

Osaze Ogieriakhi & Monica Kim

CPTS 322

Fall 2024

TravelBuddy

| Functional Requirement | User Story ID | Use Case ID | Description | Test Case ID |
|--|----------------------|--------------------|--|---------------------|
| User Registration/ Profile Creation | US01 | UC01 | Allows users to create a profile with travel preferences. | TC01 |
| Generate Personalized Itinerary | US02 | UC02 | Generates personalized itineraries based on destination and dates. | TC02, TC03, TC04 |
| View Recommended Activities | US03 | UC03 | Displays recommended activities based on the user's itinerary. | TC05, TC06, TC07 |
| Modify Itinerary | US04 | UC04 | Allows users to modify the generated itinerary. | TC08, TC09, TC10 |
| Save Itinerary for Later | US05 | UC05 | Saves the generated itinerary for future reference. | TC11, TC12, TC13 |

User Story ID: US01 User Registration/Login

As a user, I want to create an account so that I can access personalized features of the bookstore.

User Story ID: US01 Create User Profile

As a user, I want to create a profile with my travel preferences **so that** I can receive personalized travel itineraries.

Scenario 1: User creates a new profile

Given the user is on the "Sign Up" page

When the user inputs their name, email, and preferences

And clicks the "Create Profile" button

Then a new profile is created And the user is redirected to their dashboard

Scenario 2: User inputs invalid email

Given the user is on the “Sign Up” page

When the user inputs an invalid email address and clicks the “Create Profile” button

Then an error message is displayed stating that the email is invalid

And the profile is not created

Scenario 3: User leaves required fields blank

Given the user is on the “Sign Up” page

When the user leaves the name or email field blank and clicks the “Create Profile” button

Then an error message is displayed asking the user to fill in all required fields

And the profile is not created

User Story ID: US02 Generate Personalized Itinerary

As a user, I want to input my destination and travel dates, **so that** I can get a personalized itinerary for my trip.

Scenario 1: User generates a personalized itinerary

Given the user is logged in

And is on the "Itinerary Generator" page

When the user selects a destination and travel dates

And clicks the "Generate Itinerary" button

Then a personalized itinerary is displayed based on user preferences

Scenario 2: User inputs invalid travel dates

Given the user is logged in

And is on the “Itinerary Generator” page

When the user inputs invalid travel dates

And clicks the “Generate Itinerary” button

Then an error message is displayed stating the travel dates are invalid

Scenario 3: No preferences available for destinations

Given the user is logged in

And is on the “Itinerary Generator” page

When the user selects a destination for which no personalized preferences are available

Then a default itinerary is generated with general recommendations

User Story ID: US03 View Recommended Activities

As a user, I want to view activity recommendations based on my itinerary, **so that** I can choose activities that fit my preferences.

Scenario 1: User views recommended activities

Given the user has a generated itinerary
When the user navigates to the "Activities" section of their itinerary
Then a list of recommended activities is displayed
And the activities are based on the user's travel preferences

Scenario 2: User filters recommended activities

Given the user has a generated itinerary
When the user applies filters to narrow down activity recommendations
Then the list of recommended activities is updated based on the applied filters

Scenario 3: No recommended activities available

Given the user has a generated itinerary
When the system cannot find any recommended activities based on user's preferences
Then a message is displayed stating no activities are available

User Story: US04 Modify Itinerary

As a user, I want to modify the AI-generated itinerary, **so that** I can customize it to better fit my needs.

Scenario 1: User modifies the itinerary

Given the user has a generated itinerary
When the user clicks the "Edit Itinerary" button
And makes changes to the itinerary (e.g., adds or removes activities)
Then the modified itinerary is saved
And the updated itinerary is displayed

Scenario 2: User tries to remove all activities

Given the user has a generated itinerary
When the user attempts to remove all activities from the itinerary
Then a warning is displayed informing the user they cannot have an empty itinerary
And the system prompts the user to add at least one activity

Scenario 3: User cancels itinerary modifications

Given the user has a generated itinerary
And has clicked the "Edit Itinerary" button
When the user makes changes but then clicks the "Cancel" button
Then the itinerary remains unchanged

And the original itinerary is displayed

User Story ID: US05 Save Itinerary for Later

As a user, I want to save my generated itinerary, **so that** I can access it later for reference.

Scenario 1: User saves an itinerary for later

Given the user has a generated itinerary

When the user clicks the "Save Itinerary" button

Then the itinerary is saved to the user's profile

And the user can access it later from the "Saved Itineraries" section

Scenario 2: User overwrites an existing saved itinerary

Given the user has a previously saved itinerary

And has generated a new itinerary

When the user clicks the "Save Itinerary" button

And chooses to overwrite the existing saved itinerary

Then the new itinerary replaces the old one in the "Saved Itineraries" section

Scenario 3: User fails to save itinerary due to network issues

Given the user has a generated itinerary

When the user clicks the "Save Itinerary" button but there is a network issue

Then an error message is displayed indicating the itinerary could not be saved

And the system prompts the user to try again later

User stories (linked to functional requirements)

US01: User Registration/Profile Creation

Use Case: User Registration/Profile Creation

- **Actor(s):** Traveler
- **Description:** Allows users to create a profile by providing personal details and travel preferences. This profile is used for personalized recommendations and future interactions with the system.
- **Preconditions:**
 - The traveler does not already have an account.
 - The registration page is accessible.
- **Basic Flow:**
 1. The traveler navigates to the registration page.
 2. The traveler enters personal details (name, email, password, etc.) and travel preferences.
 3. The system verifies the information and creates a user profile.

4. The system confirms successful registration and redirects the traveler to the dashboard.
- **Alternate Flows:**
 - If the email is already registered, the system notifies the traveler and offers a login option.
- **Postconditions:** A new user profile is created and saved, and the traveler is logged in.

US02: Generate Personalized Itinerary

Use Case: Generate Personalized Itinerary

- **Actor(s):** Traveler
- **Description:** Travelers input preferences such as destination and travel dates, and the system generates a personalized itinerary.
- **Preconditions:**
 - The traveler is logged in.
 - The traveler has access to the itinerary creation interface.
- **Basic Flow:**
 1. The traveler selects the “Create Itinerary” option.
 2. The system prompts the traveler to input details (destination, travel dates, preferences).
 3. The traveler submits the information.
 4. The system generates and displays a personalized itinerary based on the provided inputs.
- **Alternate Flows:**
 - If there is insufficient information for the destination, the system suggests alternative locations or activities.
- **Postconditions:** A personalized itinerary is displayed and ready for further actions (e.g., modification or saving).

US03: View Recommended Activities

Use Case: View Recommended Activities

- **Actor(s):** Traveler, System
- **Description:** Displays a list of activities based on the traveler's preferences and the destination selected in the itinerary.
- **Preconditions:**
 - The traveler has an active itinerary.

- **Basic Flow:**
 1. The traveler opens their itinerary.
 2. The system presents a list of recommended activities based on the itinerary details.
 3. The traveler can browse through and select activities for inclusion in the itinerary.
- **Alternate Flows:**
 - If no activities are available, the system informs the traveler and suggests other options.
- **Postconditions:** The traveler views a list of personalized activity recommendations.

US04: Modify Itinerary

Use Case: Modify Itinerary

- **Actor(s):** Traveler
- **Description:** Allows the traveler to modify an existing itinerary by adding, removing, or adjusting activities and travel details.
- **Preconditions:**
 - The traveler has an existing itinerary.
- **Basic Flow:**
 1. The traveler selects the itinerary they wish to modify.
 2. The system displays the current itinerary.
 3. The traveler adds, removes, or edits the details.
 4. The system updates the itinerary accordingly.
- **Alternate Flows:**
 - If modifications conflict with existing bookings, the system prompts the traveler to resolve the issue.
- **Postconditions:** The updated itinerary is saved and displayed to the traveler.

US05: Save Itinerary for Later

Use Case: Save Itinerary for Later

- **Actor(s):** Traveler
- **Description:** Allows the traveler to save a generated itinerary for future reference or modification.
- **Preconditions:**
 - The traveler has created an itinerary.
- **Basic Flow:**
 1. The traveler reviews their itinerary.

2. The traveler selects the “Save Itinerary” option.
 3. The system saves the itinerary to the traveler’s profile.
 4. The system confirms that the itinerary has been successfully saved.
- **Alternate Flows:**
 - If the system fails to save the itinerary due to a technical issue, the traveler is notified to try again later.
 - **Postconditions:** The itinerary is saved in the traveler’s profile for future access.