



Vision Document

“The past cannot be changed. The future is yet in your power.” - Unknown

1. Introduction

This project consists of a travel planning software, in which a user can plan a trip somewhere, as part of the Software Quality course in UFRJ, taken during the second semester of 2018.

2. Product Overview

This section will explain the main points concerning the product, such as the business context it is inserted in and the underlying problem it attempts to solve, the capabilities of the product, the technologies it interfaces with, as well as licensing and installation matters.

2.1 Business Opportunity

All year long, millions of people travel around the world, be it for leisure, work, or a handful of other reasons. With this, comes trip planning. Looking up flights, reserving hotels, buying tickets for attractions... While time-consuming, it is a necessary process to any successful trip. As such, a product inserted in this context is relevant to anyone who has ever traveled, and anyone who will still travel in their lives, having, therefore, the potential for huge impact. On the other hand, lots of competition already exist, and exploiting their weaknesses is necessary for a successful product.

2.2 Problem Statement

Planning a trip involves several stages: looking up flight prices for a given destination, searching for a place to stay, deciding what attractions would be nice to visit, estimating the number of days necessary to enjoy those attractions, and so on. This process repeats itself for each destination in the full itinerary, and can even be repeated when changes are made to even one destination, becoming quite complicated. Most products that help in trip planning actually only focus on a single sub-problem (hotel reservations, for instance), so the user still needs to use several different resources to plan a trip. The problem we intend to solve is exactly this one: making the planning process simpler for the traveler by gathering all the necessary information in a single place, and thus reducing the research he needs to perform to



a minimum. Offering a service that integrates all the different parts of planning into a single package is what makes our product unique.

2.3 Product Perspective

The product is built as a web application, made with the JHipster framework. It will interact with a custom database of planes, hotels, cars and attractions, for project purposes. Version control is used through Git/Github and the use of Zenhub for project management.

2.4 Summary of Capabilities

It is a platform that provides simple and seamless trip planning to travelers that can't afford or don't want to spend too much time researching all the details of their trip. The functionalities offered aim to solve most of the problems that a user faces when planning a trip, such as:

- Researching and reserving flights for each destination in the itinerary
- Researching and reserving hotel rooms or other sort of accommodation
- Renting a car
- Looking up attractions and buying tickets online when possible
- Buying insurance

The experience is tailored to each user, meaning they don't need to make use of all the functionalities if they don't require them (eg.: not all users will need to rent a car for a given trip).

2.5 Licensing and Installation

This project is made under the GNU General Public License, as an open source software. As a web application, it doesn't require any sort of installation from the user, being directly usable by anyone through a web browser.

3. Stakeholders and Users

This section will enumerate the main actors whom the project will have an impact on. Stakeholders are here defined as all the actors who have some sort of interaction with the product, be it by using the services offered by the product directly, or by offering services that will be used by the product. Users, on the other hand, are defined as the actors who will directly use the services offered by the product. From this definition we see that all users are stakeholders, but not all stakeholders are users.



3.1 Stakeholders

Several stakeholders are involved in this project:

- Travelers
- Airline Companies
- Lodging Companies
- Car Rental Companies
- Insurance Companies
- Travel Agencies

3.2 Users

Travelers are the main users of the product, as its goal is to help people plan their trips, and all the functionalities are offered with this final objective in mind.

4. Functional Requirements

Code	Functional Requirement Description	Status	Priority
FR01	The system must be capable of registering user accounts.	Proposed	High
FR02	A registered user must be capable of planning a trip with an itinerary, dates and number of passengers.	Proposed	High
FR03	The system must be capable of displaying a list of hotel rooms for reservation according to the trip itinerary.	Proposed	High
FR04	The system must be capable of displaying a list of flights for reservation according to the trip itinerary.	Proposed	High



FR05	The system must be capable of displaying a list of attractions according to the trip itinerary.	Proposed	Medium
FR06	The system must be capable of providing car rental during the trip planning.	Proposed	Medium
FR07	The system must be capable of providing insurance during the trip planning.	Proposed	Medium
FR08	The system must provide a payment method at the end of the planning.	Proposed	High
FR09	A confirmation must be sent to the user after the payment is made.	Proposed	High
FR10	A user must be able to check his past transactions and its information.	Proposed	High

5. Non Functional Requirements

Code	Non Functional Requirement Description	Status	Priority
NFR01	Only accommodation up to 10km from the selected city center is displayed to the user.	Proposed	Medium
NFR02	Only attractions up to 10km from the selected city center is displayed to the user.	Proposed	Medium
NFR03	A user's activity is hidden from all other users.	Proposed	High



NFR04	A user may select the things they want to reserve (flight, accommodation, attractions, car rental, insurance) in whatever order they prefer.	Proposed	Medium
NFR05	The system will connect to a database with information about flights, hotels, attractions, car rentals and insurances available for the selected city.	Proposed	High

6. Business Rules

- The user needs to create an account and login in order to use the service.
- A user needs to specify an itinerary to be able to look up and reserve flights, hotels, attractions, rent cars and buy insurance.
- At least one of the five main functionalities (flight, hotel, attraction, car, insurance) must be defined in order to finish an order.
- At the end of planning, relevant travel information must be given to the traveler.
- A convenience fee will be charged at the moment of the transaction in order for the company to make a profit.

7. Constraints

- User payment information should be used at the time of transaction, and then deleted from the system.
- Users' personal information may not be disclosed to the other involved stakeholders (airline companies, car rental companies, lodging companies, travel agencies and insurance companies).