TravelPath

Project Vision Document

Version 2.0

Document Preparation

| **Name** | **Role** | **Approval (Signature)** | **Approval Date** |
| --- | --- | --- | --- |
| Malak Mahdy | Project Technical Manager | Malak Mahdy | 06/21/24 |
| Kevin Castillo | Project Design Manager, Project Configuration Manager | Kevin Castillo | 06/21/24 |
| Chantey Baca | Project Test Manager | Chantey Baca | 06/21/24 |
| Mark Spangler | Project Manager | Mark Spangler | 06/21/24 |
| Austin Butrviengpunt | Project Risk Manager | Austin Butrviengpunt | 06/21/24 |

Document Approvals

| **Name** | **Role** | **Approval (Signature)** | **Approval Date** |
| --- | --- | --- | --- |
| Kevin Castillo | Project Design Manager | Kevin Castillo | 06/21/24 |
| Kevin Castillo | Project Configuration Manager | Kevin Castillo | 06/21/24 |
| Chantey Baca | Project Test Manager | Chantey Baca | 06/21/24 |
| Austin Butrviengpunt | Project Risk Manager | Austin Butrviengpunt | 06/21/24 |
| Malak Mahdy | Project Technical Manager | Malak Mahdy | 06/21/24 |
| Mark Spangler | Project Manager | Mark Spangler | 06/21/24 |
| Dr. Kadir Demir | Project Sponsor |  | 06/21/24 |

Revision History

| **Date** | **Version** | **Description** | **Author** |
| --- | --- | --- | --- |
| 06/21/24 | 1.0 | Initial Project Vision Document | Jahahava Development Team |
| 08/01/24 | 2.0 | Revision 2 from feedback | Austin Butrviengpunt |

Table of Contents

[**1. Introduction 5**](#_heading=h.gjdgxs)

[1.1 Purpose of the Document 5](#_heading=h.30j0zll)

[1.2 Scope of the Document 5](#_heading=h.1fob9te)

[1.3 References 5](#_heading=h.3znysh7)

[1.4 Definitions, Acronyms, and Abbreviations 5](#_heading=h.2et92p0)

[**2. Positioning 5**](#_heading=h.tyjcwt)

[2.1 Business Opportunity 5](#_heading=h.3dy6vkm)

[2.2 Problem Statement 5](#_heading=h.1t3h5sf)

[2.3 Product Position Statement 6](#_heading=h.2s8eyo1)

[**3. Stakeholder and User Descriptions 6**](#_heading=h.17dp8vu)

[3.1 Stakeholder Summary 6](#_heading=h.3rdcrjn)

[3.2 User Summary 6](#_heading=h.26in1rg)

[3.3 User Environment 7](#_heading=h.lnxbz9)

[3.4 Summary of Key Stakeholder or User Needs 7](#_heading=h.35nkun2)

[3.5 Alternatives and Competition 7](#_heading=h.1ksv4uv)

[**4. Product Overview 8**](#_heading=h.44sinio)

[4.1 Product Perspective 8](#_heading=h.2jxsxqh)

[4.2 Assumptions and Dependencies 8](#_heading=h.z337ya)

[4.3 Cost and Pricing 9](#_heading=h.3j2qqm3)

[4.4 Licensing and Installation 9](#_heading=h.1y810tw)

[**5. Product Features 9**](#_heading=h.4i7ojhp)

[5.1 Feature 1 – Account Creation 9](#_heading=h.2xcytpi)

[5.2 Feature 2 – E-Ticket Storage 9](#_heading=h.1ci93xb)

[5.3 Feature 3 – Trip Planning 9](#_heading=h.3whwml4)

[5.4 Feature 4 – Calendar Integration 9](#_heading=h.bdtys1bb05nl)

[5.5 Feature 5– Day-by-Day Schedule](#_heading=h.5dyezzipp3k1) [9](#_heading=h.hameyk6w7oqi)

[5.6 Feature 6– Budget Planner 9](#_heading=h.y2gmhjktaf4t)

[5.7 Feature 7– Reservation Details Storage 9](#_heading=h.x2flr6dh9qae)

[10](#_heading=h.k3v94u7fj1j8)

[**6. Constraints 10**](#_heading=h.s6o612rtrztu)

[**7. Quality Ranges 10**](#_heading=h.qsh70q)

[**8. Precedence and Priority 10**](#_heading=h.3as4poj)

Project Vision Document

# Introduction

## Purpose of the Document

The purpose of this document is to collect, analyze, and define high-level needs and features of TravelPath. It focuses on the capabilities needed by the stakeholders and the target users, and why these needs exist. The details of how TravelPath fulfills these needs are detailed in the use-case and supplementary specifications.

## Scope of the Document

The positioning, stakeholder and user description, product overview, product features, constraints, quality ranges, and precedence and priority are outlined in this Project Vision Document. Stakeholders are aligned on the project’s goals, scope, and success criteria by a comprehensive guide. The project’s purpose, intended benefits, and the specific problems it aims to solve are detailed in the document. The target audience, high-level requirements, constraints, and their priority are also described. By defining these elements, a clear framework for project planning, execution, and evaluation is provided by the document, ensuring that a shared understanding of the project’s vision and expected outcomes is held by all team members and stakeholders.

## References

1. Jahahava Project Proposal v1.0, 06/12/24, 5.1-5.17

## Definitions, Acronyms, and Abbreviations

| **Term** | **Abbreviation / Acronym** | **Definition** |
| --- | --- | --- |
| User Interface | UI | The means by which the user and a computer system interact. |
| General Data Protection Regulation | GDPR | A European regulation of information privacy. |

# Positioning

## Business Opportunity

The travel industry is witnessing a significant shift towards personalized and streamlined experiences, creating a lucrative opportunity for innovative solutions. Aiming to capitalize on this trend, TravelPath offers an all-in-one travel itinerary application that consolidates trip information, manages budgets, stores e-tickets and reservations, integrates with calendars, and provides customizable day-by-day schedules. With the growing number of travelers seeking seamless and organized travel experiences, TravelPath addresses a clear market need. By providing a user-friendly platform that simplifies travel planning, enhances trip management, and improves overall travel satisfaction, the potential to become an essential tool for modern travelers is presented by TravelPath.

## Problem Statement

| The problem of | an unorganized and stressful travel experience. |
| --- | --- |
| affects | travelers looking for personalized and seamless travel itineraries. |
| the impact of which is | unnecessary stress, inefficient planning, and overall an unsatisfying trip. |
| a successful solution would be | a user-friendly and convenient platform that secures flight details, budget management, destination highlights, and personalized travel plans, and improves overall travel satisfaction. |

## Product Position Statement

| For | travelers seeking personalized and seamless itineraries. |
| --- | --- |
| Who | need an organized, stress-free travel planning experience. |
| The TravelPath | is a Java-based travel itinerary application. |
| That | simplifies travel planning by securing flight details, budget management, destination highlights, and personalized travel plans. |
| Unlike | traditional travel planning methods or separate travel applications. |
| Our product | simplifies the traveling process to assist travelers; creating a carefree trip; solving common traveler issues such as managing flight details, and creating a personalized itinerary; enhancing trip management. |

# Stakeholder and User Descriptions

The stakeholders and users involved in the project are profiled in this section, highlighting the key problems they aim to address with the proposed solution. Emphasized is the necessity of identifying and involving all relevant stakeholders in the Requirements Modeling process to ensure that users are adequately represented.

## Stakeholder Summary

| **Name** | **Description** | **Responsibilities** |
| --- | --- | --- |
| End Users | Travelers or users of the application. | Use of the application for either themselves or a company. |
| Business Partners | Provide travel information that may be accommodating for application users. This includes hotels, Airlines, local businesses, etc. | Incorporate additional service offerings and promotional opportunities within the app. |

## User Summary

| **Name** | **Description** | **Responsibilities** | **Stakeholder** |
| --- | --- | --- | --- |
| Admin | Managing and maintaining the system is the responsibility of individuals. | Monitoring system performance and resolving technical issues.  Updating and maintaining database information.  Manage users: Oversee user account setup, verify accuracy, and address any user issues or inquiries.  Manage itinerary: ensure all travel details are accurately recorded and organized. | System Administrator |
| Travelers | Individuals or groups who are planning to travel | Inputting travel preference and details.  Assessing and reviewing travel itineraries.  Providing feedback on the system. | Primary user |

## User Environment

A mobile device with an internet connection is required by the user to download and use the application. Depending on how long the user is on a trip and using the application, the task cycle will vary. Since the information is user-inputted, any updates provided by the user shall be uploaded instantly at their discretion.

## Summary of Key Stakeholder or User Needs

| **Key Problem** | **Combatting Issue** | **Our Solution** |
| --- | --- | --- |
| Fragmented Travel Information | Users often gather their travel plans from various sources and compile them on a spreadsheet or even physical documents, leading to disorganization and difficulty in managing their travel information efficiently. | TravelPath consolidates all travel plans into a single application. Features such as E-Ticket Storage (Feature 2), Trip Planning (Feature 3), and Reservation Details Storage (Feature 7) ensure that users have all their travel information in one place, organized and easily accessible. This eliminates the need to juggle multiple sources and formats, providing a seamless and efficient travel planning experience. |
| Ineffective Communication and Coordination | Users may have encountered problems coordinating travel plans or sharing information with other travelers, which can lead to confusion and inefficiency. | TravelPath enhances communication and coordination through features like Calendar Integration (Feature 4) and Day-by-Day Schedule (Feature 5). The integrated calendar provides an overview of all activities, making coordination straightforward and minimizing the risk of missed events or miscommunications. |
| Budget Management | Users often struggle with managing their travel budget, leading to overspending and financial stress during trips. | TravelPath offers a comprehensive Budget Planner (Feature 6). This feature allows users to set budget limits for different categories and track their spending throughout their trip. By providing a clear overview of expenses, users can manage their finances effectively, ensuring a stress-free travel experience. |

## Alternatives and Competition

| **Alternatives and competitions** | **Description** | **Strengths** | **Weakness** |
| --- | --- | --- | --- |
| TripIt | TripIt is a transportation and lodging organizer that provides users with location-based services and suggestions for recreational activities, though most features require an annual subscription. | TripIt provides location-based services and a comprehensive organizer for transportation and lodging. | Most of TripIt's features require an annual subscription. |
| Google Travel | Google Travel is a travel organizer that integrates with Google services, providing personalized travel recommendations and location-based suggestions. | Google Travel is free to use, integrates smoothly with Gmail and Google Calendar, and offers personalized travel recommendations. | Google Travel has no direct customer support and raises data privacy concerns due to its data collection from Google accounts. |
| Kayak | Kayak is a metasearch engine for travel services that helps users find flights, hotels, car rentals, and more, offering price alerts and deals. | Kayak offers a wide search for flights, hotels, and car rentals, and provides price alerts and deals. | The interface can be cluttered with advertisements and sponsored results, and it has limited integration with other services. |
| Travel.com | Travel.com is a travel booking platform that provides search options for flights, hotels, car rentals, and more, featuring a user-friendly interface with customer reviews and ratings. | Travel.com offers a user-friendly interface with easy navigation and includes customer reviews and ratings. | Travel.com may have occasional issues with booking confirmations and slow customer support during peak times. |

# Product Overview

Designed as an independent and self-contained application, TravelPath was meticulously crafted to cater comprehensively to the needs of travelers. It enabled users to securely and efficiently store and manage their travel information, distinguishing itself from other travel management applications.

## Product Perspective

Unlike other travel management applications, TravelPath focused on providing a robust platform where users could manually input and store all relevant travel details such as flight information, trip itineraries, accommodation details, and budget tracking and calculations. This emphasis on manual input allowed users to have full control over their travel information, ensuring accuracy and personalization. The application also incorporated features that streamlined the organization of travel details, facilitated easy access to crucial information, and enhanced the overall travel planning experience. Through its user-centric design, TravelPath aimed to simplify travel management and provide a secure, efficient solution for travelers.

## Assumptions and Dependencies

Basic proficiency in using mobile and web applications is assumed for users, allowing them to effectively input and manage their travel information. Internet access during the initial data entry phase is also expected for users. Depending on the users' hardware and software, keeping up with updates for both their operating system and the application will be recommended.

## Cost and Pricing

The cost structure for TravelPath involves several key components, primarily centered around development, maintenance, and distribution. Primary costs include software development, ongoing maintenance and updates, cloud or internal storage for user data, and security measures to protect user information. Adopted by TravelPath will be a freemium pricing model, offering basic features for free while providing premium features through a subscription or one-time purchase model. The cost of this application was by no means easy. Each team member has allotted 3 hours a week which comes out to 15 hours of manpower used to create this app. By allowing this much time to be driven into software creation, Jahahava plans to establish a well developed app for the user. By allowing users to access essential functionality at no cost, with the option to enhance their experience through premium features, a sustainable revenue stream will be generated to cover costs and support continuous improvements and innovations.

## Licensing and Installation

Critical considerations for TravelPath's development are licensing and installation issues. Used by the app will be a subscription-based licensing model for its premium features, requiring secure user authentication and account management. Robust systems for serializing subscriptions, managing user passwords securely, and handling user accounts efficiently will be necessitated by this. Compliance with various licensing regulations and privacy laws, such as GDPR, which will impact development and data management processes, must be ensured by the app. Installation requirements also play a significant role; the app must be easy to install across multiple platforms (iOS, Android, and web browsers), requiring seamless integration with respective app stores and ensuring compatibility with a wide range of devices.

# Product Features

## Feature 1 – Account Creation

Users can create individual accounts to store their personal travel information. This allows for a personalized experience and easy access to stored data. Secure account management ensures that users' information is protected.

## Feature 2 – E-Ticket Storage

Users can store and easily access their transportation tickets within the app. This eliminates the need to keep physical copies or search through emails.

## Feature 3 – Trip Planning

Create and manage detailed trip itineraries, including activities, reservations, and appointments. This feature helps users organize their entire trip in one place. Users can update and modify plans as needed.

## Feature 4 – Calendar Integration

The built-in calendar allows users to see an overview of their trip itinerary. It integrates all planned activities and reservations into a single view. This helps in managing time and ensuring no important events are missed.

## Feature 5 – Day-by-Day Schedule

Breakdown of daily activities with specific time and location details. This feature helps users keep track of their daily plans. It ensures that all activities are well-organized and timely.

## Feature 6 – Budget Planner

Users can set budget limits for different categories and track their spending. This feature helps in managing finances and avoiding overspending. Users can adjust their budget as needed based on their spending patterns.

## Feature 7 – Reservation Details Storage

Save booking confirmations, check-in/check-out times, and addresses. This feature keeps all reservation details organized and easily accessible. It ensures that users have all necessary information at their fingertips.

# Constraints

There are various constraints that are applicable to TravelPath. In regards to the design constraints, retaining the interface's quality regardless of the device used is vital. Ensuring the UI is still accessible for users with visual disabilities will also be constrained. Accessibility to the application without the need for an internet connection is an external constraint. Regulatory constraints regarding user privacy, especially for users in Europe, may be applicable.

# Quality Ranges

The dependency on TravelPath for all travel information places significant responsibility on the development team, necessitating high-quality delivery across all levels. To ensure usability, quick loading of pages and features must be maintained. Additionally, language, fonts, and font sizes must be easy to read for all users. A high level of fault tolerance must be maintained by TravelPath to minimize user disruptions. Ensuring data integrity is a top priority, necessitating a robust storage system.

# Precedence and Priority

Designed to ensure a seamless and comprehensive user experience is the priority of system features for the TravelPath application. Account creation, trip planning, day-by-day schedules, and reservation details storage are included as high-priority features. Forming the core of the application, these functionalities allow users to create and manage their profiles, detailed itineraries, and essential booking information. Critical features for providing easy access to transportation tickets and an overview of trip plans include e-ticket storage and calendar integration. Facilitating collaboration and ensuring users stay on track with important dates and activities.

1. Feature 1 – Account Creation
2. Feature 3 – Trip Planning
3. Feature 5 – Day-by-Day Schedule
4. Feature 7 – Reservation Details Storage
5. Feature 2 – E-Ticket Storage
6. Feature 4 – Calendar Integration
7. Feature 6 – Budget Planner