UA Capstone Tours

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General Motivation

Why this project?

There is no dedicated, in-depth, self-guided UA campus tour

Existing campus maps lack storytelling and context, not suited for tours

Visitors often explore campus without a guide

General Motivation

Who is this project for?

01

Visitors and guests exploring campus independently

02

Students and faculty leading informal tours

03

Prospective students, families, and new hires

App Features

Core Experience

Mobile-friendly web app

Interactive map of the UA campus

Geotagged landmarks and buildings

App Features

Key Functionality

- Live location tracking (with permission)
- Static map mode for remote users or denied location permissions
- Nearby locations surfaced dynamically based on user location
- Text and image content associated with geotagged locations

App Features

Optional or Advanced Features

Audiovisual Content

Guided Walking Tours, either curated or custom generated for user

User-submitted locations / information (with review)

Technical Details

Existing Frameworks and APIs to integrate

Google Maps integration

UA Login terminal

Location Permissions

Initial Environment

Language, IDE, & Setup

Django Environment

Visual Studio

Python Language Basis

Related Apps/Competitors

Mapping/Navigation Applications

Other Virtual Tour Apps

In-Person Capstone Tours

High Priority Challenges

Geolocation and User Permissions

- User Permissions
- Accurate and Reliable Geolocation
- Off Campus Utilization

High Priority Challenges

Auto-play and Geofencing

- Geotagging Buildings
- Multiple Buildings Being Tagged Simultaneously
- Audio and Auto-Play Features