EasySearch

A Travel Based tool
Made for people with disabilities

Core Values

- Accessibility
- Innovation
- Continuous Improvement
- Empowerment

Objectives

- Create a full stack travel-assistant application.
- Tailor the application to the needs of disabled travelers.
- Develop an accurate speech-to-text feature that can effectively convert spoken words into written text.
- Develop a personalized chatbot that can give accurate recommendation and advices based on traveler’s location and preferences
- Incorporate responsive user-friendly interfaces and accessibility features
- Conduct extensive testing and user feedback sessions to ensure the best application for our user

Target Audience

- Visually Impaired Travelers
- Travelers with Disabilities
- Travelers
- Perspective Travelers
- People who seek a resource to find traveling tips

Competitive Advantage

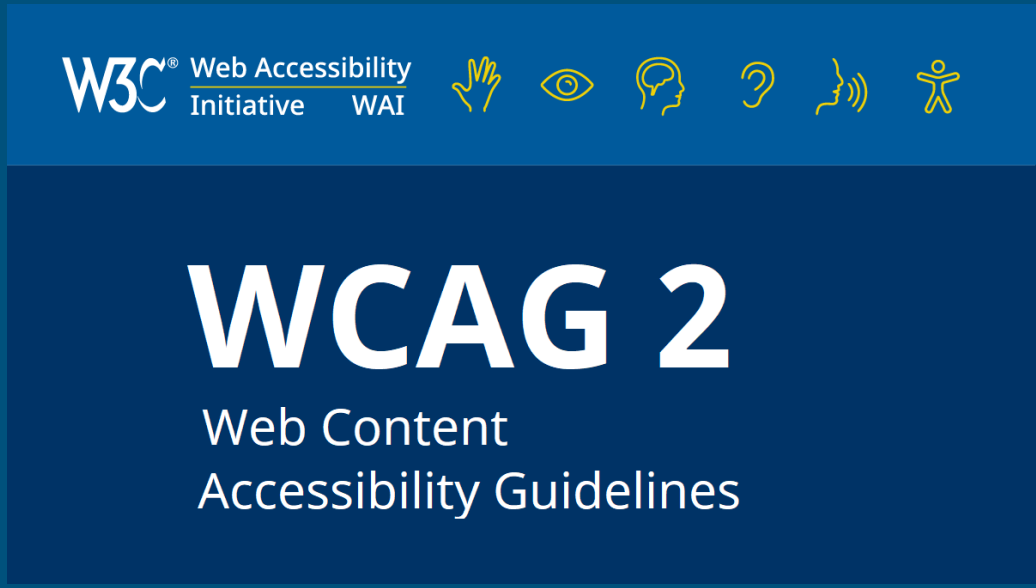
- Tailored for the visually impaired travelers: The application is was designed to enhance the travel experience for individuals with visual impairments, giving it a niche focus and competitive edge.
- User centered design allows us to understand preferences of our user and design accordingly.
- Innovative features such as generative AI, personalization, and Text-to-Speech are not typically included in other travel application.

Key Features & Future Enhancements

- Integration of travel blog
- Integration of collaboration mechanism
- Integration of ranking system
- Refinement of Chatbot
- Refinement of personalization features

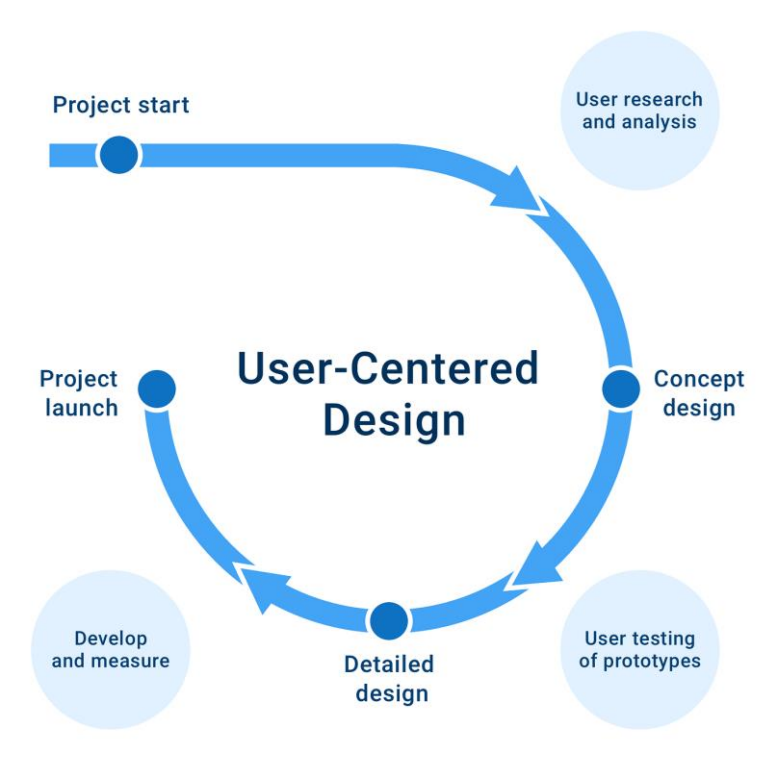
Accessibility Guidelines

- Web Content Accessibility Guidelines (WCAG)
- Understanding WCAG
- Key Concepts and Principles of WCAG



UI Design Approach

- User-centered design: Design phases will prioritize the user input, considering their opinions throughout the development process.
- User Personas will be created based on our user base.
- Surveys, interviews, and Q&A will provide insights into user preferences and areas for improvement.
- User Research will be conducted to understand user's behavior and motivation.



Technology Stack

Development Languages

- HTML & SCSS
- Typescript
- C#
- SQL

Frameworks and Tools

- Bootstrap 4
- Angular 15
- Dotnet Core 7
- Identity Framework
- SQL Server

Microservice Architecture Overview

Front-End

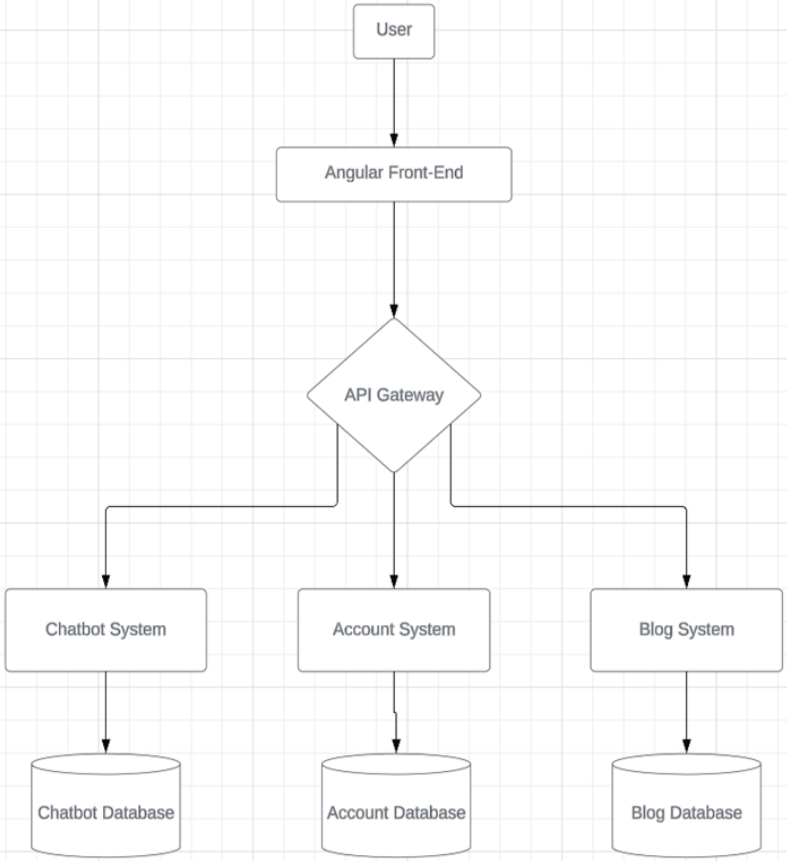
- Chatbot Module
- Account Module
- Travel Blog Module

API Gateway

- Entry Point for all Microservices API's
- Handle Authorization and Authentication between API's via JWT token

Back-End

- Chatbot System
- Account System
- Travel Blog System


User
Angular Front-End
API Gateway
Chatbot System
Account System
Blog System
Chatbot Database
Account Database
Blog Database

Front-End Design

Angular

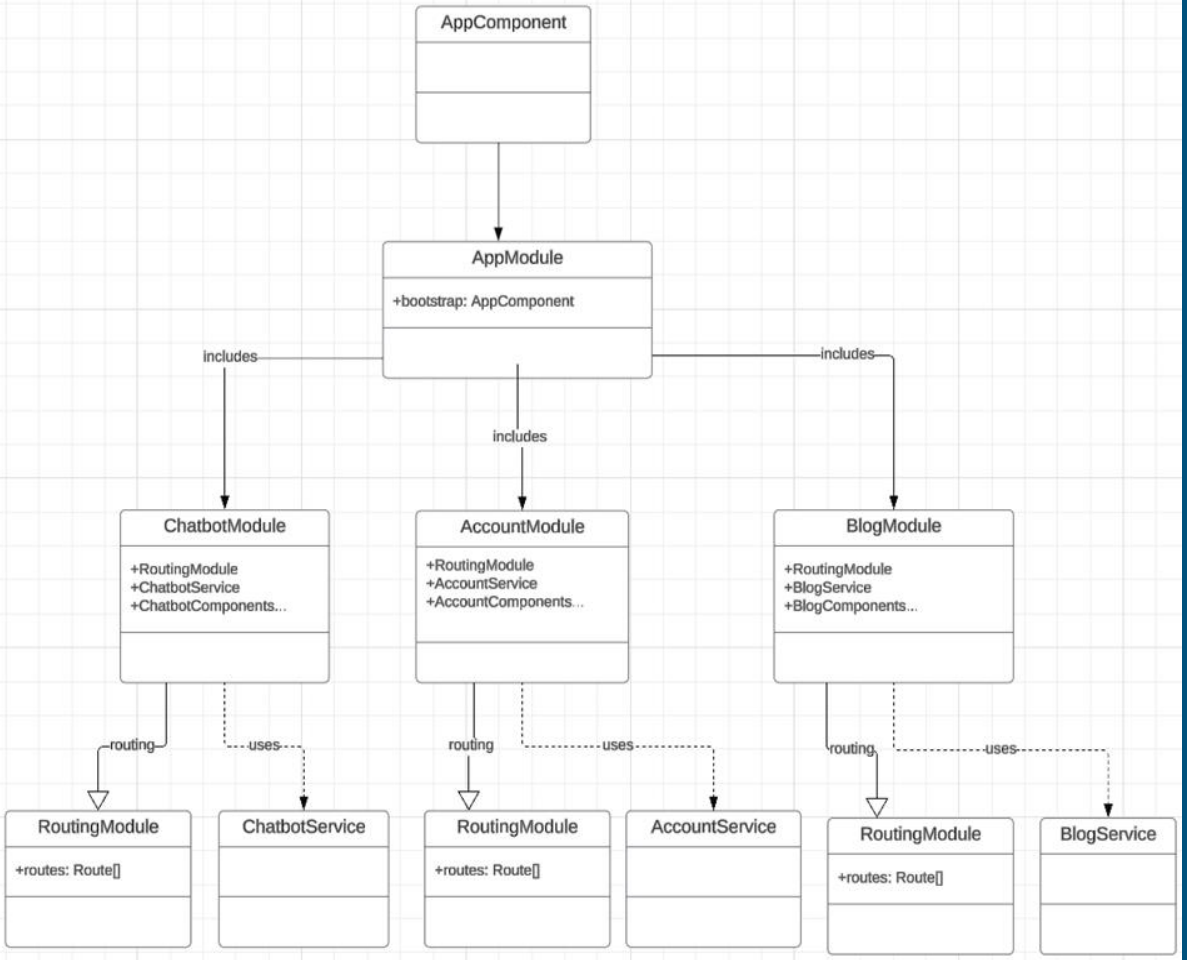
- Modularize design to encapsulate independent system logic
- Services for data fetching and state management
- RXJS: For handling events and asynchronous data stream

Bootstrap 4

- User Interface library with prebuilt responsive components

SCSS

- Styled sheet scripting language used to make custom variables and mixins to build reusable CSS library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Back-End Design

Microservice Dotnet Web API

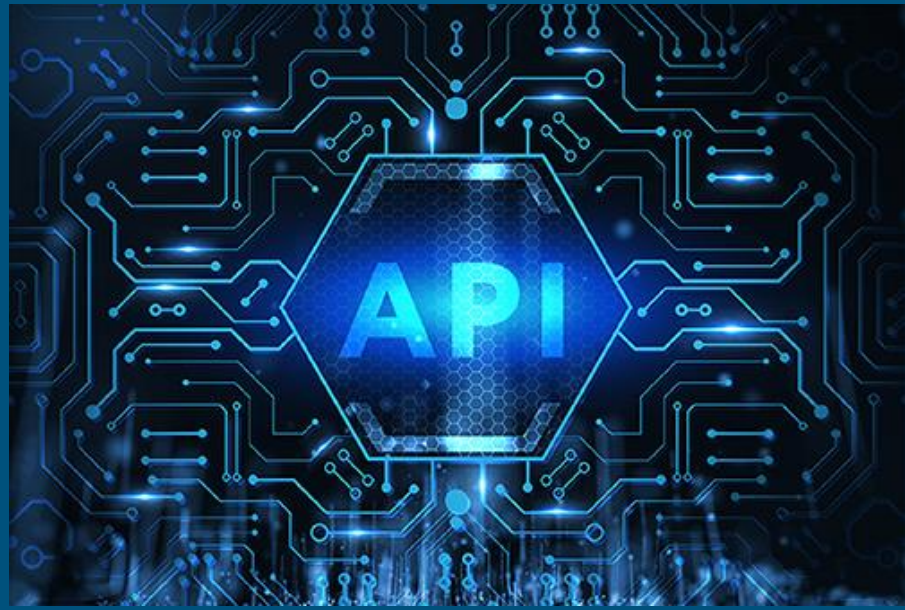
- Repository Pattern & DTO
- Specification Pattern
- Identity Framework
- SQL Server

API Integration

ChatGpt API: Used to create custom chatbot for users.

Web Speech API: Used to convert spoken speech to text.

Account API: Used to create, authenticate, and authorize users across microservices



Persona - Tom

NAME

Tom

MARKET SIZE

20 %

TYPE

Idealist

Demographic

Gender 30 years

United Kingdom

Single

Computer Technician

60,000

Goals

To travel independently and explore new places despite his visual impairment.

To utilize technology effectively to enhance his travel experience.

To experience new cultures, cuisines, and adventures.

Quote

I believe that with the right tools and resources, I can travel the world on my own terms.

Background

Tom is introverted. He prefers solitary activities and finds peace in spending time alone, immersed in his thoughts, or working on personal projects. He wants some excitement and would like to take a solo trip to a country where he does not know the language.

Expectations

User-friendly interfaces with compatibility for screen reader software and voice commands.

Needs

Information about accommodations, attractions, and transportation options for the solo traveler.

Challenges

Navigating unfamiliar environments independently and safely, especially in crowded or busy areas.

UXPRESSIA

This persona was built in uxpressia.com

Persona - Kelly

PERSONA: Kelly

NAME

Kelly

MARKET SIZE

15 %

TYPE

Idealist

Goals

Experience new things

Meet new people and make connections

Quote

I believe life is about making new connections and making every second count

Demographic

Gender 30 years

America

Married

Singer

60,000

Background

Kelly is extroverted and free-spirited. She loves social interaction and meeting new people. She wants to meet new people and seeks new friends with whom she can make genuine connections. She doesn't know where to go and prefers to make plans as she feels like it. She also has slight dyslexia, which makes reading long and compact paragraphs hard.

Expectations

A travel application with a simple interface to assist her in her journey. She doesn't know where she wants to go but wants insight on the best place to visit.

Needs

A simple travel-based application that will help her navigate a three-month trip across Europe.

Challenges

With her slight dyslexia, she had trouble with information overload.

UXPRESSIA

This persona was built in uxpressia.com

Persona - Richard

NAME

Richard

MARKET SIZE

30 %

TYPE

Rational

Goals

To explore new destinations and cultures during retirement.

To reconnect with nature and go on outdoor adventures.

Quote

"I may be retired, but I still have a lot left in me. I'm ready to explore the world!"

Demographic

Male 65 years

America

Widowed

Retired

80,000

Background

Richard was an electrician for 35 years. He just recently retired and wants to travel and explore the world. His kids are all grown up, and his wife passed away ten years ago. He is very analytical and prefers to be in nature.

Expectations

A travel application that is easy to use and provides recommendations based on his age.

Needs

Accessible travel resources and information tailored to older adults.

Assistance with planning and organizing travel itineraries .

Age-related recommendations

Challenges

He has trouble walking for an extended period and prefers trips where he can rest and reset his energy.

He has difficulty seeing and requires reading glasses

He sometimes has trouble hearing if the volume is too low.

UXPRESSIA

This persona was built in uxpressia.com

Persona - Cindy

NAME

Cindy

MARKET SIZE

28 %

TYPE

Guardian

Goals

To seek out unique and authentic travel experiences that offer opportunities for personal growth and discovery.

To travel and get closer with friends and family.

Quote

Traveling is such a great way to strengthen connections

Background

Cindy is a regular when it comes to traveling. She has visited 10 countries and goes on 2-3 trips a year. Cindy's reason for traveling is driven by her desire to connect with her friends and family.

Demographic

Female 55 years

America

Married

Self Employed

80,000

Needs

Access to comprehensive travel resources and information to plan her trips effectively.

Accommodations and recommendations that are good for multiple people, including children.

Challenges

Balancing her desire for adventure with the need for comfort and safety.

Traveling with other people and need to accommodate their interests and desires as well.

Expectations

A comprehensive and intuitive travel assistant that provides all the resources she needs to plan her trip.

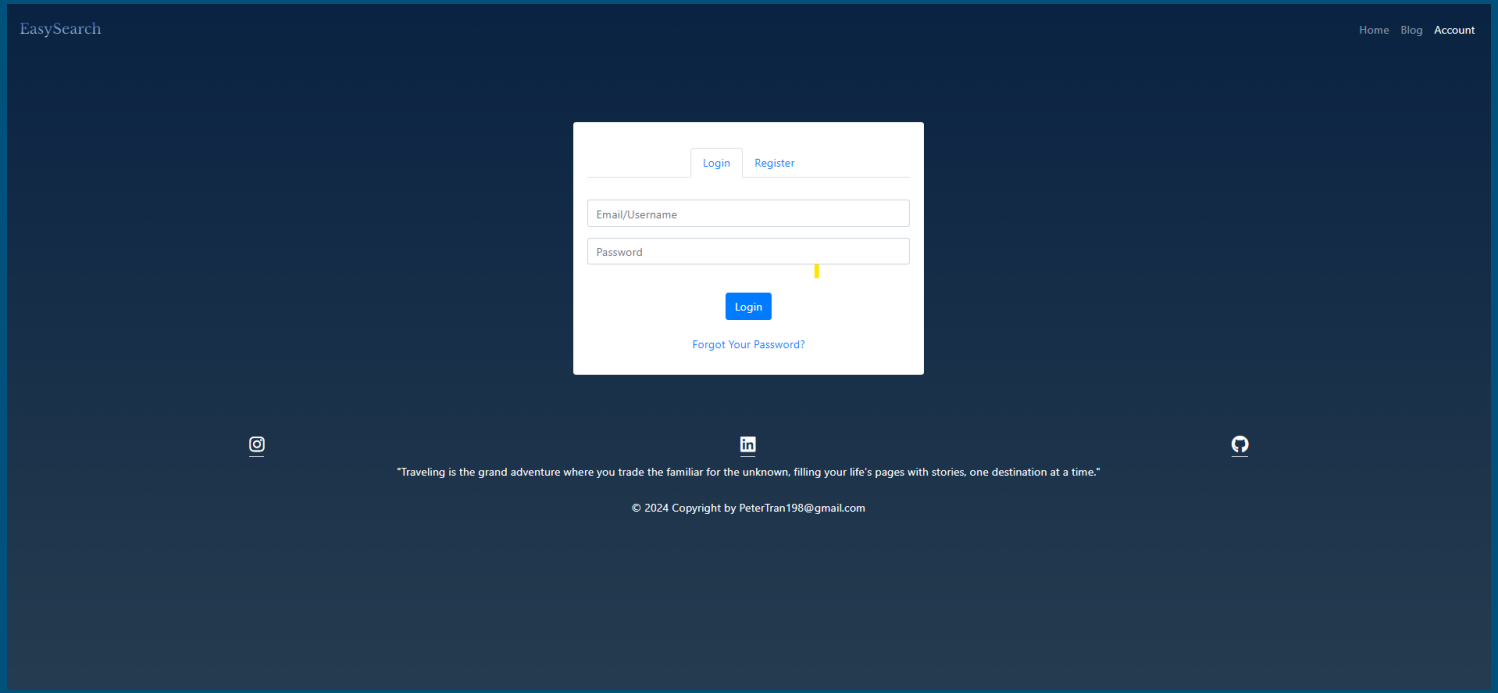
UXPRESSIA

This persona was built in uxpressia.com

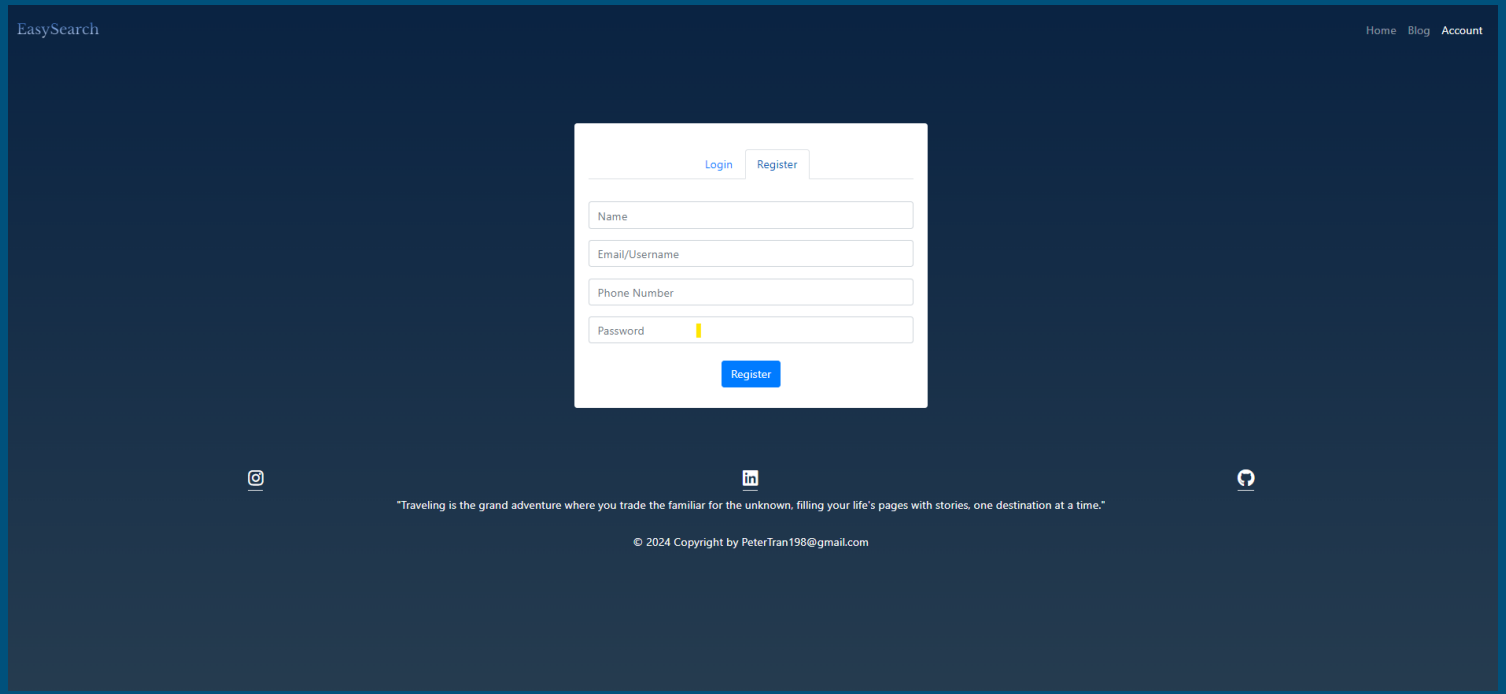
Marketing & Engagement Strategies

- Audience Research
- Determining & Measuring KPIs
- SEO Optimization Strategy
- Gamification Plan
- Surveys and Polls
- Content Marketing
- Email Marketing
- Community Engagement

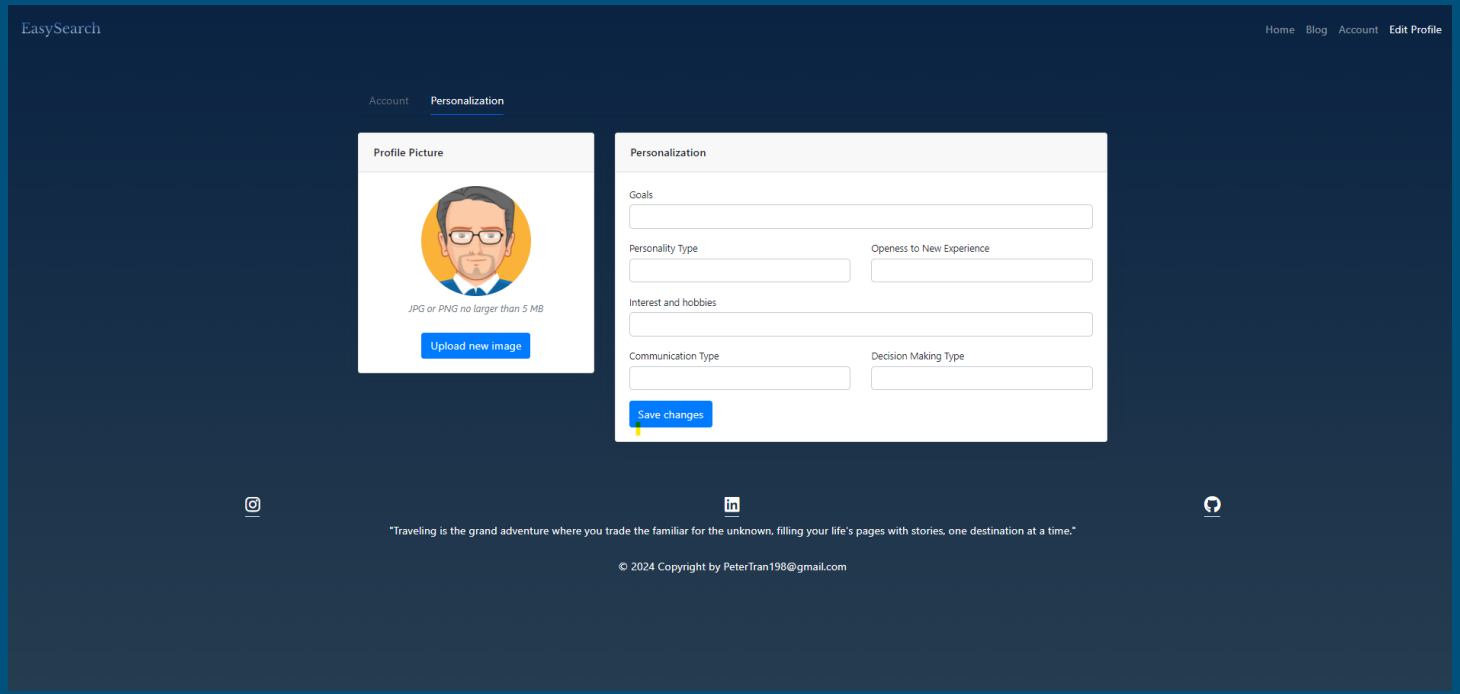
Minimum Viable Product - Login



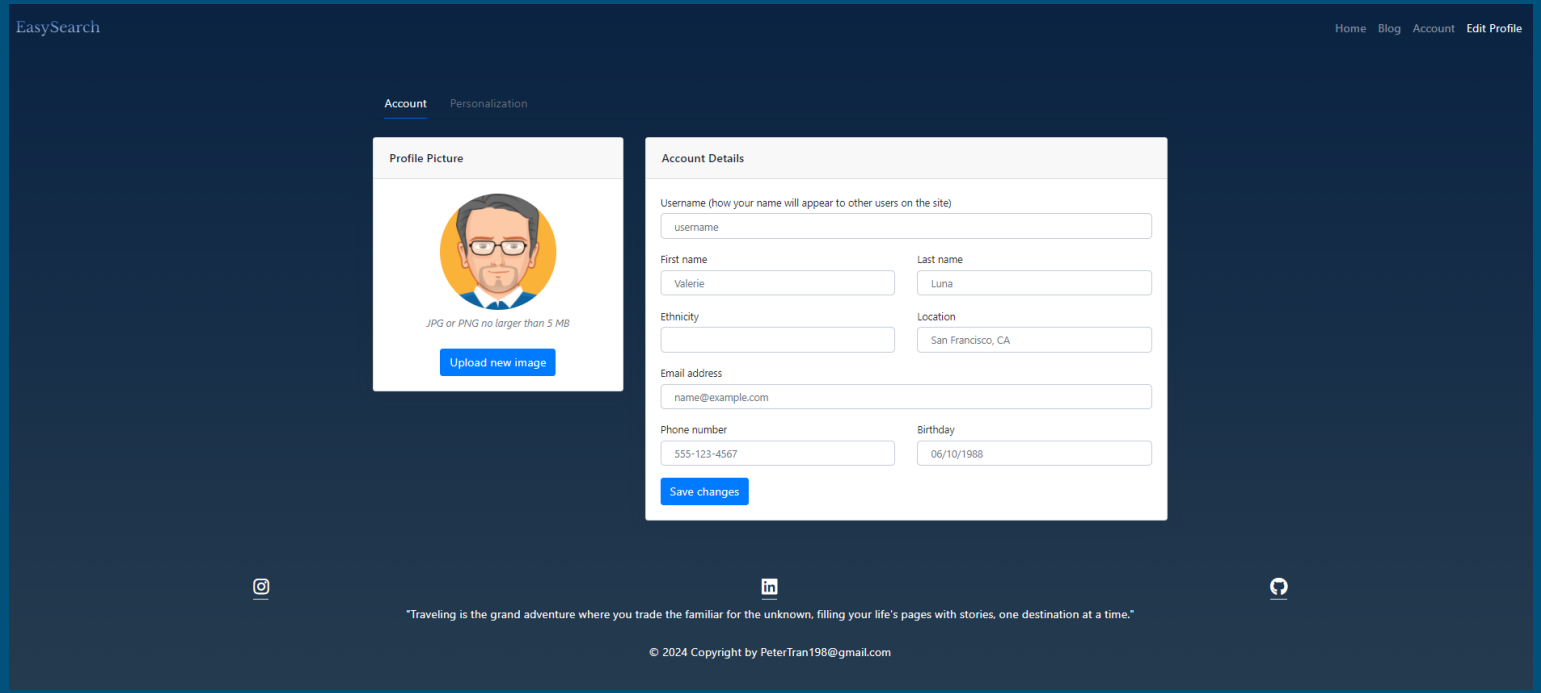
Minimum Viable Product - Register



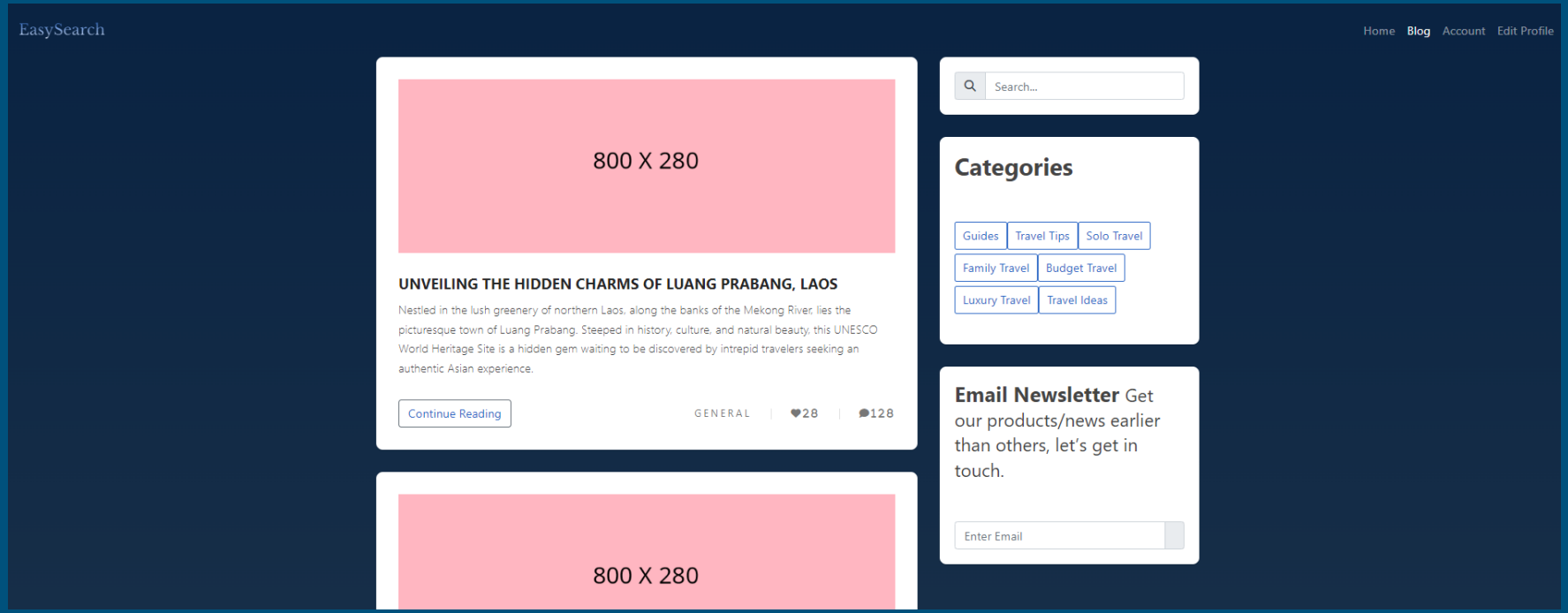
Minimum Viable Product – Personalization Tab for AI and Blog



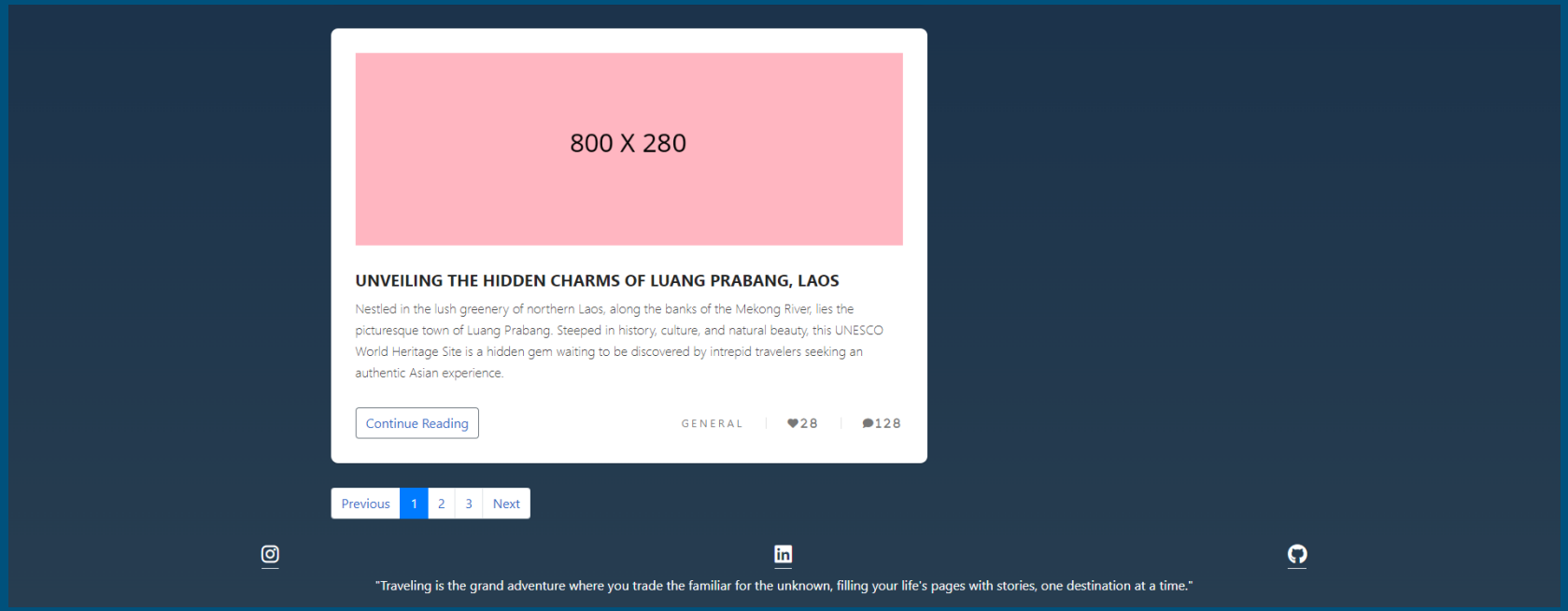
Minimum Viable Product – Profile



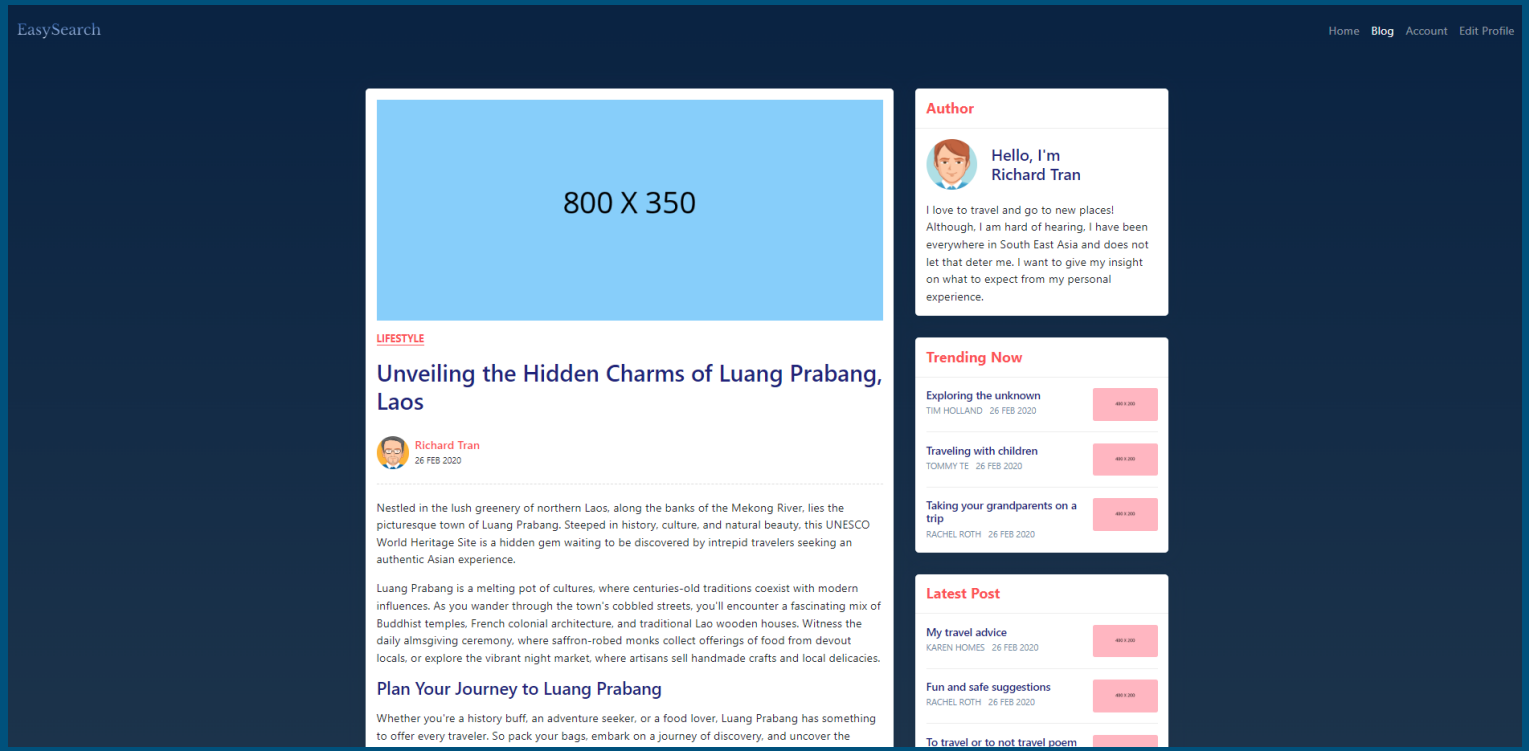
Minimum Viable Product – Blog - 1



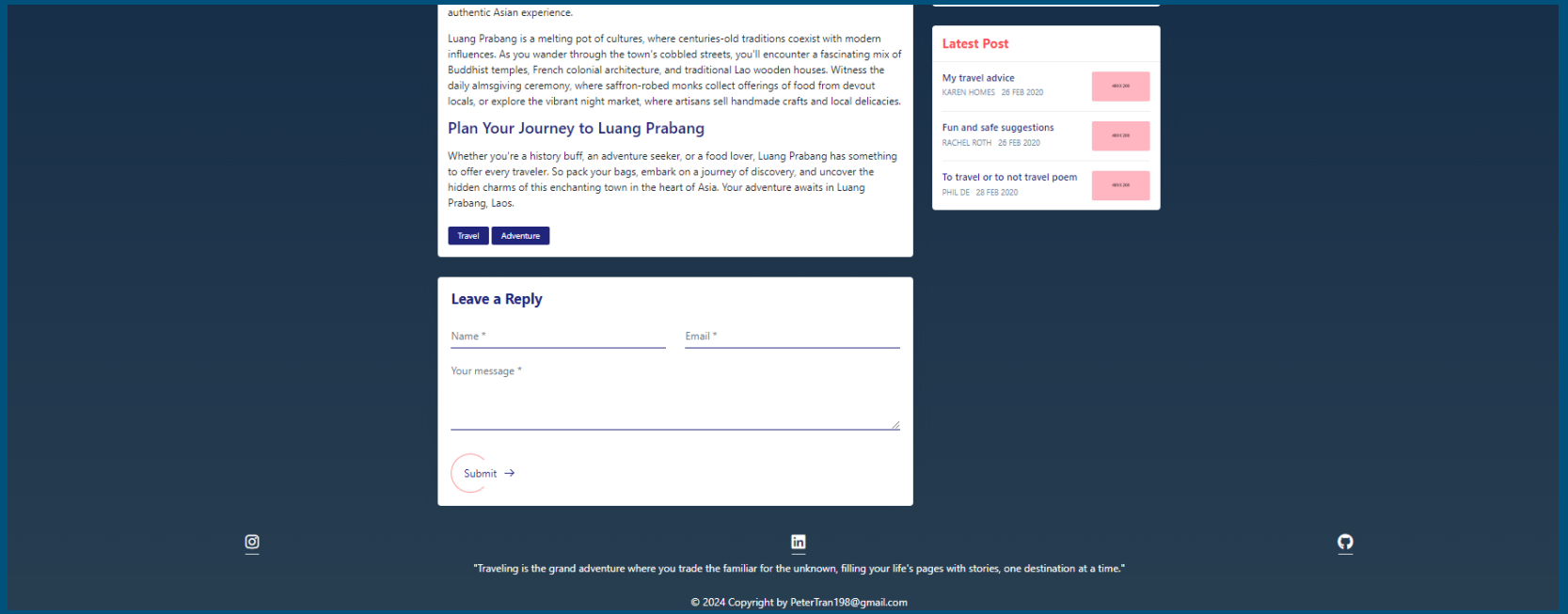
Minimum Viable Product – Blog - 2



Minimum Viable Product – Blog Post -1



Minimum Viable Product – Blog Post -2



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