



Experience 66

Route 66 Companion





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The Team

Route 66 Companion

Our Clients:

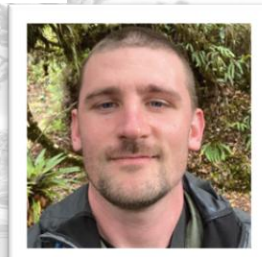


Mike Taylor



Mark Manone

Our Mentor:



Scott LaRocca

Our Focus

Create a new location-aware app that transforms SCA's archives into an interactive travel experience – connecting Route 66 historical photos, oral histories, and documents directly to the user's GPS location along the highway.

Overview

Route 66 Centennial – 2026





Travelers from around the world will explore the highway's rich history.

Currently

- The Cline Library SCA holds over 100,000 Route 66 materials - photos, maps, and oral stories in CONTENTdm.
- CONTENTdm works well for research but isn't designed for travelers on the road.



Pains/inefficiencies

-  No location-based discovery
-  Interactivity, materials are buried behind keyword search
-  CONTENTdm is static, desktop-oriented
-  No unified narrative

Value

A modern, mobile, GPS-aware platform is needed to transform these archives into an interactive, on the road companion - bridging the gap between place and story

The Problem

Solution Overview

- Simple, intuitive exploration of historic Route 66 locations
- Interactive maps combined with real-time GPS awareness
- Offline navigation support for areas without service
- Seamless experience as users travel along the route
- Location-based stories, photos, and audio surfaced automatically

Key Features & How They Address Client Needs



Interactive map experience



Location-based triggers



Offline access



Searchable POI database



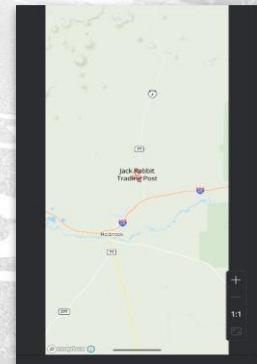
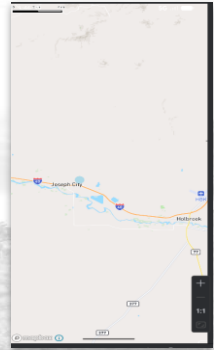
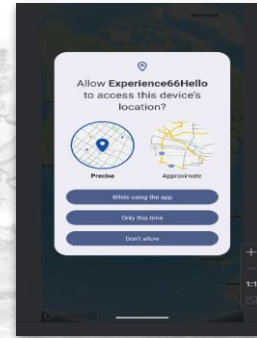
Simple, clean interface

Key Requirements

Gathered information via client meetings, docs, prototype + field testing.

MVP (Minimal Viable Product)

- Interactive map with live GPS user dot
- Geofencing for Route 66 POIs
- POI cards with images, short description, and oral narration
- Offline access for low-coverage areas
- Simple, clean UI



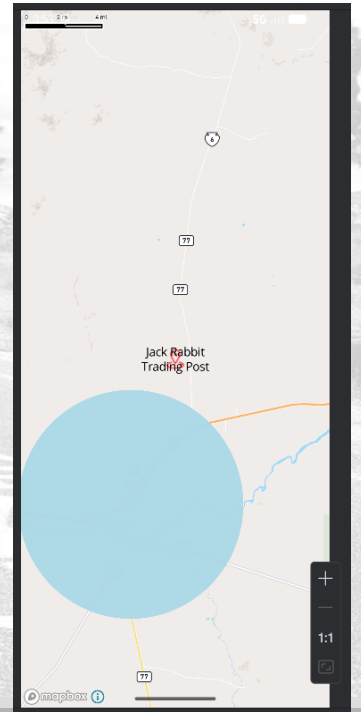
Breakdown

High-Level -> Detailed Example

- Precise location permission
- Geofence creation + detection
- Entry triggers + notifications
- Audio narration + cached content

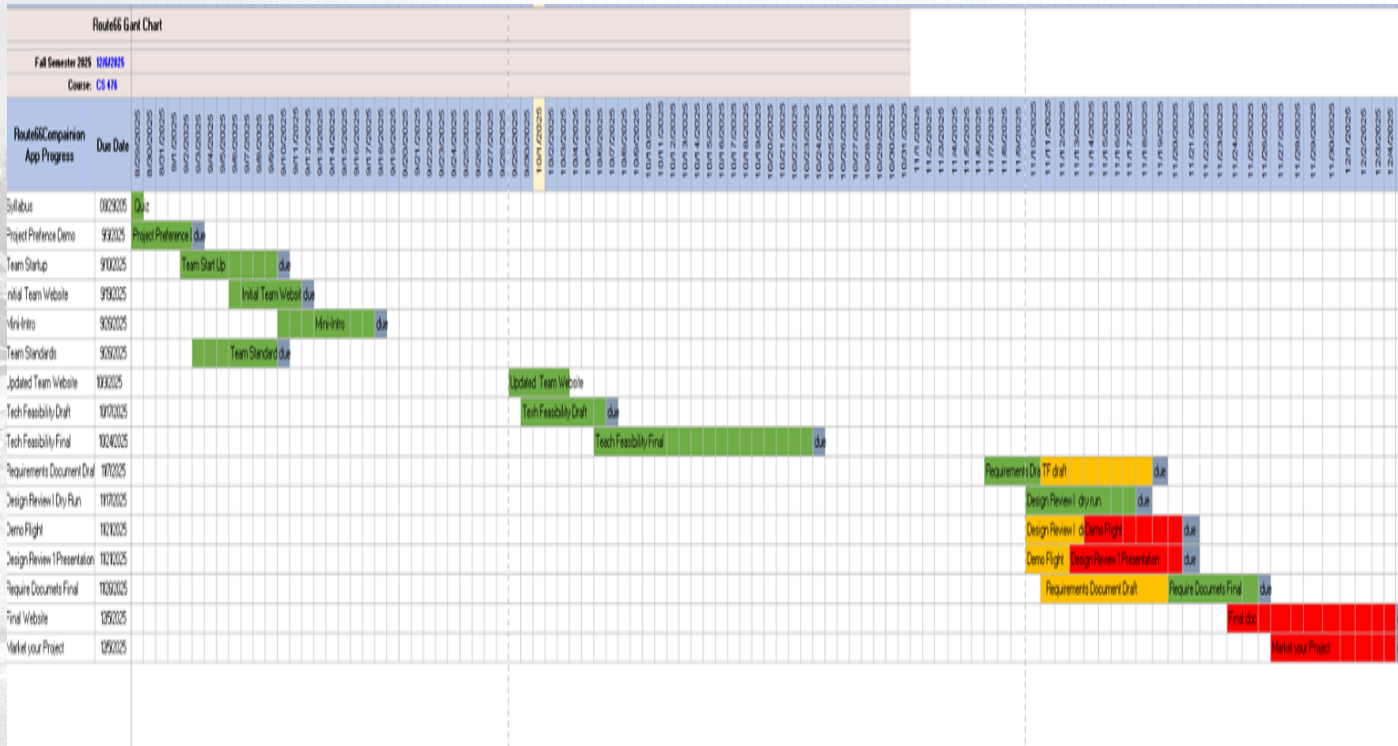
Conclusion

We have a strong initial baseline, and while the requirements will continue to evolve through client feedback and testing, this gives us a clear foundation moving forward.



Risk and Feasibility

- **External dependencies, offline reliability & GPS accuracy:** Risks include API changes (Mapbox, CONTENTdm), offline data failures in low-connectivity areas, and inaccurate GPS readings. Mitigations focus on version locking, modular API wrappers, offline caching optimization, and GPS smoothing with manual fallback options.
- **Content integrity, copyright, & user privacy:** Using archival materials requires strict metadata accuracy and proper rights handling. Location-based features introduce privacy concerns. Mitigations include verified CONTENTdm sourcing, librarian review, displayed attributions, real-time-only location processing, and transparent permission prompts.
- **Device performance & user experience:** Heavy GPS usage, rendering, and background tasks may cause battery drain or slowdowns. Mitigation includes optimization of polling frequency, suspending unnecessary background services, and enabling Mapbox Lite Mode.



Schedule

Conclusion



Our solution

- Tackles the core challenges of **navigation, connectivity, and engagement**
- Provides a **dependable travel companion** built around:
 - Offline access
 - Location-triggered content
 - A **clean, intuitive user experience**

Coming Next

- Completing a **full geofencing system** for all Route 66 landmarks
- Expanding **CONTENTdm integration** to support full archival datasets
- Adding **offline caching** for improved access on the road
- Developing **complete iOS compatibility** for a true cross-platform experience

Thank You!



Any Questions?

