Web Development Design Document

Project Overview

Project Name: Waypoint

Date: 12/9/2025

Designer/Developer: Stewart Almeida, Theresa Coleman

Version: 1.0

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1. Project Description

1.1 Project Summary

Waypoint is a full stack application that allows a user to record trips they have taken throughout the United States. Users can create an account, log trips with destinations, expenses and notes, and visually see the states they have visited through an updated map of the United States.

1.2 Project Goals

- **Primary Goal:** Create a functional full stack application with full CRUD operations for user accounts and trip logging. Frontend must be rendered using React. Authentication must use Passport for middleware. Accessibility must be accounted for.
- **Secondary Goals:**
  - Use at least 2 collections in MongoDB
  - Implement full user authentication and personalized profile page
  - Fully integrate auto-updated map of United States for visual tracking

1.3 Target Audience

Current target audience includes fellow students, course professors, and individuals who have an interest in traveling and logging some of their experiences from around the United States.

1.4 Key Features

- Large integrated map of United States that color codes visited states
- User dashboard with some quick generalized statistics of logged trips

- Ability to log various trips and associated legs with optional overall costs
- Account sign up, user login and user authentication

2. User Personas

Persona 1: Hans / 29 / Officer worker / Austin, TX / Infrequent Traveler

Goals:

- Easily create an account to log the occasional trip made (no significant details)
- Browse some basic information pages for each state - to potentially consider a future trip

Quote: "While I may not travel much, it wouldn't hurt to at least jot down where I've been just for my personal keepsake."

Persona 2: Mona / 42 / Consultant / Phoenix, AZ / Frequent Traveler

Goals:

- Track various trips made, including all of the legs traveled
- Visually track which states have not been visited yet - to plan around hitting the goal of visiting every state.

Quote: "In my field of work, it's not uncommon to travel around for various business meetings/customer interactions. I'm curious where I still haven't gone yet."

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3. User Stories

User Story 1.1:

- **As a** n infrequent traveler
- **I want** create an account
- **So that** I can start explore the site and have an account ready
- **Acceptance Criteria:**
  - Account creation process is simple and responsive

User Story 1.2:

- **As a** n infrequent traveler

- **I want** explore some quick state information
- **So that** I can learn a bit about other states and consider travel
- **Acceptance Criteria:**
    - Quickly click provided state information

User Story 2.1:

- **As a frequent traveler**
- **I want** log trips I've taken over the years
- **So that** I can keep an organized catalog of trips in one location
- **Acceptance Criteria:**
    - Can seamlessly add/edit/delete trips from the designated page
    - Various pieces of information related to a trip, including compiled stats, are able to be tracked and provided easily

User Story 2.2:

- **As a frequent traveler**
- **I want** visually see states I have marked visited
- **So that** I can visually keep track/progress of where I've been
- **Acceptance Criteria:**
    - Provided map automatically updates with states I logged in my trips

4. Visual Design Guidelines

4.1 Color Palette

- **Primary Color:** Navy Blue (#202A44)
- **Secondary Color:** Dark Navy Blue (#111827)
- **Background:** Navy Blue (#202A44)
- **Text Colors:**
    - Main Text: Pale White (#DCF2F5)
    - Accent: Pale Gold (#D1846D)
    - Neutral: Black
- Button Colors:
    - Standout: Dark Green (#28a745)
    - Danger: Red
    - Accent: Pale Gold (#D1846D)

4.2 Typography

- **Primary/Secondary Font:** Bellota Text, Nunito

4.3 Visual Style

- **Style Direction:** Modern, Calm, More Minimalist
- **Key Visual Elements:** Deep blue colors with gold compliment accents, dark green standouts for states and some buttons, pale white text for readability.

5. Technical Requirements

5.1 Platform & Technologies

- **Frontend:** HTML5, CSS, Bootstrap, JavaScript ES6, React
- **Backend:** Node.js, Express, MongoDB, Passport
- **Hosting:** Render (live site)

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6. Resources & References

6.1 Inspiration

- Been - phone application that allows a user to mark countries/states visited and see them color coded on a map
- DTS - Uses accordion style elements for trip details

6.2 Tools & Assets

- **Design Tools:** Excalidraw
- **Code Editor:** VS Code
- **Map:** MapBox
- **geoJSON:** https://eric.clst.org/

Appendices

Appendix A: Initial Profile Mockup

https://imgur.com/a/AwBizqX