favourites so that I can quickly access preferred options for future bookings.
  - **US06.2:** Enable easy removal of hotels or rooms from the favourites list so that I can manage my preferences efficiently.
  - **US06.3:** Ensure favourites are accessible in a dedicated tab so that I can conveniently review my saved options anytime.

- US07: Enrolling in Loyalty Program: As a Guest, I want to enroll in and participate in the loyalty program so that I can earn and redeem points or coupons for future bookings.
  - **US07.1:** Provide an option for eligible guests to join the loyalty program so that I can start accumulating rewards.
  - **US07.2:** Notify guests about their loyalty status and available rewards so that I can stay informed about my benefits.
  - **US07.3:** Allow guests to redeem earned points or coupons during bookings so that I can take advantage of my loyalty benefits.
- US08: Express Check-In for Returning Guests: As a Returning Guest, I want to check in online before arriving at the hotel so that I can skip the front desk and go straight to my room.
  - US08.1: Allow returning guests with a confirmed booking to check in online via the hotel's website or mobile app.
  - US08.2: Verify the guest's booking and identity through an OTP sent via email/SMS...
  - US08.3: If payment is incomplete, prompt the guest to complete the payment before proceeding with check-in.
  - US08.4: Provide room access details (digital key code or pickup instructions) after successful check-in

# **Structured Specifications**

# **US01: Searching and Filtering Hotels**

## **US01.1: Searching Hotels**

Pre-condition: User inputs valid search criteria.

Post-condition: Hotels matching criteria are displayed.

Normal Flow: Enter location, dates  $\rightarrow$  Search  $\rightarrow$  Display results.

Alternative Flow: Notify if no results are found.

## **US01.2:** Filtering Hotels by Amenities

Pre-condition: Hotels are listed from the initial search.

Post-condition: Filtered hotel results are displayed.

Normal Flow: Select amenities  $\rightarrow$  Apply filter  $\rightarrow$  Display updated results.

Alternative Flow: Alert if no matching amenities are found.

# **US01.3: Sorting Hotels**

Pre-condition: Hotels are listed.

Post-condition: Hotels are sorted as per user choice.

Normal Flow: Choose sorting criteria  $\rightarrow$  Display sorted results.

Alternative Flow: Default sorting if criteria are unspecified.

# **US02: Booking a Hotel Room**

## **US02.1: Display Room Details**

Pre-condition: User selects a hotel.

Post-condition: Comprehensive room details are displayed.

Normal Flow: Select hotel  $\rightarrow$  View room details  $\rightarrow$  Display images, descriptions, and pricing.

Alternative Flow: Notify if no rooms are available.

### **US02.2: Selecting Additional Services**

Pre-condition: User is in the booking process.

Post-condition: Selected additional services are added to the booking.

Normal Flow: Choose additional services  $\rightarrow$  Confirm selection  $\rightarrow$  Update booking summary.

Alternative Flow: Notify if service is unavailable.

## **US02.3: Booking Confirmation**

Pre-condition: Payment is successfully processed.

Post-condition: Booking confirmation and receipt are generated.

Normal Flow: Process payment  $\rightarrow$  Generate confirmation  $\rightarrow$  Send receipt via email/SMS.

Alternative Flow: Notify if payment fails.

# **US03: Managing Bookings**

## **US03.1: Viewing Booking History**

Pre-condition: User is logged in.

Post-condition: Booking history is displayed.

Normal Flow: Navigate to bookings → View past and upcoming reservations.

Alternative Flow: Notify if no booking history is available.

#### **US03.2: Automated Notifications**

Pre-condition: A booking is modified.

Post-condition: User receives a notification.

Normal Flow: Update booking  $\rightarrow$  Send notification via email/SMS.

Alternative Flow: Notify if the message fails to send.

# **US04: Providing Feedback**

## **US04.1: Submitting Reviews**

Pre-condition: User has completed their stay.

Post-condition: Review is submitted successfully.

Normal Flow: Select stay  $\rightarrow$  Enter review  $\rightarrow$  Submit.

Alternative Flow: Notify if submission fails.

### **US04.2: Uploading Multimedia**

Pre-condition: User is submitting a review.

Post-condition: Photos/videos are attached to the review. Normal Flow: Select media → Upload → Attach to review.

Alternative Flow: Notify if the upload fails.

## **US04.3: Editing Reviews**

Pre-condition: User has submitted a review. Post-condition: Updated review is saved.

Normal Flow: Locate review  $\rightarrow$  Edit content  $\rightarrow$  Save changes.

Alternative Flow: Notify if editing is restricted.

# **US05: Facilitating Group Bookings**

#### **US05.1: Bulk Reservations**

Pre-condition: Travel agent is logged in.

Post-condition: Group reservation is successfully created.

Normal Flow: Enter booking details  $\rightarrow$  Assign rooms  $\rightarrow$  Confirm booking.

Alternative Flow: Notify if room allocation is unavailable.

## **US05.2: Managing Assigned Rooms**

Pre-condition: Group booking exists.

Post-condition: Individual room assignments are updated.

Normal Flow: Select booking  $\rightarrow$  Update room assignment  $\rightarrow$  Save changes.

Alternative Flow: Notify if rooms are unavailable.

# **US05.3: Managing Group Discounts**

Pre-condition: Bulk reservation is eligible for a discount.

Post-condition: Discount is applied.

Normal Flow: Apply discount  $\rightarrow$  Confirm price adjustment  $\rightarrow$  Save booking.

Alternative Flow: Notify if the discount is invalid.

# US06: Selecting Favourites/Adding to WishList

### **US06.1: Adding Hotels or Rooms to Favourites**

Pre-condition: User is logged in.

Post-condition: Hotel/room is saved to favourites.

Normal Flow: Select hotel/room  $\rightarrow$  Click add to favourites  $\rightarrow$  Save.

Alternative Flow: Notify if the action fails.

## **US06.2: Removing Hotels or Rooms from Favourites**

Pre-condition: User has items in favourites.

Post-condition: Item is removed from favourites.

Normal Flow: Open favourites  $\rightarrow$  Select item  $\rightarrow$  Remove.

Alternative Flow: Notify if the removal fails.

## **US06.3: Accessing Favourites**

Pre-condition: User is logged in.

Post-condition: Favourites list is displayed.

Normal Flow: Navigate to favourites → View saved hotels/rooms.

Alternative Flow: Notify if the favourites list is empty.

# **US07: Enrolling in Loyalty Program**

### **US07.1: Joining the Loyalty Program**

Pre-condition: User meets eligibility criteria.

Post-condition: User is enrolled.

Normal Flow: Accept invitation  $\rightarrow$  Enroll in program  $\rightarrow$  Receive confirmation.

Alternative Flow: Notify if eligibility criteria are not met.

# **US07.2: Receiving Loyalty Status Updates**

Pre-condition: User is enrolled in the program.

Post-condition: Loyalty status and rewards are displayed.

Normal Flow: Log in  $\rightarrow$  Navigate to loyalty section  $\rightarrow$  View status.

Alternative Flow: Notify if no loyalty data is available.

# **US07.3: Redeeming Points or Coupons**

Pre-condition: User has available points.

Post-condition: Discount is applied to the booking.

Normal Flow: Select booking  $\rightarrow$  Apply points/coupons  $\rightarrow$  Confirm.

Alternative Flow: Notify if insufficient points.

# US08: Register/Login

### **US08.1: User Registration**

Pre-condition: User provides valid registration details.

Post-condition: Account is successfully created.

Normal Flow: Enter registration details  $\rightarrow$  Submit  $\rightarrow$  Receive verification PIN  $\rightarrow$  Verify PIN  $\rightarrow$ 

Account created.

Alternative Flow: Notify user if registration details are invalid or if the email/phone number is already in use.

## **US08.2: Secure Login**

Pre-condition: User has a registered account.

Post-condition: User is successfully logged in.

Normal Flow: Enter login credentials  $\rightarrow$  Authenticate  $\rightarrow$  Redirect to homepage.

Alternative Flow: Notify user if login credentials are incorrect.

### **US08.3: PIN Verification for Signup**

Pre-condition: User has successfully submitted registration details.

Post-condition: Account is verified and activated.

Normal Flow: System sends verification PIN  $\rightarrow$  User enters PIN  $\rightarrow$  Account activated.

Alternative Flow: Notify user if PIN is incorrect or expired.

### **US08.4: Successful Login Notification**

Pre-condition: User has entered correct credentials.

Post-condition: User receives confirmation of login.

Normal Flow: Authenticate user  $\rightarrow$  Notify successful login  $\rightarrow$  Redirect to homepage.

Alternative Flow: Alert if login is from a new device and require additional verification.

### **US08.5: Homepage Redirection**

Pre-condition: User is successfully authenticated.

Post-condition: Homepage is displayed.

Normal Flow: Authenticate  $\rightarrow$  Redirect to homepage.

Alternative Flow: Redirect user to an onboarding page if first-time login.

# **US09: Managing Rooms**

# **US09.1: Adding New Rooms**

Pre-condition: Admin has the necessary permissions.

Post-condition: Room is successfully added to the system.

Normal Flow: Enter room details  $\rightarrow$  Save  $\rightarrow$  Confirm addition.

Alternative Flow: Notify if required fields are missing.

## **US09.2: Updating Room Details**

Pre-condition: Room exists in the system.

Post-condition: Updated details are saved.

Normal Flow: Select room  $\rightarrow$  Edit details  $\rightarrow$  Save changes.

Alternative Flow: Notify if update fails due to missing or incorrect data.

## **US09.3: Removing Rooms**

Pre-condition: Admin has necessary permissions.

Post-condition: Room is removed from active listings.

Normal Flow: Select room  $\rightarrow$  Remove  $\rightarrow$  Confirm deletion.

Alternative Flow: Notify if the room cannot be deleted due to active bookings.

# **US10: Viewing Booking Data**

# **US10.1: Retrieving Booking Information**

Pre-condition: Hotel staff is logged in.

Post-condition: Booking details are displayed.

Normal Flow: Search by guest name, booking dates, or room number  $\rightarrow$  Display results.

Alternative Flow: Notify if no matching records are found.

## **US10.2: Accessing Guest Profiles**

Pre-condition: Booking exists for the guest.

Post-condition: Detailed guest profile is displayed.

Normal Flow: Select guest name from booking list  $\rightarrow$  View profile.

Alternative Flow: Notify if the profile is incomplete or missing.

# **US11: Manage Hotels**

# **US11.1: Adding New Hotels**

Pre-condition: Admin has necessary permissions.

Post-condition: Hotel is successfully added to the system.

Normal Flow: Enter hotel details  $\rightarrow$  Save.

Alternative Flow: Notify if details are incomplete or if the hotel already exists.

### **US11.2: Updating Hotel Details**

Pre-condition: Hotel exists in the system.

Post-condition: Updated details are saved.

Normal Flow: Select hotel  $\rightarrow$  Edit details  $\rightarrow$  Save changes.

Alternative Flow: Notify if update fails.

## **US11.3: Removing Hotels**

Pre-condition: Admin has necessary permissions.

Post-condition: Hotel is removed from active listings.

Normal Flow: Select hotel  $\rightarrow$  Remove  $\rightarrow$  Confirm deletion.

Alternative Flow: Notify if hotel has active bookings and cannot be removed.

# **US12: Manage Accounts**

# **US12.1: Creating User Accounts**

Pre-condition: Admin is logged in.

Post-condition: User account is created.

Normal Flow: Enter user details  $\rightarrow$  Assign role  $\rightarrow$  Save.

Alternative Flow: Notify if details are invalid.

### **US12.2: Updating User Details**

Pre-condition: User account exists.

Post-condition: Updated details are saved.

Normal Flow: Select user  $\rightarrow$  Edit details  $\rightarrow$  Save.

Alternative Flow: Notify if the update fails.

### **US12.3: Removing User Accounts**

Pre-condition: Admin has necessary permissions.

Post-condition: Account is removed.

Normal Flow: Select user  $\rightarrow$  Remove account  $\rightarrow$  Confirm deletion.

Alternative Flow: Notify if the user has active reservations or permissions preventing deletion.

## **US12.4: Logging Account Changes**

Pre-condition: Any modification is made to a user account.

Post-condition: Change is recorded in the system.

Normal Flow: Admin modifies an account  $\rightarrow$  System logs change.

Alternative Flow: Notify if logging fails due to a system issue.

# **US13: Adjust Prices**

## **US13.1: Modifying Room Pricing**

Pre-condition: Admin has necessary permissions.

Post-condition: Price changes are reflected in the system.

Normal Flow: Adjust pricing  $\rightarrow$  Confirm changes  $\rightarrow$  Save.

Alternative Flow: Notify if the update fails.

## **US13.2: Setting Automated Pricing Rules**

Pre-condition: Admin has access to pricing management.

Post-condition: Automatic pricing rules are applied.

Normal Flow: Define conditions  $\rightarrow$  Save  $\rightarrow$  System updates prices accordingly.

Alternative Flow: Notify if rules conflict with existing settings.

### **US13.3: Logging Price Adjustments**

Pre-condition: Price changes are made.

Post-condition: Adjustments are recorded in the system.

Normal Flow: Modify price  $\rightarrow$  Save  $\rightarrow$  Log entry created.

Alternative Flow: Notify if logging fails.

# **US14: Generating Reports**

# **US14.1: Generating Occupancy and Revenue Reports**

Pre-condition: Admin is logged in.

Post-condition: Report is generated.

Normal Flow: Select report type  $\rightarrow$  Generate  $\rightarrow$  Display.

Alternative Flow: Notify if report generation fails.

# **US14.2: Exporting Reports**

Pre-condition: Report is generated.

Post-condition: Report is downloaded in the selected format.

Normal Flow: Choose format (PDF/Excel)  $\rightarrow$  Export  $\rightarrow$  Download.

Alternative Flow: Notify if export fails.

## **US15: Process Payment**

### **US15.1: Processing Transactions**

Pre-condition: Secure payment gateway is available.

Post-condition: Payment is successfully processed.

Normal Flow: Enter payment details  $\rightarrow$  Process transaction  $\rightarrow$  Confirm booking.

Alternative Flow: Notify if payment fails.

# **US15.2: Validating Payment Details**

Pre-condition: User enters payment details.

Post-condition: Payment is validated.

Normal Flow: System checks card details  $\rightarrow$  Validate with bank  $\rightarrow$  Confirm.

Alternative Flow: Notify if card is declined.

## **US15.3: Updating Booking Status**

Pre-condition: Payment is successful.

Post-condition: Booking status is updated.

Normal Flow: Confirm payment  $\rightarrow$  Update booking record  $\rightarrow$  Notify user.

Alternative Flow: Notify if status update fails.

## **US15.4: Maintaining Payment Logs**

Pre-condition: A transaction is completed.

Post-condition: Transaction is logged for auditing.

Normal Flow: Process payment  $\rightarrow$  Save transaction details.

Alternative Flow: Notify if logging fails.

## **US16: Express Check-In for Returning Guests**

**US16.1:** Online Check-In for Returning Guests

Pre-condition: Guest has a confirmed booking.

Post-condition: Guest is checked in online.

Normal Flow: Enter booking details  $\rightarrow$  Verify identity via OTP  $\rightarrow$  Complete check-in.

Alternative Flow: Display error if booking is invalid or OTP verification fails.

# **US16.2:** Identity Verification via OTP

Pre-condition: Guest initiates online check-in.

Post-condition: Guest identity is verified.

Normal Flow: System sends OTP  $\rightarrow$  Guest enters OTP  $\rightarrow$  Verification success.

Alternative Flow: Prompt for OTP resend if incorrect or expired.

# **US16.3:** Payment Completion Before Check-In

Pre-condition: Guest has an outstanding payment.

Post-condition: Payment is successfully processed.

Normal Flow: Display outstanding amount → Guest completes payment → Proceed with

check-in.

Alternative Flow: Restrict check-in until payment is completed.

## **US16.4:** Room Access Details Delivery

Pre-condition: Guest has successfully checked in online.

Post-condition: Guest receives room access details.

Normal Flow: Check-in confirmed → System sends digital key or pickup instructions.

Alternative Flow: Notify front desk if digital access fails.