Samuel Flock, Aidan Scudder, Martin Guzman

November 10, 2023

Mobile App Development

Professor Steven Cutchin

Final Project - Project Proposal

Introduction

Our team is developing a Hiking App dedicated to efficiently tracking and saving hiking routes. This app aims to provide a simple yet powerful tool for hikers to record their journeys with ease.

Project Overview

Our project will focus on developing a user-friendly application that allows hikers to track their routes in real time and save them for future reference. The app will offer a clean and intuitive interface, ensuring a seamless experience for users of all skill levels.

Blueprint

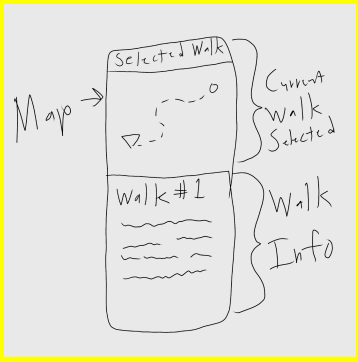
App Structure and File Hierarchy:

App.js: The central hub of our application, integrating all functionalities and modules.

HikeInfo.js: A dedicated module for tracking the ongoing hike, utilizing GPS technology to map the route accurately.

HikeList.js: A module designed to save the details of completed hikes, including route maps and essential statistics.

Implementations



User Manual Overview

Text

Projected Timeline

Sun - Nov 5	Mon - Nov 6	Tues - Nov 7	Wed - Nov 8	Thurs - Nov 9	Fri - Nov 10	Sat - Nov 11
x	x	x	x	x		Proposal
Sun - Nov 12	**Mon - Nov 13**	**Tues - Nov 14**	**Wed - Nov 15**	**Thurs - Nov 16**	**Fri - Nov 17**	**Sat - Nov 18**
	Create Project and Share				Started Each Planned File	
Sun - Nov 19	**Mon - Nov 20**	**Tues - Nov 21**	**Wed - Nov 22**	**Thurs - Nov 23**	**Fri - Nov 24**	**Sat - Nov 25**
			Tracking Complete		Save Hikes Complete	
Sun - Nov 26	**Mon - Nov 27**	**Tues - Nov 28**	**Wed - Nov 29**	**Thurs - Nov 30**	**Fri - Dec 1**	**Sat - Dec 2**
	Design Doc				View Previous Hikes Complete	
Sun - Dec 3	**Mon - Dec 4**	**Tues - Dec 5**	**Wed - Dec 6**	**Thurs - Dec 7**	**Fri - Dec 8**	**Sat - Dec 9**
			Complete CSS	Clean Up Lingering Problems	Arch Doc User Manual Source Code	
Sun - Dec 10	**Mon - Dec 11**	**Tues - Dec 12**	**Wed - Dec 13**	**Thurs - Dec 14**	**Fri - Dec 15**	**Sat - Dec 16**
	Final Package		Final Pres		Final Sub	

BLUEPRINT

Design:

The summary of our project is here. All details and requirements of the project should be listed here. Below are the files the project will be divided up into:

- **App.js**

  The “main” function of the app.

- **Util.js**

  Utilities for —.

- **Project.html**

  Contains the “main” function of the program.

DUE DATES

(Project Proposal Nov. 11)

Samuel:

Aidan:

Martin:

Due Date (Nov. 27)

Samuel:

Aidan:

Martin:

Due Date (Nov. ##)

Samuel:

Aidan:

Martin:

BRAINSTORMING

Project Ideas

a. Hiking App

Proposed Features:

- Tracks exact path and altitude
- Plans a path
- Saves previous hikes in list

1. App Description and Functionality

Hiking Tracker App is a mobile application designed to cater to outdoor enthusiasts, particularly hikers. Its primary function is to enable users to track their hiking routes using GPS technology and save these routes for future reference. The app aims to be a simple, user-friendly tool for hikers to record and revisit their journeys.

Key Features:

- **Route Tracking**: Utilizes GPS to track and map the user's hiking route in real-time.
- **Route Saving**: Allows users to save their completed routes, including date, time, and distance.
- **Route History**: Users can view and manage their saved routes, providing a personal hiking history.

2. App Components

Core Modules to Develop:

- **GPS Tracking**: Integrates GPS functionality to track and display the user's current location and route.
- **Data Storage**: Manages the saving and retrieval of hike data, including route details and statistics.
- **User Interface** (UI): Offers a clean and intuitive design for easy navigation and interaction with the app's features.
- **History Viewer**: Allows users to view their past hikes, sort by different criteria, and select routes for more details.

3. User Interaction

User Journey and Interface Sketch:

- Start Screen: Simple welcome screen with a 'Start Hike' button.
- Tracking Screen: Displays a map showing the current hiking path. Buttons for 'Pause/Resume' and 'End Hike' are available.
- Save Hike: Prompt to save the hike post-completion, with options to name and tag the hike.
- Hike History: A list of saved hikes, selectable for detailed views.

4. Project Timeline

Weekly Goals until Final Submission:

- Week 1: Project setup, initial research, and design of the app interface.
- Week 2: Development of the GPS tracking module.
- Week 3: Implementation of the data storage module for saving hikes.
- Week 4: Creation of the history viewer and user interaction testing.
- Week 5: Integration of all modules and initial testing.
- Week 6: Refinement of UI/UX, addressing any bugs or issues.
- Week 7: Final testing, preparation of project documentation.
- Week 8: Compilation of the final package, preparation for presentation and submission.