Final Report

1) **Features Implemented and To Be Done**

   a) **Implemented Features**

       i) Used OpenStreetMap to display the different trails

       ii) Fixed the user information page to update or delete user's information

       iii) Trail control panel that allows admins to edit an existing trail route

       iv) Bench control panel that allows admins to edit an existing bench

       v) Setup email system that sends a confirmation once a user signs up, or click on the forgot password link

       vi) Display user's username on the homepage

       vii) Allow users to send feedback message to the admins

       viii) Admins can view feedbacks on the Feedback control panel

   ix) UI/UX design changes

   b) **Remaining Features**

       i) Create unit testing for the trail control panel

       ii) Create unit testing for the bench control panel

       iii) Remove some unnecessary requirement for feedback submission

       iv) Add an anonymous feedback submission

       v) Remove any remaining javascript window popup

2) **Known Issues**

   a) Security needs to be worked on more: login and signup.

   b) Analytics and Videos Functions were done by the in-class team.

3) **Project Flyer**
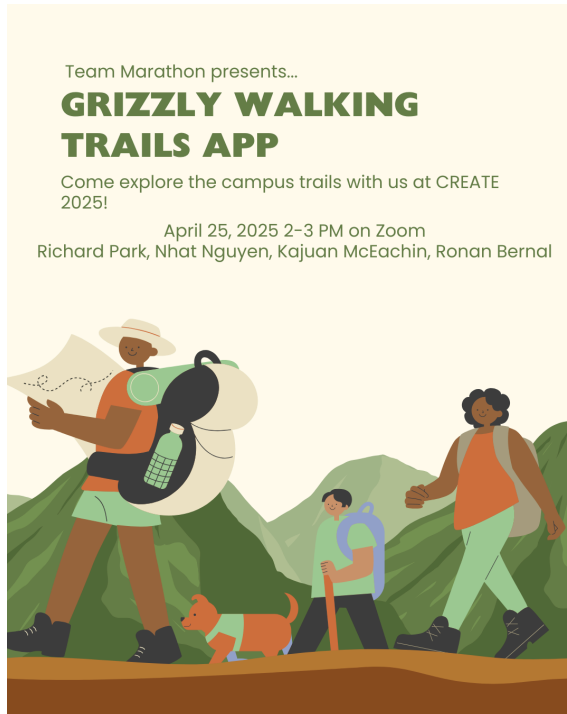
4) **Screencast Demo and Deployment Link**

    a) **Screencast Demo:** https://youtu.be/oLHjysCRNaA

    b) **Deployment Link:** Interns are working on merging the in-class and online class code to create one deployment link.

5) **Clients and Team Introduction**

    a) **Dr. Karen Lee Perell-Gerson**

Dr. Perell-Gerson has served as a faculty member at the collegiate and graduate levels with appointments at UCLA and California State

University, Fullerton. Her primary area of practice and research has been in kinesiotherapy and biomechanics, specifically, the movement patterns presented with chronic diseases. At Georgia Gwinnett College, she examines the benefits of an applied learning environment that allows the student to be part of the research process and be prepared for career development

b) Dr. Kristie Walsdorf

Dr. Kristie Walsdorf graduated from Florida State University with a doctorate in physical education teacher education. While working on her Ph.D. she served as a full-time instructor in the Department of Kinesiology at Valdosta State University for four years. After leaving VSU, she was hired as an assistant professor of physical education at her alma mater, Florida State University. Walsdorf taught a variety of PETE undergraduate and graduate courses in addition to managing the student teaching internship program for seven years.
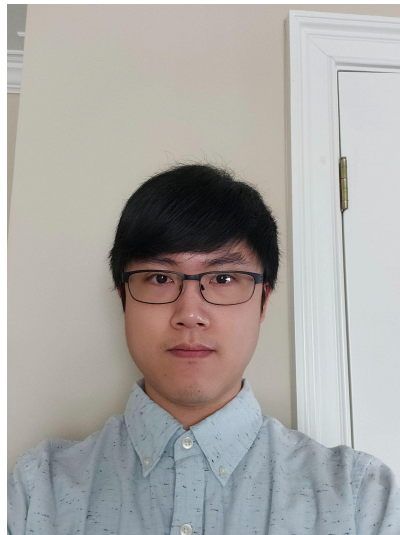
c) Dr. Cindie A. Corey

Ms. Cindie Corey is an instructor in the exercise science and physical education disciplines.

Team Introduction

1) Richard Park - Project Manager & Lead Programmer

2) Ronan Bernal - Lead Tester & Data Modeler

3) Kajuan McEachin - UI/UX Designer & Client Liaison

4) Nhat Nguyen - Documentation Leader/ Lead Programmer

6) Project Abstract

The Walking/Fitness Trail App enhances outdoor walks by providing users with informative content as they progress along a GGC trail using map, videos, and text. Developed with React, the app ensures smooth navigation, an intuitive interface, and a seamless mobile experience. The final goal is to deliver an app that looks good, functions well on mobile devices, and meets the needs of both fitness enthusiasts and nature lovers.

7) Testing Coverage, Methods, and Results

a) **Testing Coverage:** We currently tested the update and delete profile buttons. We also created testing for the feedback function.

b) **Methodology:**

i) Jest unit tests to cover API actions and button functions

ii) Post API testing to manually test models/schemas, connectivity to MongoDB, and to see if the REST functions operated as intended

c) **Results:** All test that we created passes. We still need to create tests for the trail and bench control panel.

8) Documentation

a) Installation - The installation instructions are located in the README.md file located in the top-level folder of the GitHub repository

b) For Developers - The following documentation is located in the docs-Fall2024 folder located in the top-level folder of the GitHub repository in the file,

   i) Requirements Documentation

   ii) Intellectual Property Contract

   iii) License Documentation

c) For Users

   i) Installation

   ii) System Requirements

   iii) Quick User Guide

d) How to Launch Application

   i) Navigate to the home folder, open TrailsApp directory

   ii) Open Client folder, start the Client:

   (1) Open Client Folder open command prompt, enter "npm start"

   iii) Open Server folder, start the Server

   (1) Open Server Folder open the command prompt, enter "npm start"

e) How to create an account

   i) Open Navbar → Click on Login

   ii) Enter a Username and Password + Fill out the rest of the form

   iii) Minimum username size 3

   iv) Minimum password size 4

f) How to Sign In

   i) Select Login from the NavBar

   (1) Enter username and password, then select Sign In

g) Navigate

   i) Click on Navbar to display links to the web pages

   ii) Click on links to access the different webpages

   iii) Content

   (1) Profile: Edit or Delete Profile

   (2) Content: Nutrition, Exercise, Injury Prevention, Water,

(3) Trails: View Trails Maps

h) Account types

i) Guest

    i) Can access Landing Page, About, and Privacy Pages

j) User

    i) Can also access Trails, Exercise, and Nutrition Pages

k) Admin

    i) Can access admin navbar

    ii) Can access admin manager page

        (1) View and manage videos and user

    iii) View video analytics

Code Documentation

1) Primary Directory: Client - Contains Frontend files

2) Primary Directory: Server - Contains Backend files

Server

1) Server.js - Main App

2) Directory: Routes - Contains route configurations

    a) Functions are imported from files in the Controller folder

    b) userRoutes.js

    c) videoRoutes.js

    d) trailRoutes.js

    e) benchRoutes.js

    f) feedbackRoutes.js

3) Directory: Controllers - Exports functions for handles Get Put Post Delete operations

    a) userController.js

    b) videoController.js

    c) trailController.js

    d) benchController.js

    e) feedbackController.js

4) Directory: Models - Exports Schemas for Videos and Users

       a) video.js

       b) user.js

       c) trail.js

       d) bench.js

       e) feedback.js

5) Directory: Middleware - Contains middleware for handling authorization

       a) auth.js

6) Directory: _tests_ - Contains tests for Sign in and video routes

Client

1) app.js - Main application

2) interface.css - Global Style Sheet

3) index.js - Renders app.js

4) Directory: actions - Exports functions for components and pages to interact with the API

       a) auth, users, and videos

5) Directory: api

       a) index.js - Exports Axios functions for routing

       b) PrivateRoutes.js - Prevents non-admins from accessing admin pages

6) Directory: assets - contains videos, pictures, and other media

7) Directory: components - contains elements that are displayed across the webpages

       a) Forms (Authorization, SignUp, Forgot Password, Forgot Password Link, Update User, Userinfo)

           i) input.js: form used for getting user input for Forms

       b) Navbar (Guest, User, Admin, Footer)

       c) Control Panels (Admin)

8) Directory: constants

       a) actionTypes.js - Exports action types

9) Directory: pages - Exports main web pages

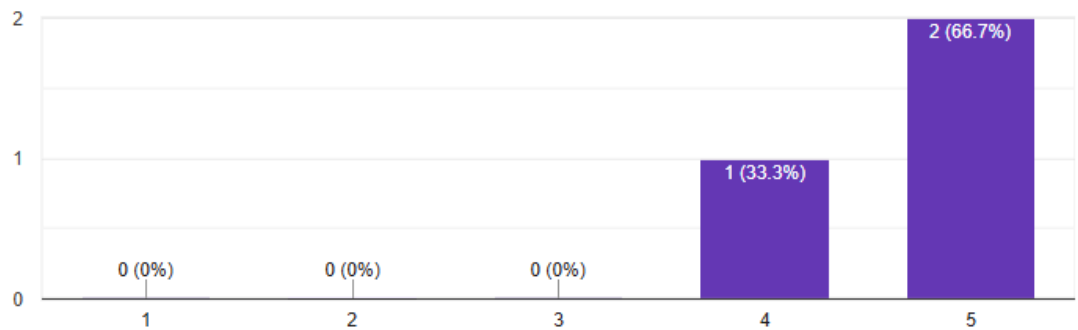10) Directory: reducers - Exports functions for updating states in
   response to actions

11) Directory: _tests_ - Contains tests for the Video and User actions

9) Usability, Testing and Focus Group Survey Results
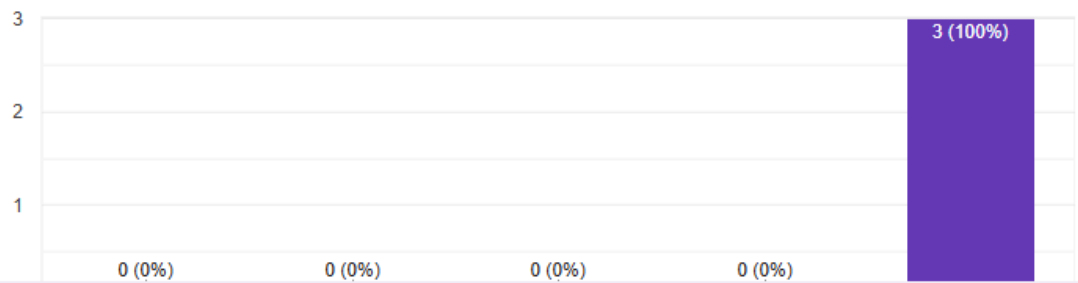

How is the overall UI design of the website?

3 responses

Do you like the overall design of the trail map?

3 responses

Do you like the design of the trail buttons?

3 responses

Copy chart

Rating	Count
1	0 (0%)
2	0 (0%)
3	0 (0%)
4	1 (33.3%)
5	2 (66.7%)
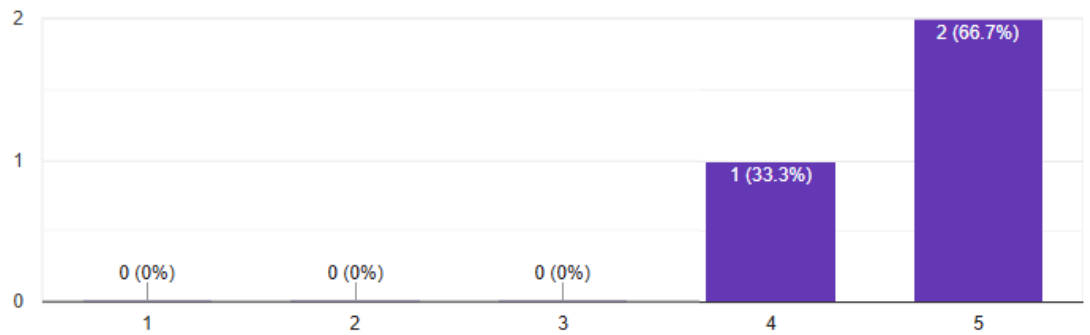
(Admins) How is the overall design of the Trail Management?

2 responses

Copy chart

Rating	Count
1	0 (0%)
2	0 (0%)
3	0 (0%)
4	1 (50%)
5	1 (50%)
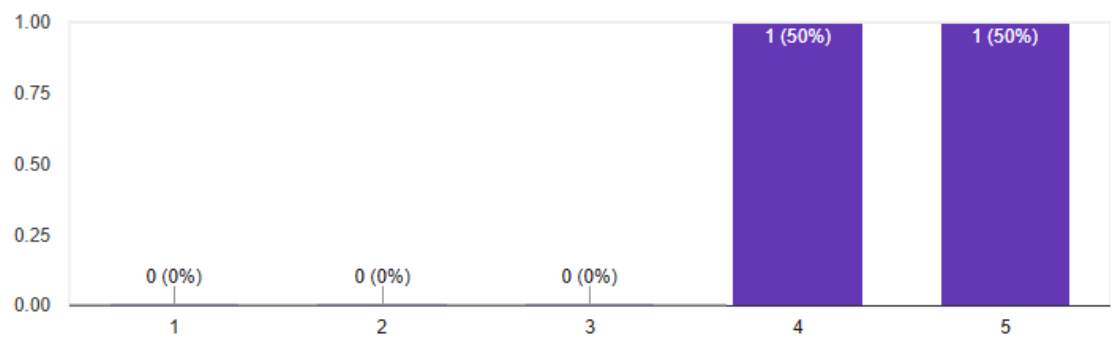
(Admins) How is the overall design of the Bench Management?

2 responses

Rating	Count
1	0 (0%)
2	0 (0%)
3	0 (0%)
4	1 (50%)
5	1 (50%)
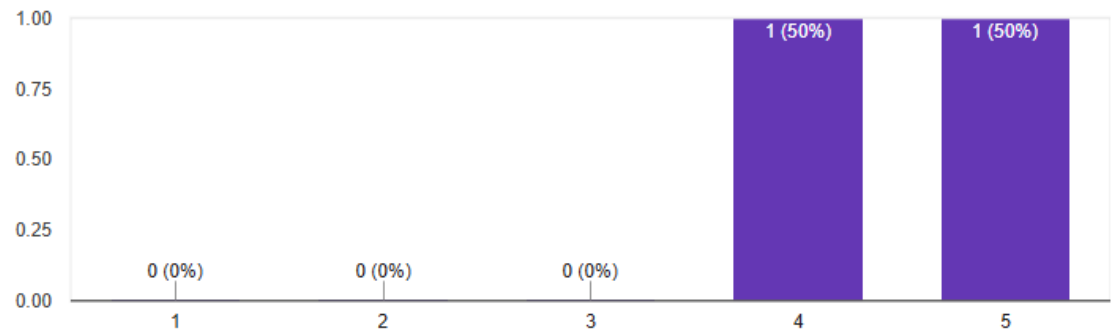
Copy chart

(Admins) How is the overall design of the Feedback Management

2 responses

Rating	Count
1	0 (0%)
2	0 (0%)
3	0 (0%)
4	1 (50%)
5	1 (50%)

Copy chart
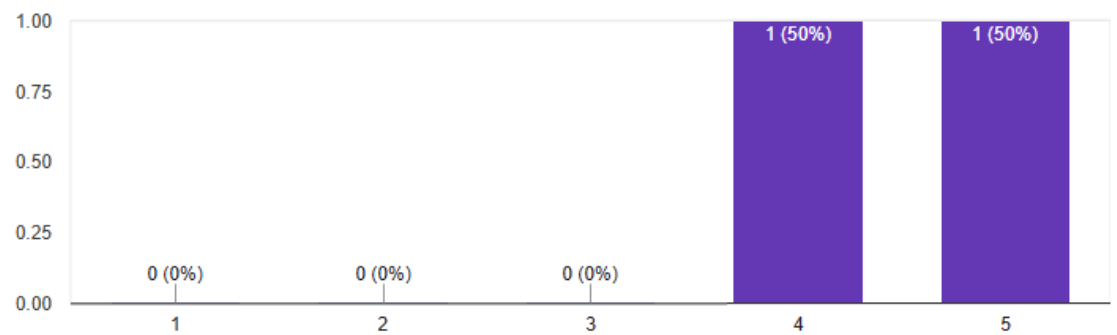
Please share your overall thought of the website. What did you like about the website? What needs more improvements? What functions should we include onto the website?

1 response

Good

10) **Documentation**

All of this documentation pertaining to the current state of the project and any that our team have generated can be found in the README.md in the root folder and with /docs-Spring2025.

11) **Software Usage License and Intellectual Property Terms**

   a) **License**

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b) Intellectual Property

Intellectual Property Contract

Walking Trails App

Team Marathon and Stakeholders

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2. Ownership of Work Product

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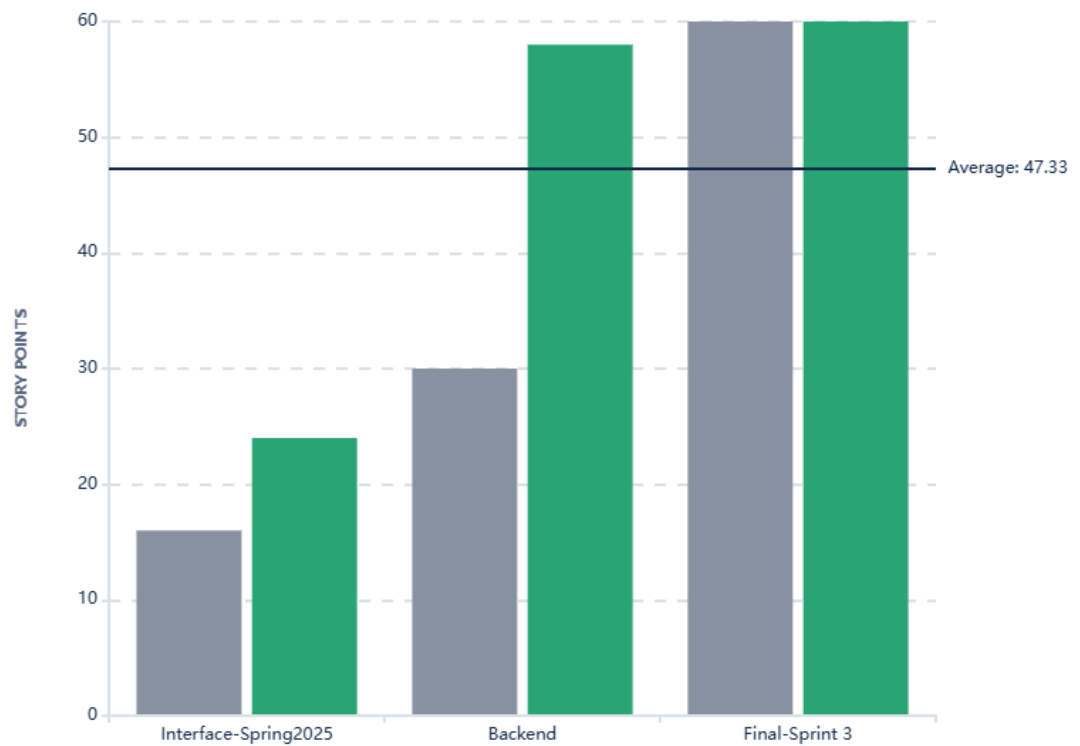*This document is not legally bound*

Signatures:

Name	Percent	Signature(First and Last Name Initial)
Ronan Bernal	10%	RB
Kajuan McEachin	10%	KM
Richard Park	10%	RP
Nhat Nguyen	10%	NN
Dr. Anca Doloc-Mihu	15%	ADM

Dr. Karen Perell-Gerson	15%	KPG
Dr. Kristie Walsdorf	15%	KW
Dr. Cindie Corey	15%	CAC

12) Sprint Velocity Charts and Team Reflection

Over the three sprints, our team showed strong improvement in both planning and execution. We started with a lower velocity in Sprint 1 but quickly adjusted, significantly increasing our story points in Sprint 2 and maintaining that momentum into Sprint 3. This growth shows that we learned how to better estimate tasks and manage our workload. One thing we would do differently is plan more aggressively early on to avoid underutilization. Overall, we are proud of our progress and will continue focusing on consistency and sustainability in future projects.