

# Web Development Design Document

## Project Overview

**Project Name:** Travel Tracker for the United States

**Date:** 11/9/2025

**Designer/Developer:** Theresa Coleman, Stewart Almeida

**Version:** 1.0

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## 1. Project Description

### 1.1 Project Summary

A full stack application that allows a user to track trips they have taken throughout the United States. Users can create an account, log trips with legs, 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.
- **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."

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### 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 an** 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 an** 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 to provided state information

#### **User Story 2.1:**

- **As a frequent traveler**
- **I want** log trips I've take 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. Technical Requirements**

### **4.1 Platform & Technologies**

- **Frontend:** HTML5, CSS, Bootstrap, JavaScript ES6, React
  - **Backend:** Node.js, Express, MongoDB
  - **Hosting:** GitHub Pages
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## **5. Resources & References**

### **5.1 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

## 5.2 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>