

Travel Agency System

Milestone 1

Functional Requirements

- **REQ001** Searching: The system **must allow clients** to search and view available trips. (MUST)
- **REQ002** Booking Trips: The system **must enable clients** to book trips (flights, hotels, or packages). (MUST)
- **REQ003** Clients Data: The system **must store client details** for managing bookings. (MUST)
- **REQ004** Favorites: The system **could allow clients** to save trips for future reference. (COULD)
- **REQ005** Admin Actions: The system **must allow admins** to add, update, and delete trips or services. (Must)
- **REQ006** Invoices: The system **should generate invoices** for bookings. (SHOULD)
- **REQ007** Leaving Reviews: The system **could allow clients** to write reviews or rate trips. (COULD)

- **REQ008 Multi-Language Support**: The system will offer multi-language support in the initial release. (WON'T)
- **REQ009 Notifications**: The system **should notify** clients of booking confirmations and updates via email. (Should)

Non-Functional Requirements

- **REQ010 Security**: The system **must ensure** secure storage of client information. (MUST)
- **REQ011 Performance**: The system **should respond** to user actions within 2 seconds. (SHOULD)
- **REQ012 Scalability**: The system **should support** up to 500 active users. (SHOULD)
- **REQ013 Usability**: The system **must provide** a clean and consistent interface, with clear navigation, accessible help options, and minimal learning curve for both clients and admins. (MUST)
- **REQ014 Reliability**: The system **should be available** 99.9% of the time. (SHOULD)
- **REQ015 Compatibility**: The system **must be compatible** with the latest versions of Chrome, Firefox, Safari, and Edge, ensuring proper rendering and functionality. (MUST)

Use Case Scenarios

- **Use Case 1: Searching**

Actor: Client

Description: Client search trips by the criteria he wants (destination, date, type) and it displays the available trips

Pre-condition: Trips must be available in the database.

Post-condition: Only available trips with the matched criteria appears.

Error Scenario: If no trips match the criteria, the system displays a “No results found” message.

- **Use Case 2: Booking Trips**

Actor: Client

Description: A client selects a trip, provide his details and confirms the booking.

Pre-condition: Client logged in to the system

Post-condition: The booking details are saved, and confirmation is sent.

Error Scenario: If payment details are invalid, the system shows an error and requests correct details.

- **Use Case 3: Clients Data**

Actor: Admin

Description: Client creates account with his personal info (name, address, phone number)

Pre-condition: Client enters registration page

Post-condition: The client's personal details are saved and an account has been created

Error Scenario: If mandatory fields are missing, the system prompts the client to complete them.

- **Use Case 4: Notifications**

Actor: System

Description: System sends notifications for booking confirmations and updates.

Pre-condition: A booking or update action occurs.

Post-condition: Client receives a notification email.

Error Scenario: If the email is undeliverable, the system logs the error and retries.

- **Use Case 5: Admin Actions**

Actor: Admin

Description: An admin logs in, adds/updates/deletes trips

Pre-condition: Admin has valid login credentials.

Post-condition: Trips database is updated

Error Scenario: If the trip details are incomplete, the system shows an error and requests corrections.

- **Use Case 6: Invoices**

Actor: Client (system-generated)

Description: the system generates an invoice with details (cost, services, client info) and sends it to the client.

Pre-condition: A booking has been completed.

Post-condition: An invoice is sent to the client.

Error Scenario: If the invoice generation fails, the system logs the issue and retries.

- **Use Case 7: Reviews**

Actor: Client

Description: Client submits a review and a rating after completing the trip

Pre-condition: Client's trip is completed

Post-condition: Review is stored in the system and displayed for other clients if the admin wants to.

Error Scenario: If the review exceeds allowed length, the system prompts for a shorter review.