

WiseTraveler

Navigate with Knowledge
Explore with Confidence

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Team Yellow
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Meet The Team



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Backend**

Problem Background

When people travel, whether domestically or abroad, their main goals are usually enjoyment, discovering new cultures, and relaxation. In 2023, approximately 48.98 million U.S. residents ventured overseas⁽³⁾

According to UN Tourism, international tourist arrivals hit 96% of pre-pandemic levels in January-July 2024, 790 million tourists travelled internationally in the first seven months of 2024, about 11% more than in 2023.⁽¹⁵⁾



What is the Problem



Travelers often have to search multiple sources for information, leaving them with insufficient research on their destination. This lack of knowledge can expose them to law, safety, and health risks, which can diminish their trip enjoyment. They may also encounter challenges like crime, unsafe water, poor sanitation, along with language barriers and cultural differences that make finding help difficult. As a result, many stick to crowded, well-known spots or fall into tourist traps due to uncertainty about where to explore.



Problem Characteristics

Multiple resources : Travellers currently have to check multiple sources to find complete information relating to their destination

Cultural Understanding : Detailed information about local customs and cultures is often omitted by popular travel guides, yet “75% (of travelers) seek authentic experiences that are representative of the local culture.”⁽¹⁾

Local Laws : Some countries have unfamiliar laws that travelers may not be aware of.⁽¹⁴⁾

Safety Concerns : Certain travel destinations are prone to having crime targeting tourists and travellers

Personal Health : Travellers are unaware of illness and pest issues

Tourist Trap : About 89% of Americans have visited a tourist trap more than once in the past two years.⁽¹³⁾



WiseTraveler Solution Statement



This Centralized AI Travel Guide provides a hassle-free, comprehensive experience, allowing travelers to focus on the journey itself without the stress of navigating multiple sources for information. It also encourages exploration beyond mainstream tourist spots, offering unique, culturally immersive experiences while keeping travelers informed and safe.

Solution Characteristics

- **AI Integration:** Assists in the researching and planning for trips
- **Centralized Platform:** Consolidates all essential travel information, so users avoid juggling multiple sources of information
- **Hidden Gems and Local Experiences:** Offers a map feature for discovering lesser-known spots and local events
- **Real-Time Health and Safety Alerts:** Sends alerts for region-specific risks, keeping travelers informed
- **Personalized Recommendations:** Delivers tailored suggestions for destinations, attractions, and activities based on user preferences, making trip planning easier and personalized



WiseTraveler Characteristics

- Safety & Health



- Using WiseTraveler, users can do the following:
 - Access quick, concise guides on local laws and potential health risks for foreign visitors
 - Understand the safety concerns and risks associated with the country they are visiting
 - Read information about local wildlife and any harmful diseases that they might carry
 - See contact information to local medical centers and police stations



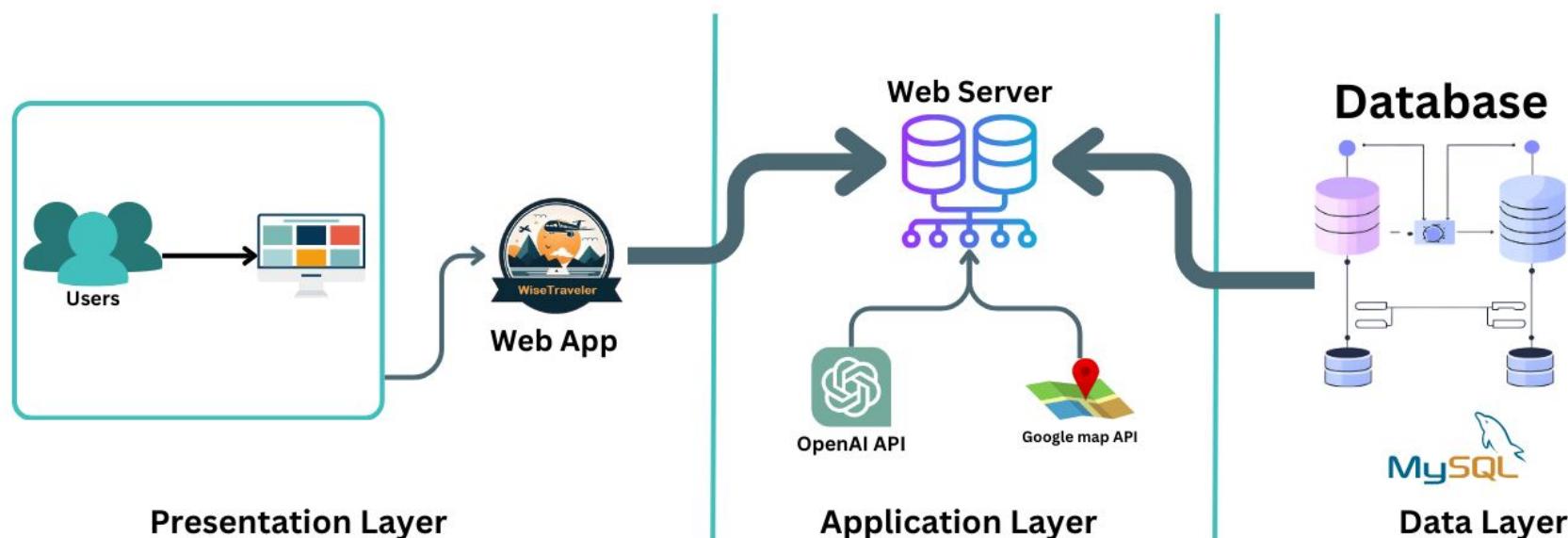
WiseTraveler Characteristics



- **While using WiseTraveler, users can do the following:**
 - Better understand the customs and traditions of the country they are visiting
 - Share travel experiences and tips with other users
 - Discover local tourist attractions
 - Rate and review various attractions, restaurants, and hotels
 - See hidden gems and lesser-known spots that the destination has to offer
 - Discover local events or activities that are occurring during their visit
 - View user reviews and ratings for attractions, restaurants, and hotels
 - A map highlighting lesser-known spots for a truly unique and authentic travel experience



Major Functional Components Diagram



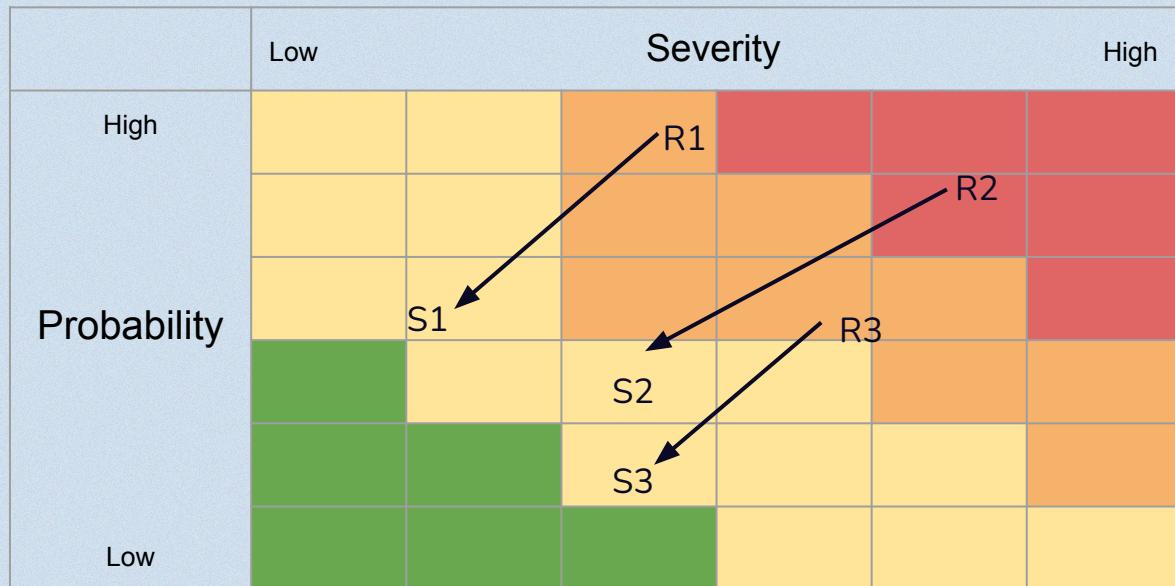
Risks



- Security
 - If proper security measures are not taken, customer information can be leaked from the database, such as names, birthdates, phone numbers, etc.
 - Payment information can be leaked if hacking occurs.
- Legal Issues
 - If a user gets injured or sick due the advice given on the app, the user might attempt to pursue legal action
- Misinformation
 - Relying on user contributions for hidden gems and famous spots may result in misinformation
 - If information is not constantly updated, this can lead to outdated information
- Cultural Insensitivity
 - If a users provides advice that lacks cultural understanding, this can lead to disrespect towards the locals
- User Retention
 - Continuous updates and new features may be required to keep users engaged long-term



Technical Risks



R1: Features may be inaccessible without an internet connection

S1: Provide offline capabilities for essential features

R2: Issues with third-party APIs could break features

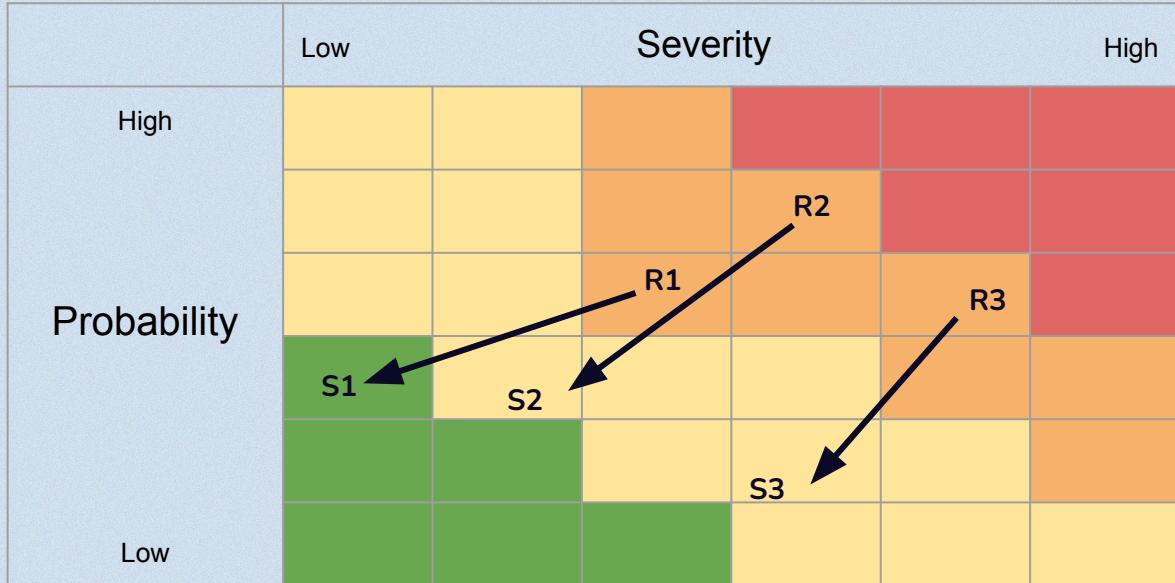
S2: Monitor third-party services and implement redundancies as a fallback

R3: The platform may struggle to handle a growing user base

S3: Use best practices for implementing scalable infrastructure



Customer Risks



R1: User receives bad information from the app

S1: Maintain quality service by ensuring that the information WiseTraveler provides is accurate and clear.

R2: User loses interest in using the app

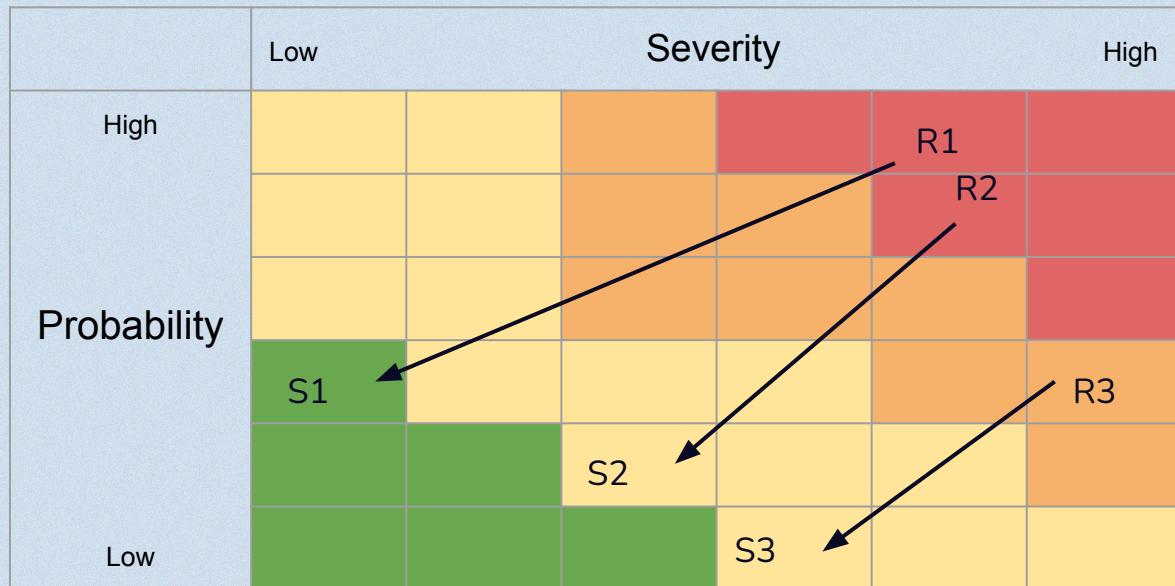
S2: Provide new features and updates to entice continued use

R3: Users are dissatisfied with the recommendations

S3: Provide a way for users to submit feedback about their experiences



Security Risks



R1: Attempts may be made to hack or hijack users' accounts.

S1: Implement multi-factor authentication and require strong, unique passwords

R2: User data could be compromised

S2: Encrypt data in transit via HTTPS and conduct thorough security assessments, such as penetration testing

R3: Users may encounter malicious links or files that could lead to security breaches.

S3: Display security warnings when users attempt to click on links redirecting away from WiseTraveler content.



Sample User Interface



Sign up

Begin your travel journey with us

Your full name

First Last

Email

Enter your email address

Username

Choose a username

Set up your password

*****

Confirm your password

*****

By signing up, you agree to our [Terms](#) and [Privacy Policy](#).

Join now

Already a member? [Log in](#)

Traveler

Welcome Back!

Username

email_address

Password

[Forgot your password?](#)

Log In

Top Destinations



Paris, France

Discover the charms of Paris with its iconic landmarks and vibrant culture.



Rio de Janeiro, Brazil

Experience the vibrant energy and stunning beaches of Rio de Janeiro.



Sydney, Australia

Explore Sydney's stunning harbor and iconic opera house.

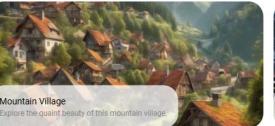
[View All](#)

Trending Hidden Gems



Secret Waterfall

Discover the tranquility of this hidden waterfall in the forest.

[Explore More](#)

Mountain Village

Explore the quaint beauty of this mountain village.



Hidden Lake

Find peace by this hidden lake surrounded by mountains.

Safety & Health Alerts

Travel Advisory

Stay informed about current travel advisories in your destination.

[Get Alerts](#)

Health Guidelines

Follow the latest health guidelines to ensure a safe journey.

AI Travel Planner

Get personalized travel plans with our AI Travel Planner.
Enter your preferences and let our AI do the rest.[Plan Your Trip](#)

Discover



Here, you'll embark on a journey to explore new and exciting content tailored just for you. Whether you're looking for inspiration, knowledge, or entertainment, our curated selection is designed to spark your curiosity and broaden your horizons.

[Discover More](#)

Sample User Interface



Save changes

Home



Edit name
Edit date of birth
Turn on/off notifications
Manage phone number

Profile settings



Change profile picture

Name

First and Last

Email

Your email address

Location

City, Country

Bio

Share about your travel experiences. #adventure #explore

Account Security

Current password

Enter current password

New password

Enter new password

Confirm new password

Re-enter new password

Update password

Notification Preferences

Receive updates on top destinations



Get notified about hidden gems



Stay informed on safety alerts



Receive community announcements



Sample User Interface



WiseTraveler

Home



Customize Your Travel Preferences

Preferred Destination

Enter Destination...

Type of Trip

Solo Trip

Couples Trip

Friends Trip

Family Vacation

Company Retreat

Event

Other

Preferred Activities

Local Food

Luxury

Outdoors

Popular Attractions

Nightlife

Wildlife

Art

Beach

History

Wellness

Placeholder

Wine

Museums

Adventure/Sports

Your Personalized Travel Recommendations



Santorini, Greece

Experience the mesmerizing sunsets and vibrant culture.



Tokyo, Japan

Explore the bustling cityscape and enjoy exquisite cuisine.



Fjords of Norway

Discover the serene beauty of Norway's natural landscapes.

Translation Tool

Select Language To Translate From

Language

Enter Text...

Select Language To Translate To

Language

Translation



Sample User Interface

WiseTraveler

Home



Map of Popular Attractions: Santorini, Greece



- 🔍
- ✈️
- 📍
- 🛡️



WiseTraveler

Home



Safety & Health Alerts

Alert: Tropical Storm Warning

A tropical storm warning has been issued for the Caribbean islands. Travelers are advised to stay updated with local news.

Read

Health Alert: COVID-19 Update

New guidelines have been issued for travelers returning from high-risk areas. Ensure you follow the protocols.

Read

Safety Alert: Civil Unrest

Protests are ongoing in the capital city. Travelers should avoid large gatherings and stay informed.

Read

Travel Tips

Pack a basic first aid kit including any personal medications.

Ensure your passport is valid for at least six months from your return date.



Software/Hardware Tools

Front End

- Languages
 - HTML
 - Javascript
 - CSS

Back End

- Node.js
- Express.js

Databases

- AWS
- Amazon aurora

Testing

- Jest
- Mocha and Chai
- Gitlab CI/CD

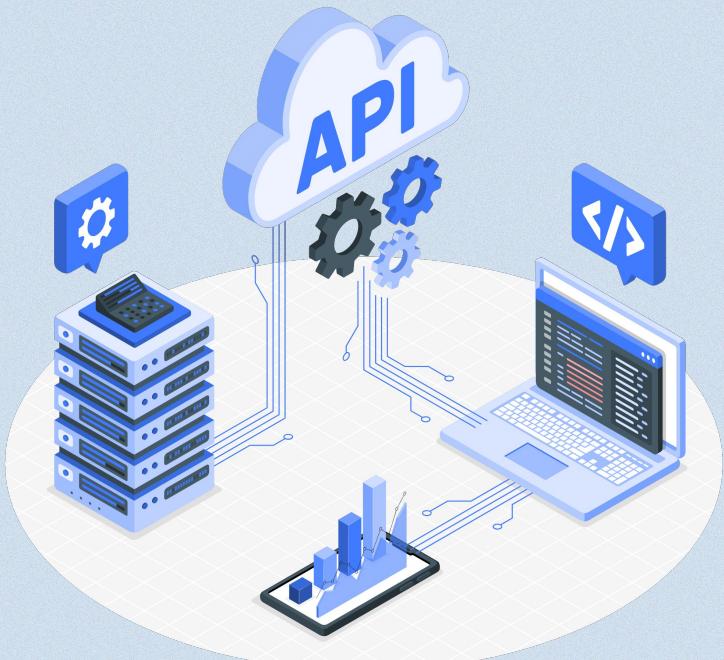
3rd Party Software

- OpenAI API
- Google Map API

Hardware

- Desktop Computer

Development Tools



- **Integrated Development Environment (IDE):** VSCode
- **Version Control:** GitHub
- **Continuous Integration (CI) and Continuous Deployment (CD):** GitHub Actions & Workflows
- **Frontend Languages:** HTML, CSS, & JavaScript
- **Backend Language:** Node.js, Express.js
- **Database:** SQL
- **Testing Framework:** Jest
- **Documentation Tool:** JSDoc
- **Formatters & Linters:** Prettier, ESLint



Sprints



Sprint 1

- Set up VSCode
- Create & configure GitHub repository
- Create Database
- Create backend and frontend foundations

Sprint 2

- Implement basic UI
- Implement 'user login' algorithm
- Implement 'update user information' algorithms
- Implement 'delete account' algorithm
- Add user table to database

Sprint 3

- Update UI
- Implement LLM (AI) API
- Implement language translation tools API

Sprint 4

- Update UI
- Implement algorithm to search for a destination
- Implement map API
- Implement algorithm to review and rate attractions

Sprints



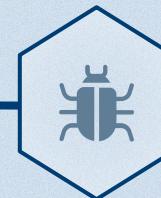
Sprint 5

- Update UI
- Add functionality to access health and safety information
- Add functionality to view local law enforcement contact information
- Implement notifications algorithm



Sprint 6

- Finish UI
- Add mobile responsive design
- Implement security features, i.e., password hashing, database security, HTTPS



Sprint 7

- Debug
- Perform testing
- Publish application

Prototype vs Real World Product

	Prototype	Real World Product
User Interface	Basic, Limited Functionality	Full Design and Function
Data	Static Data from Sources	Live Data from API
Calendar	Limited, Manual Entry	Robust and Integrated
Map	Basic Location Points	Location and Travel Time



Features

	WiseTraveler	Prototype	RWP
User Interface	AI assistance for planning and research	Fully functional	Fully Functional
	Safety Concerns (dangerous animal sightings, criminal activity, etc.)	Partially functional	Fully Functional
	Health Risks	Partially functional	Fully Functional
	Cultural Discovery	Partially functional	Fully Functional
	Local Customs	Partially functional	Fully Functional
	User Reviews	Partially functional	Fully Functional
	Centralized Information	Fully functional	Fully Functional
	Language translation tools	Partially functional	Fully Functional
	Personalized Travel Recommendations	Fully Functional	Fully Functional
	Calendar	Fully Functional	Fully Functional



Features

	WiseTraveler	Prototype	RWP
Testing	Unit Testing	Fully Functional	Fully Functional
	System Testing	Fully Functional	Fully Functional
	Integration Testing	Fully Functional	Fully Functional
Account Manager	Web Application	Partially Functional	Fully Functional
	Account Creation	Fully Functional	Fully Functional
	Login	Fully Functional	Fully Functional



User Stories - Traveler

Fully Implemented

Partially Implemented

Eliminated

As a traveler, I want to view a comprehensive overview of my destination, including local laws, health advisories, and cultural tips, so that i am well prepared and can avoid potential risk

As a traveler, I want to know the areas with high crime rates or health risk so that I can make informed decision about where to stay and visit

As a traveler, I want guidance on local sanitation practices, safe drinking water options, and food safety, so I can minimize health risks during my trip

As a traveler, I want to create a personalized itinerary with recommendations based on my interests.

As a traveler, I want suggestions for lesser known spots to avoid crowded tourist areas.

As a traveler, I want to know about popular tourist traps so I can avoid them and discover more genuine, locally recommended places

As a traveler, I want to read reviews from other users who have visited my destination to get additional insights and tips from past travelers.



User Stories - Curious Traveler

As a curious traveler, I want to explore destinations tailored to my interest to get ideas for where to travel next.

As a curious traveler, I want to browse recommended itineraries for different destinations to visualize what my days could be like.



Conclusion



- **Centralized AI Travel Guide:** WiseTraveler Offers a hassle-free, all-in-one platform for travel planning.
- **Stress-Free Experience:** Eliminates the need to navigate multiple sources for information.
- **Beyond Mainstream Tourism:** Encourages exploration of unique, culturally immersive destinations.
- **Traveler Safety and Information:** Keeps users informed and ensures safe, well-prepared journeys.
- **Focus on the Journey:** Allows travelers to concentrate on enjoying their adventures.
- **Personal Travel Assistant:** Helps you navigate unfamiliar destinations while uncovering authentic, off-the-beaten-path experiences.
- **Cultural Immersion and Safety:** Ensures a safe, well-prepared journey and facilitates deep engagement with local culture.
- **Unforgettable Adventures:** Transforms trips into extraordinary experiences filled with unique discoveries.



Questions?



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Thank YOU

