FIT History Tours

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Faculty Advisor and Client



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Our Goal

- **Goal**: To provide users with a mobile suite for navigating the Florida Tech campus while engaging them with historical content:
 - Photos
 - \circ Videos
 - Trivia

such that the campus experience is memorable and educational.

Motivation

Campus Tours today are:

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Pros	Cons		
 → Led by students → Visit popular landmarks → Explain area purposes → Can ask questions 	 → Have a set pace → Limit exploration → Are detached from campus life → Lack impact → Formulaic, follow one path → Information is not always accurate 		

Primary Features

- Feature #1: Explore the beautiful campus of Florida Tech at your own pace with our guided walking tours, housed completely within the app! Navigate to your desired point of interest with ease as the GPS shows which paths to take in real-time! Take the scenic route with the "Sightseeing" option, or arrive in no time with the "Fast Travel" option.
- Feature #2: Virtual Tours: Discover the landmarks and history of Florida Tech without setting foot on campus! Select locations on the map to see an image/video with narration about each place!
- Feature #3: Compete in trivia games as you walk around campus to win prizes. Bridge the gap between education and fun with our Jeopardy style trivia during your tour and rack up points while you learn about each landmark! Make your own path as you search for points of interest in a scavenger hunt! Deepen your connection with campus as you play games on the tour.

Technical Challenges

- Challenge #1: Mobile App development/deployment
- Challenge #2: Learn JavaScript/Choose Framework
- **Challenge #3**: Applying the Software Development paradigms taught in previous semesters to one large project.
- Challenge #4: Dynamic UI/UX Development (ReactJS)
- Challenge #5: Content Management Systems Implementation

Novel Ideas

An active timeline that appears during a tour when a history "event" is triggered, visually scrolling backward from the current year to the date of the past event. Used as an indication that a mini-game or trivia section is about to begin. This is novel because we have never seen a dynamic timeline implemented in any app graphically to express to the user when an event happened, only static dates in the header/footer.

(Tentative) Augmented reality tags located throughout the campus and generate a visual model in 3D space when scanned during a guided tour within the app. This feature may occasionally be present in museum tours but has not been encountered during a college campus tour before.

Milestone 1

- Select and Learn a JS Framework for Development
- Select and Learn a Mobile Development Toolkit for iOS/Android
- Begin to Collect Historical Research and Images for the Application
- Create UI Mock-Ups and Get Client Feedback
- Create Requirement Document
- Verify and Validate Requirements
- Create Design Document
- Create Test Plan

Milestone 2

Milestone 3

- Implement and Deploy Basic Web App/Mobile App
- Choose GPS/Location Framework/API
- Build Out Historical Database

- Develop UI Further
- Implement Timeline
- Test GPS Popup On Arrival at a Location
- Validate Historical Database into Application Timeline

Task Matrix: Milestone 1

Task	Grant	Tyler	Matthew	Cameron
Select and Learn a JS Framework	25%	25%	25%	25%
Select and Learn Mobile Development Toolkit	55%	15%	15%	15%
Investigate Hosting Options and Needs	15%	55%	15%	15%
Compare and Select Collaboration Tools	Calendar Software for Team/Client Meetings	Documentation Software and UI/UX Preview Software	Presentation and Communication Tools	Version Control and Code Reviews
Begin to Collect Historical Research	15%	15%	55%	15%
Requirement Document	Write 15%	Write 15%	Write 15%	Write 55%
Design Document	Write 35%	Write 15%	Write 35%	Write 15%
Test Plan	Write 15%	Write 25%	Write 15%	Write 45%

