
Software Requirements Specification

for

<CZ2006>

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Revision History

Name	Date	Reason For Changes	Version

A. Introduction

1.1 Web-based application is designed for couples or individuals to gain ideas for dates more easily and efficiently, by generating itineraries based on users' inputs such as budget, location, interests etc.

B. Functional Requirements

For users who want to generate itineraries

1. Onboarding to Application

1.1 The application shall display introductions to users with graphics and texts.

2. Registration and Login

2.1 The application shall display "login" or "register" at the top right of website.

2.2 The application shall be operating with the user registration.

2.2.1 The application shall allow users to register using email address.

2.3 The application shall be operating without the user registration.

2.3.1 The user shall not be able to access and set personal information without signing in.

2.3.3 Any itineraries generated through users' preferences will not be saved without signing in.

2.4 The application shall generate and send verification code to the user via email.

2.5 The application shall ask users' preferences upon successful registration

2.5.1 The preferences shall include users' home location.

2.5.2 The preferences shall include users' interests.

3. Search Activities

3.1 The browse function shall be open to both logged-in users and guests.

3.2 The application shall allow users to filter based on preferences.

3.2.1 The filter functionality must be able to sift out itineraries using users' interests.

3.2.2 The filter functionality must be able to sift out itineraries using users' preferred budget.

3.2.3 The filter functionality must be able to sift out itineraries using users' preferred location.

3.2.4 The filter functionality must be able to sift out itineraries using users' desired number of pax.

3.2.5 The filter functionality must be able to sift out itineraries using users' desired

3.3 The application shall allow logged-in users to add an itinerary to their favorites.

3.4 The application shall allow logged-in users to save an itinerary to a list.

3.5 The application shall allow logged-in users to edit a saved itinerary.

3.5.1 The edit functionality must be able to add an activity to a saved itinerary.

3.5.2 The edit functionality must be able to remove an activity from a saved itinerary.

3.6 The application shall allow a user to find the nearest parking location of an activity.

4. Create new itinerary

- 4.1 The application shall allow users to select their preferences for itinerary creation.
 - 4.1.1 The preference selection functionality must allow users to select their interests.
 - 4.1.2 The preference selection functionality must allow users to select their preferred budget.
 - 4.1.3 The preference selection functionality must allow users to select their location availability.
 - 4.1.4 The preference selection functionality must allow users to select their desired number of pax.
- 4.2 The application shall generate itinerary plans for users.

5. View Featured Itineraries

- 5.1 The application shall display itineraries that have been saved by users.
 - 5.1.1 Featured itineraries will be based on the number of times users have saved it.

6. View Activities

- 5.1 The application shall display activities that have been saved by users.
 - 5.1.1 Featured activities will be based on the number of times users have favorited it.
 - 5.1.2 Most Popular activities will be based on the activities with the highest number of favorites by users.
 - 5.1.3 Nearest Activities will be based on users' preferred locations.

C. Non-Functional Requirements

For users who want to generate itineraries

1. Usability

- 1.1 The guiding message to get users started.
 - 1.1.1 The introduction shall consist of 3 pages.
 - 1.1.1.1 The first page shall welcome the user.
 - 1.1.1.2 The second page shall explain what each tab does.
 - 1.1.1.3 The third page shall show where the user-login, registration and settings are, and their functions.
 - 1.1.2 The guiding message shall be displayed when the user goes through each of the tabs.
 - 1.1.3 The user shall click the 'NEXT' button to view the next guiding message.
 - 1.1.4 The 'SKIP' choice must be displayed at the bottom for user to skip when the a guiding message is shown.

2. Reliability

- 2.1 APIs shall be implemented.
 - 2.1.1 Carpark Availability API, based on real-time data from Singapore government database, shall be used to get car park capacity.
 - 2.1.2 Google map API shall be used to get location, path, and information.
 - 2.1.3 Singapore Tourism Board API shall be used to get locations and descriptions of

activities.

- 2.1.4 Reminding message shall display when the user signs up with an invalid email address.
- 2.1.5 Reminding message shall display when the user signs up with an email address that has been registered.
- 2.1.6 Reminding message shall be displayed when the user inputs the wrong verification code.
- 2.1.7 Reminding message shall be displayed when the user type two different passwords when setting the password.
- 2.2 The application must not leak user information.
 - 2.2.1 User email address shall not be seen or used by others.
 - 2.2.2 User itinerary plans shall not be seen or used by others to prevent location of user to be exposed.

3. Performance

- 3.1 The application shall take within 3 seconds to load in.
- 3.2 The introduction message shall take within 1 second to load in.
- 3.3 The sign up and sign in page shall take within 1 second to load in.
- 3.4 The verification email shall take within 30 seconds to arrive.
- 3.5 The browsing activities result shall take within 2 seconds to load in
- 3.6 The generation of an itinerary shall take within 2 seconds to load in.
- 3.7 Details about an activity shall take within 2 seconds to load in.
- 3.8 All exception handling message shall take within 0.5 second to load in.
- 3.9 The application shall support at most 100 people using at the same time.
- 3.10 The database shall store at most 1000 users with an estimate of 5 itineraries for each user.