# PROJECT CHARTER

## GENERAL PROJECT INFORMATION

| PROJECT NAME | PROJECT MANAGER | PROJECT SPONSOR |
|---|---|---|
| Flightly | Vicente Pascoal | Fernando Toniolli |

| EMAIL | TELEPHONE | ORGANIZATIONAL UNIT |
|---|---|---|
| vicente.pascoal@fatec.sp.gov.br | (11) 94517-8847 | Development System Team |

| DEVELOPMENT TEAM | ESTIMATED START DATE | ESTIMATED END DATE |
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| Ágata Cecília, Breno Saraiva, Enzo Dorta, Rodrigo Zanetti e Vinicius Crozato | 08/04/2024 | 04/11/2024 |

| SCRUM MASTER |
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| Vicente Venancio Pascoal |

## PROJECT OVERVIEW

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| PROBLEM | The growing demand for online resources in the travel sector, coupled with the complexity of planning a trip and the lack of certain functionalities on online sites, has led to the need for a more comprehensive solution. This includes the lack of certain filters needed by the user, such as car filters (price, model, brand, economy, capacity, class, type of car (electric or combustion), type of policy, form of payment). A platform for travel planning, offering a range of booking options for flights, accommodation, and cars. Differentiating ourselves from sites such as TripAdvisor, which prioritizes booking and attraction information in travel planning, we identified a need to streamline travelers' processes, adding essential features and centralizing information, including more economical options for backpackers. |
| PROJECT PURPOSE | Create a website and mobile app with the following functionality: search, compare, book, cancel, and change reservations; a notification system; account management for airline tickets, accommodation, car rental, and tourist activities, backpacking planning, and features such as personalized recommendations and destination reviews. |

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| **BUSINESS CASE** | By bringing together the main elements that make up a trip, such as tickets, accommodation, transportation and travel plans, it is hoped to increase the efficiency of the planning process. In addition, this solution promises to promote competitiveness between tour companies, since the most accessed items will be highlighted on the platform and will be recommended more frequently to users.<br><br>As a differentiator, we propose some ideas such as backpacking, where the aim is to put together a personalized trip, with the tourist attractions, history and experiences planned according to the client's taste and wishes, with the itinerary, tips and evaluations of people in the planned locations being made available. We also make a difference by helping to map out the region in which the client will be traveling, providing a map with the main possible points of interest, such as markets, pharmacies, restaurants and hospitals. We will combine the functions of buying trips and renting hotels and cars. Finally, we will have travel recommendations based on analysis of the user's choices. |
| **GOALS / METRICS** | Create a travel planning and booking website and mobile application that streamlines and optimizes the travel planning process for users. The site offers a unique combination of features that set it apart from competitors in the market. These include backpacking planning assistance, the ability to make reservations for accommodation, an algorithm that uses AI to indicate the most suitable trips for each user, a partnership with travel companies that offer complete trips with events and their particularities (e.g., graduation or individual trips for families), and a pleasant design that makes navigating the site easy for any audience. The project scope will include the functionalities that differentiate the product. |
| **EXPECTED DELIVERIES** | 1. April: delivery of typography and project logo<br><br>2. May: approval of the project charter and delivery of the prototype to figma.<br><br>3. June: validation of prototyping, delivery of registration screens.<br><br>4. November: Scope delivery V1 : Home display, showing trips with more affordable prices and promotions, Search bar, which allows a more personalized search, searching by keywords, Filtering system that helps in the personalized search for trips, Screen displaying relevant information about the trip, such as dates, number of passengers, flight class, etc., Notification system referring to dates and confirmations, Notification system related to emergencies, such as flight cancellations, etc. User registration system, User login system, Functionality for changing registration data, System for viewing booking history, System for managing profile information, System for selecting travel preferences to help with personalized searches, System for cancelling bookings, System for changing bookings. |

# PROJECT SCOPE

| SCOPE V1 | 1. Home display, showing more affordable travel and promotions: Use cards, with high-contrast colors in the most important information for the user. |
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**SCOPE V1**

1. Home display, showing more affordable travel and promotions: Use cards, with high-contrast colors in the most important information for the user.

2. Search bar, which allows a more personalized search, looking for keywords: Use an API or the existing database.

3. Filtering system for personalized travel searches: **flight filters** (date, season, price, time, stopovers, promotions, companies, class, flight duration, place of departure and arrival), **accommodation filters** (rating, location, whether there is a board (breakfast, lunch, dinner, full board), services (swimming pool, gym, wi-fi, minibar, air conditioning), prices, type (hotel, inn, resort, farm hotel, hotel, pension, motel, airbnb)), **car filters** (price, model, brand, economy, capacity, class, type of car (electric or combustion), type of policy, payment method), **travel objectives filter** (work, family, tourism, romantic, beach...), **tourist attractions filter** (Price, cultural, entertainment, nature/landscape, trail, age group, accessibility)

4. Screen displaying relevant information about the trip, such as dates, number of passengers, flight class, etc.

5. Date and confirmation notification system: pulls up information according to your reservations and wishes, so you're aware of the important things.

6. Notification system for emergencies, such as flight cancellations, etc.

7. User registration system: with e-mail, password, name and date of birth fields, which will be encrypted.

8. User login system: using only the e-mail and password field.

9. Functionality for changing registration data: a tab showing your registered data (e-mail, password, name, date of birth).

10. Personalized flight search system: using AI filters and recommendations.

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| | 11. System of trips saved as favorites, to direct the user to the actual site to buy and pay for the favorite flight: tabs separating each type (airfare, accommodation and cars), which redirect to the site for users to pay.<br><br>12. Personalized travel package search system.<br><br>13. Travel planning system, which allows you to organize reservations (for flights, accommodation and cars) and attractions for a given trip.<br><br>14. Profile information management system.<br><br>15. Travel preferences questionnaire system, to help with personalized search: form with simple questions so that the AI can designate the best options for travel, accommodation, cars.<br><br>16. Booking cancellation system.<br><br>17. Booking change system.<br><br>18. Recommendations of travel plans through an AI that is based either on the results of the questionnaire applied to the user or through the latest searches carried out or through the latest trips booked, as well as considering the user's age and other factors such as whether they have a driving license, etc.<br><br>19. Backpacking planning system: with specific information for users who want to go backpacking, such as: stops, places to eat, cheapest hotels... |
| SCOPE v2 | 1. Refining the project, improving old functions, design, branding, covering more companies, trips and customers: search function.<br><br>2. Recommending airbnb rentals through an AI that uses the data collected in the questionnaire about the user's preferences, the last airbnb booked and the last searches carried out, in that order of relevance to the AI algorithm.<br><br>3. Recommendation of travel plans through an AI that uses an algorithm to recommend based on questionnaire data, favorite travel plans, and the most recent searches carried out, considering this order of relevance for the AI to indicate to the user.<br><br>4. A miles counting system that uses the location of the handset to count the distance traveled by the user from the moment they travel through a travel plan offered by the site. |

5. A system for offering travel packages from companies that combine travel with possible special events (e.g. graduation travel companies or family travel packages).

6. Miles payment system: Show the flights that users can buy with their miles and redirect them to the company's website.

7. Online travel payment system: Redirection to the site via a link.

8. Car rental system: Redirection to the site via a link.

9. Airbnb rental system: Redirection to the site via a link.

10. Data encryption system.

11. Partnerships with companies that sell travel packages: Contact existing travel agencies to set up exclusive partnerships with Flightly.

## RESOURCES

| PROJECT TEAM | Vicente Pascoal – Project Manager    Enzo Dorta – Developer Full Stack<br>Ágata Cecília – Design Web / dev Front-end    Rodrigo Zanetti – Db Manager<br>Breno Saraiva – Developer Back-End    Vinicius Crozato – Developer Full Stack |
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| SUPPORT RESOURCES | Tecnology Resources: Visual Studio Code(code editor), Github(file sharing), Infraestrutura Cloud (hosting sites and DB), NodeJS(Back-end), React(Front-end), APIs for flight and travel information (Tripadvisor API, Airbnb API, Expedia API, Rate Hawk API, etc.), Postman (help to create APIs).<br><br>Interpersonal resources:<br>• Teacher Fernando Toniolli (Integrator Project 1)<br>• Teacher Carlos Veríssimo (Key User, Data Structure)<br>• Teacher Leandro Ramos (Agile Management)<br>• Teacher Patricia Gallo (IHC)<br>• Teacher Floriano Ferreira (Database)<br>• Teacher Carlos Rony (Advanced Web and Mobile Programming) |

## CLIENT AND BENEFITS

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| **PROCESS OWNER** | Vicente Pascoal - Project Manager |
| **MAIN STAKEHOLDERS** | People between the ages of 18 and 50 who are interested in traveling and getting to know the world, the vast majority of whom are upper middle class. |
| **FINAL CLIENT** | System User |
| **EXPECTED BENEFITS** | 1. Organize various travel features in a single place (car rental, airbnbs, tickets, hotels, etc.). <br> 2. Offer backpacking packages through the Southeast region of Brazil. <br> 3. Travel and rental recommendations through AI. <br> 4. Visualization of points of interest at the destination. <br> 5. Booking hotels. <br> 6. Optimized Design <br> 7. Partnership with companies that sell travel packages. |

## RISKS, RESTRICTIONS AND PREMISES

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| **RISKS** | 1. Technological Risks: Outdated packages, system bugs, lack of security and outdated technology → Use package managers to keep them up to date and follow good cyber security practices. <br><br> 2. Market risks: High competition from travel planning websites → Focus on a niche market - backpackers aged 18 to 25 - and on differentiating features, such as a more attractive design and centralized functionalities. <br><br> 3. Scope Risks: Changes to the project's requirements or goals by the client can lead to delays in the system's development. → Follow the Agile Development Method. |
| **RESTRICTIONS** | 1. Outdated packages in programs needed for development. Use a package manager (NPM). <br><br> 2. Outdated technology. à Use cloud programming tools such as GitHub Codespaces. <br><br> 3. Bugs, failures in development applications, planning or in the team's machines. Predict margin of error in the schedule. |

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| | 4. Lack of funds to use software and paid APIs. à Many APIs require an affiliation program, which requires hundreds of thousands of visits to the site per month to be able to use the key, but you could use static information to carry out the project or try to create your own APIs. |
| PREMISES | 1. We expect the project to be completed within two years, with partial delivery after one year of development.<br><br>2. We believe that all the members have the right conditions to carry out the project, including technological devices, access to the internet and the software needed to carry out their tasks.<br><br>3. We believe that all the members have the necessary knowledge to carry out their tasks. |

| PREPARED BY | TITLE | LAST MODIFICATION IN |
|---|---|---|
| Vicente Venancio Pascoal | Project Manager | 12/06/2024 |