WiseTraveler

Navigate with Knowledge, Explore with Confidence

CS 410 Feasibility Presentation

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Meet The Team

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Ethan is a senior at Old Dominion University. He is currently pursuing his Bachelor of Science degree in computer science with a minor in computer engineering. In his free time, he enjoys spending time with his family and cooking.

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Dylan Montgomery

Dylan is a senior majoring in Computer Science at Old Dominion University. He currently resides in Arlington, VA where he works in the non-profit sector. After graduation, he hopes to continue his education by pursuing a Master's in Software Engineering.

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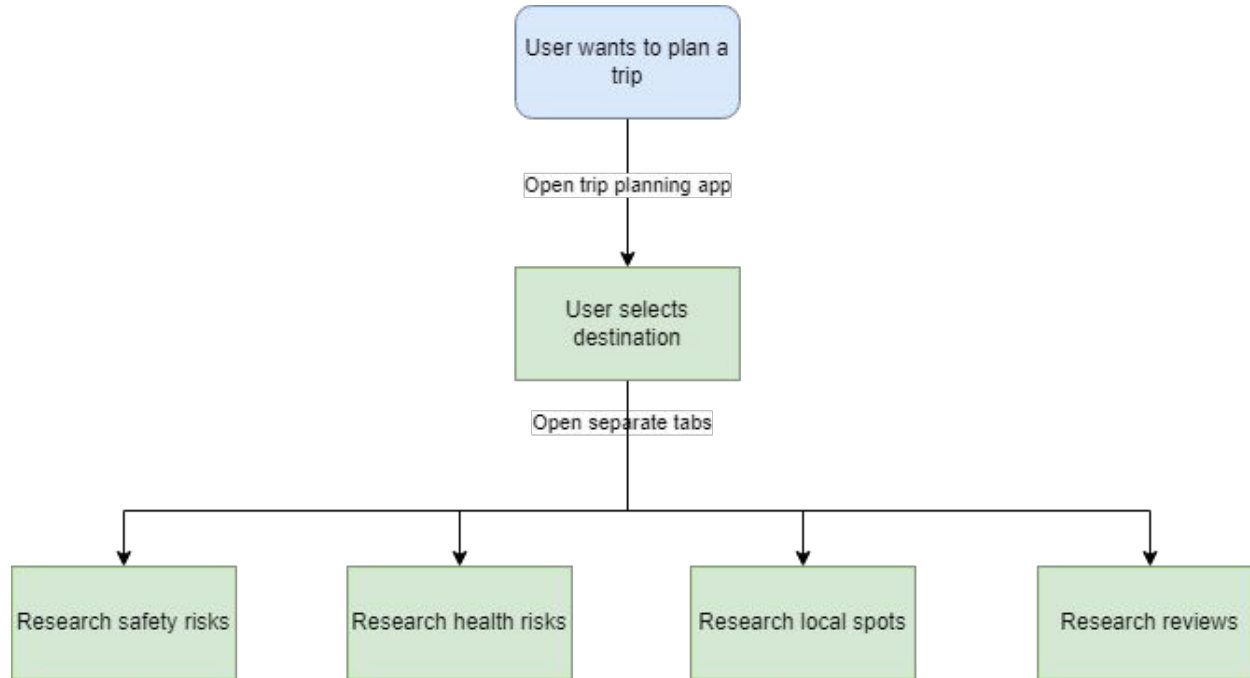
Safety Concerns: Certain travel destinations are prone to having crime targeting tourists and travellers

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]

[1] "Booking.com Sustainable Travel Report 2023"

Current Process Flow

Target Audience and Stakeholders

- The primary users of this software will encompass anyone interested in enhancing their travel experiences, learning about new cultures, and better understanding other countries, such as:
  - Tourists
  - Individuals attending business-related trips
  - Students on study abroad programs
- The primary customer base of this software will be travelers
  - Families
  - Business travelers
  - Individual people
- The primary stakeholders of this software are resort companies
  - Local resort companies
  - Business owners
  - Airbnb owners

WiseTraveler Solution Statement

WiseTraveler will take the hassle out of travelers researching to multiple resources to their preferred destination.

Travelers will be able to use our website to have an overview to their destination, local laws, health and safety precautions, location reviews, hidden spots, activities, and hotel recommendations.

This allows travelers to fully and confidently immerse themselves in the local culture and experience their destination like a true insider

WiseTraveler Characteristics – Safety and Health risk

- **While 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

Mapping Problem Characteristics to Solution Characteristics

Multiple Resources

Problem: Travelers struggle to find complete information by using miscellaneous websites.

Solution: WiseTraveler provides a single platform for complete destination information.

Local Experiences

Problem: Travelers often miss out on local hidden gems and attractions.

Solution: WiseTraveler will feature a map that highlights unique spots for an authentic travel experience.

Mapping Problem Characteristics to Solution Characteristics

Local Laws

Problem: Legal information on local laws is often unknown to tourists.

Solution: WiseTraveler will provide easy to understand legal documents explaining the local laws specific to each country.

Safety Concerns

Problem: Travelers are often unaware of safety concerns with their travel destinations.

Solution: WiseTraveler will automatically send users alerts detailing any diseases, dangerous animal sightings, or safety concerns that tourists need to be aware of.

Mapping Problem Characteristics to Solution Characteristics

Communication Issues

Problem: Tourists often have difficulty in communicating with the locals due to language barriers.

Solution: WiseTraveler will provide language translation tools and common phrases for easier communication.

Cultural Misunderstanding

Problem: Travel guides usually do not contain detailed information about local customs, traditions, and cultures.

Solution: WiseTraveler will offer concise guides on local customs and traditions to help users fully immerse themselves in the culture.

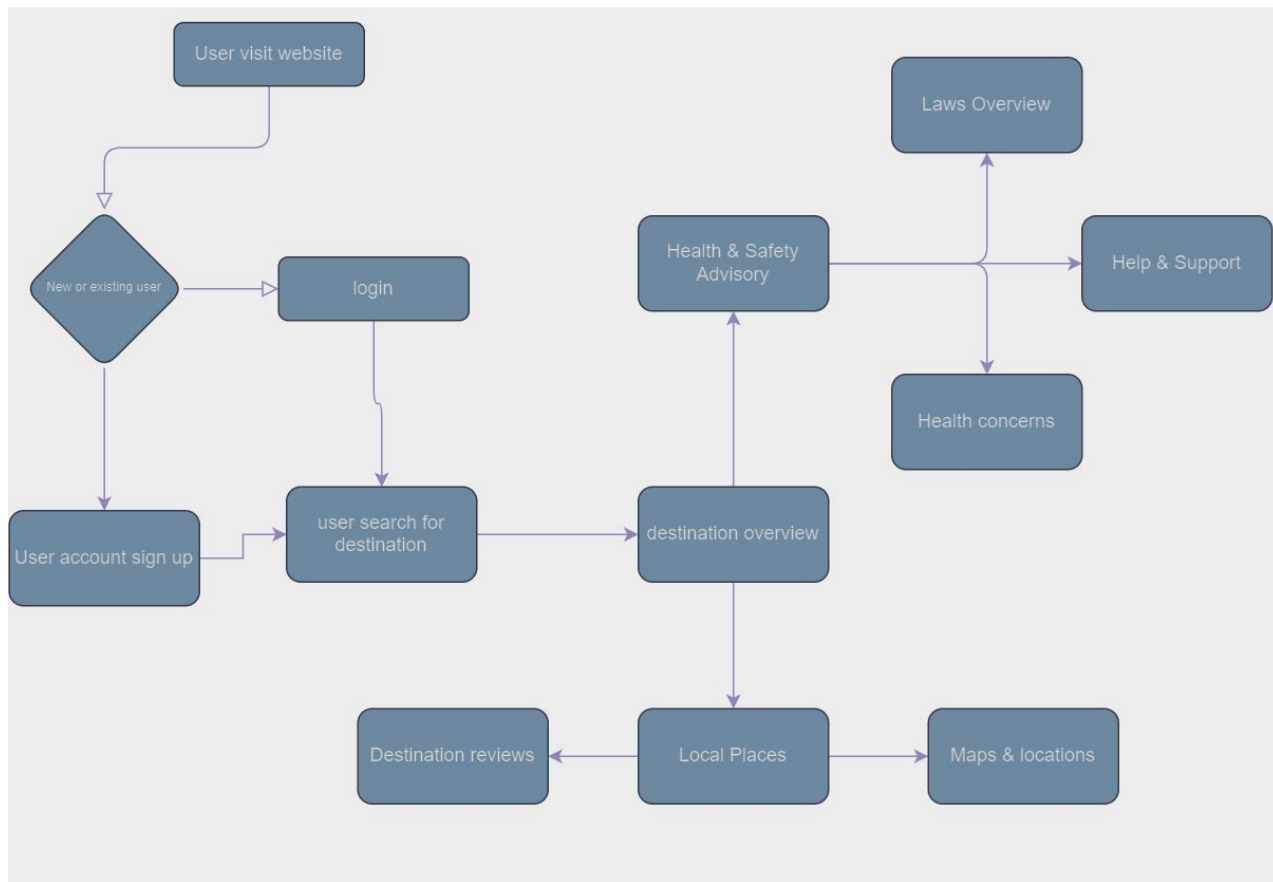### *Tourist Trap*

Problem: Travelers often fall into tourist traps due to a lack of reliable information.

Solution: WiseTraveler will provide user reviews to spots where the traveler is, to better understand the place.

Solution Process Flow

What it Will Do

A Map to Discover Hidden Spots for a Truly Unique Travel Experience:

- Hidden Travel Gems: Discover underrated and hidden travel destinations for 2024. For example, Bolivia offers unique experiences like the Salar de Uyuni and Lake Titicaca. Other hidden gems include Sardinia in Italy, the Faroe Islands in Denmark, and the Namib Desert in Namibia. Off the beaten path sites and travel destinations.

- Expert Recommendations: Get insights from travel experts on hidden gem destinations like Eleuthera in the Bahamas, the Peloponnese in Greece, and lesser-known spots in Europe such as Villajoyosa and Ares del Maestre.

- User-Generated Content: Leverage a community of travelers who share their experiences and tips on hidden gems, ensuring you get the most authentic and off-the-beaten-path experiences

What it Will Do

Wildlife: Be aware of local wildlife and avoid contact with animals that may carry diseases like rabies, and cultural differences, for example in Hawaii it is a $2000k fine to get close to sea turtles and touch them

Political and Social Unrest: Avoid participating in or being near protest and demonstrations, stay informed about the local political climate

Level 1: Exercise Normal Precautions[16]

Level 2: Increased Caution[16]

Level 3: Reconsider Travel[16]

Level 4 : <u>DO NOT</u> Travel[16]

By integrating these features, WiseTraveler aims to provide a comprehensive travel companion that not only enhances your travel experience with insider tips but also ensures your safety and preparedness, making every adventure more enjoyable and secure.

What it Will Do

- Warnings about crime
  - Users can find out and be aware of high crime areas, and cultural differences for Ex: taking pictures of temples is not allowed and is an arrestable offense in Japan
- In regions with high risk of diseases like malaria or dengue fever, the software will alert the user of this information and provide tips on how to avoid these illnesses, such as:
  - Use insect repellent
  - Sleep under mosquito nets
  - Avoid consuming tap water
  - Be cautious with street food to prevent foodborne illnesses
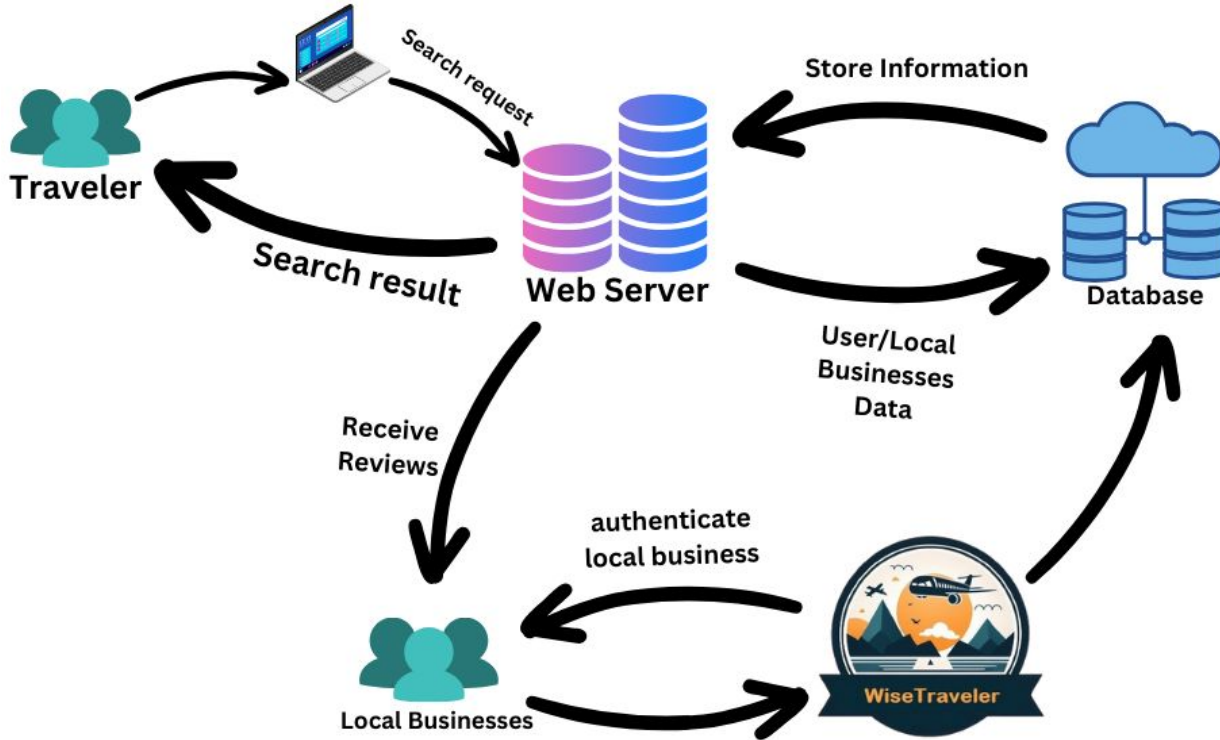
What it Will Not Do

Real-Time Emergency Assistance : WiseTraveler will not provide real-time emergency assistance or rescue services; travelers should contact local authorities or their embassy/consulate

Legal Assistance: WiseTraveler will not offer legal advice or assistance; travelers should consult with legal professionals or their embassy/consulate for legal matters

Medical Service: WiseTraveler will not provide medical services or emergency medical care. Travelers should seek medical attention from local healthcare providers

Trip planning: WiseTraveler will not plan the entirety of your stay, including flights, hotel accommodations, and rental accommodations; however, It will guide the traveler by displaying top-rated hotels, local accommodations, and rental accommodations

Major Functional Components Diagram

Search request

Store Information

Traveler

Search result

Web Server

Database

User/Local
Businesses
Data

Receive
Reviews

authenticate
local business

Local Businesses

WiseTraveler

Competition Matrix

	Wise Traveler	TripAdvisor	Lonely Planet	Expedia	YouTube
Safety Concerns	Yes	Limited to user reviews	Details about the most common concerns	N/a	Limited to personal experiences
Health Risks	Yes	N/a	Provides details about the most common concerns	N/a	Rarely covers health risks
Cultural Discovery	Yes	Most popular locations only	Provides details about must see and can skip locations	N/a	Varies by vlogger
Local Customs	Yes,	N/a	Limited information	N/a	Varies by vlogger

Risks

- 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
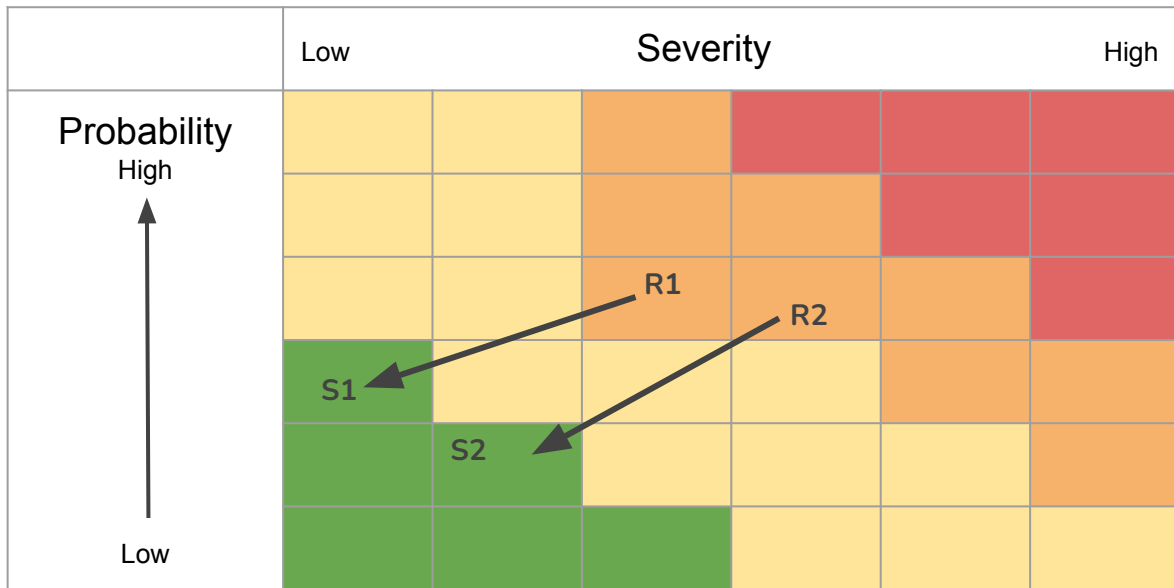
Technical Risks

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 recommendations from the app
S1: Keep content up-to-date by encouraging users provide feedback

R2: User loses interest in using the app
S2: Provide regular updates to entice continued use

R3: Users are dissatisfied with the recommendations
S3: Provide a feedback option for users to give suggestions and critiques

Major Functional Components

The stack that we will be using to construct our software is LAMP. We will use Linux as the operating system, Apache as the web server, MySQL as the database server, and PHP as the programming language. By utilizing the LAMP stack, the software will be highly efficient, scalable, and easy to maintain.

L - Linux

A - Apache

M - MySQL

P - PHP

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:** JavaScript
- **Database:** SQL
- **Testing Framework:** Jest
- **Documentation Tool:** JSDoc

Summary

In a world where travel can be overwhelming and risky, WiseTraveler stands out as your ultimate travel companion. While YouTube vlogs, TripAdvisor, and Expedia offer valuable insights, WiseTraveler goes above and beyond these competitors by providing concise, actionable guides on local laws, health risks, and hidden gems. Imagine having a personal travel assistant that not only helps you navigate the unknown but also unveils the authentic, off-the-beaten-path experiences you crave. Whether you are seeking to immerse yourself in local culture or simply want to ensure a safe, well-prepared journey, WiseTraveler is the key to transforming every trip into an unforgettable adventure. Join us in building a vibrant community of informed, confident travelers ready to discover the world's hidden treasures!

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Thank YOU