

School of Informatics, Computing and Cyber Systems

NAU NORTHERN ARIZONA LINIVERSITY Reheal of Informatics, Computing and Cyber Systems ROUTE 66 Computing and Cyber Systems



Team: Ethan Meyer, Manjot Kaur, Moraa Morara, Nasya Valenzuela

Client: Mike Taylor, Mark Manone Mentor: Scott LaRocca

The Problem

- Route 66's 100th anniversary in 2026 is sparking new interest in its history and culture among travels.
- Cline Library SCA holds over 100,000 Route 66 photos, maps, and stories in its online database, CONTENTdm.
- CONTENTdm works well for research but isn't designed for travelers on the road.
- It lacks mobile access, interactivity, and GPS-based discovery of local stories.

Solution Vision

- Turns SCA's Route 66 archives into an interactive, GPS-based app.
- Shows photos, stories, and history based on where the user is.
- Built with Mapbox and Kotlin in Android Studio for maps, offline use and navigation.
- Makes Route 66 a "living museum" travelers can explore on the road.



Key Features

- The app will use **geofencing** to suggest nearby historical sites based on the user's location.
- Display different types of materials, like oral stories and pictures with a description and the option for an audio version.
- Includes stationary and on-the-go modes for viewing content while traveling or standing still.

Challenges

- Designing the application for full iOS device compatibility
- Implementing offline access so users can view content even if connection is lost.
- Ensuring accurate geofencing for reliable location-based features

Technologies









Future Work

- Full geofencing covering for all Route 66 landmarks with location-triggered media.
- Deeper CONTENTdm integration to pull full archival datasets and support offline caching.
- Full iOS compatibility for complete cross-platform support.