RepQuest

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Project Description:

Our project, RepQuest, revolutionizes your fitness journey with a DuoLingo-esque gamified fitness application designed to build workout habits that last. Inspired by the beginner-friendliness and engaging progression design of apps like Duolingo, Repquest transforms your exercises into addictive, engaging experiences by unlocking paths, achievements, and streaks. The experience centers around the progression pathway on the homescreen, where each node represents a workout, and by logging it, you unlock more of the path. Users can log their workouts through an intuitive pop-up modal, and their progress is saved on the backend, so they can exit and re-enter as they please. Users can visit the calendar page for an easy overview of their week and see the achievements page at any time to view their accomplishments, giving tangible goals that reinforce motivation. RepQuest is committed to being the go-to workout experience for beginning lifters, and we wanted the application's user interface and experience to be as smooth, modern, and appealing as possible. The user authentication, onboarding sequence, and profile picture uploads help personalize the app, and the frontend incorporates a responsive design, liquid glass-style elements, and animated visual effects. Our goal is simple: make working out fun and build habits that last.

Video:

- https://youtu.be/5c3FhmaF4d4?si=VdCr8DFrcWIwEx_f

VCS:

https://github.com/CU-CSCI3308-Fall2025/group-project-BuffBuffs-RepQuest

Contributions:

Addie: I created a large majority of the account.sql file. I used this to store account data and link it to workout data, logged through the home page. I then took that data and applied it to the achievements page, which I also worked on.

Dalton: I created and connected both the register and login pages to the account.sql file. Making sure that this was functional and worked as intended. After that, I worked on the initial setup of our index.js, Docker, and more files. Then I worked on getting the calendar page to

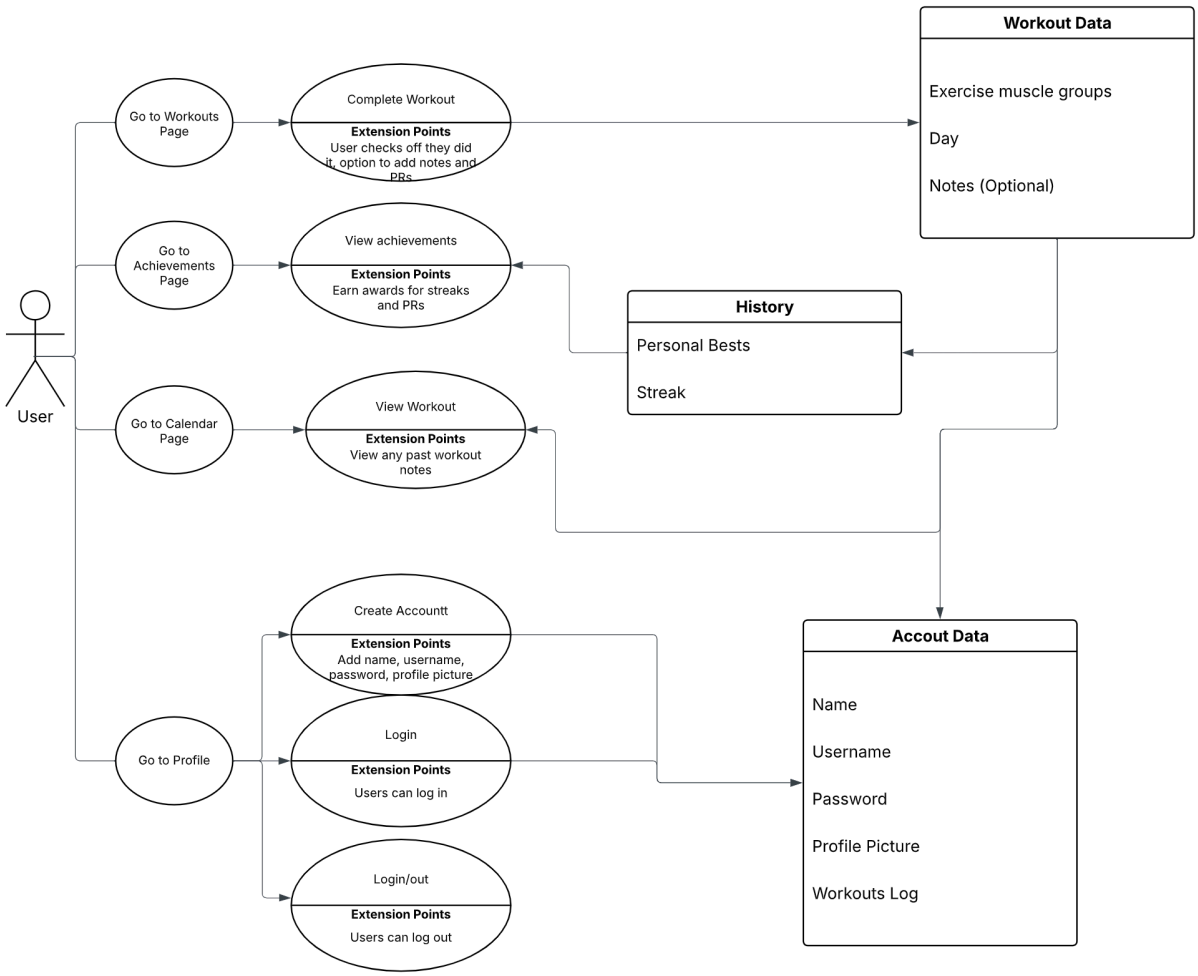
show dates for the current week, connected our application to render, and set up that entire functionality. From there, I helped with bugs or little areas where help was needed.

Zandra: I planned and created a lot of the UI for our website, using Procreate to draw out custom PNGs for the path, and implementing them within the css. I then customized the header and footer by linking my profile picture display in the javascript and HTML, designed the streak icon, and helped with visual aspects in the css. I also created the profile page, implementing functions adding and changing profile pictures using a base64 method to make profile picture changes and storing the image smoother, as well as a logout button, and a username display. Afterwards, I did some debugging.

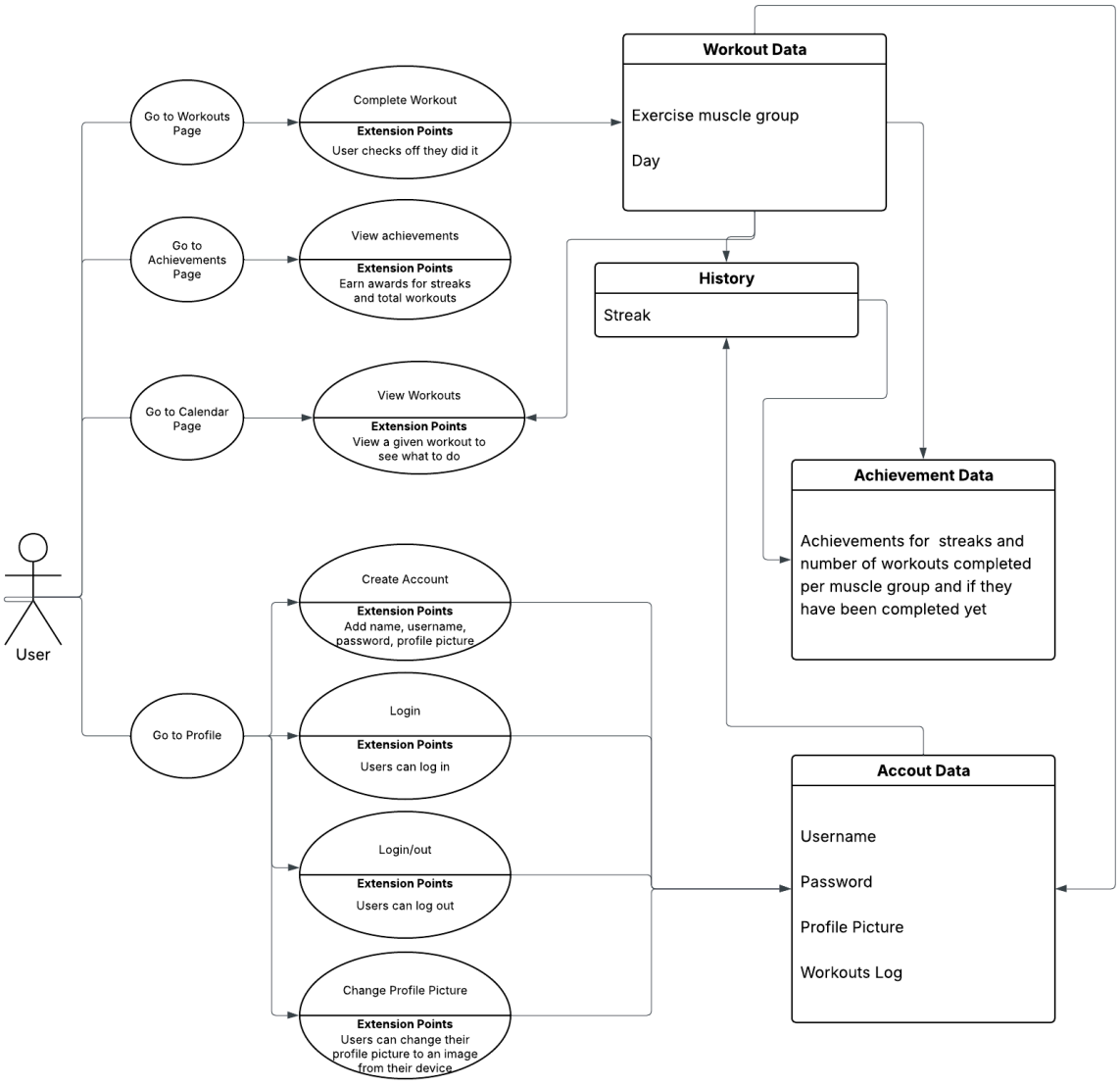
Keira: I started with creating the basic layout for our header and footer, using basic Handlebars and CSS to start. I also did the workout page layout, creating the little sections to show the workouts. Afterwards, I spent the majority of the rest of the project working on the home page nodes, getting them to allow the user to log their workouts and save to the database. I then implemented the designed nodes Zandra drew up to make it a bit more personalized to the workouts.

Cole Spencer: My work in the project was mainly front end design. I helped create the onboarding sequence that greets the users when they first enter the app. In addition I worked with Zandra to help design some of the pages. My biggest contribution however was the css. I was responsible for turning the website into the responsive, animated, and modern application that users interact with. Using villa css I created animations and liquid glass styled components that helped to bring the website together.

Use Case Diagram:
Original

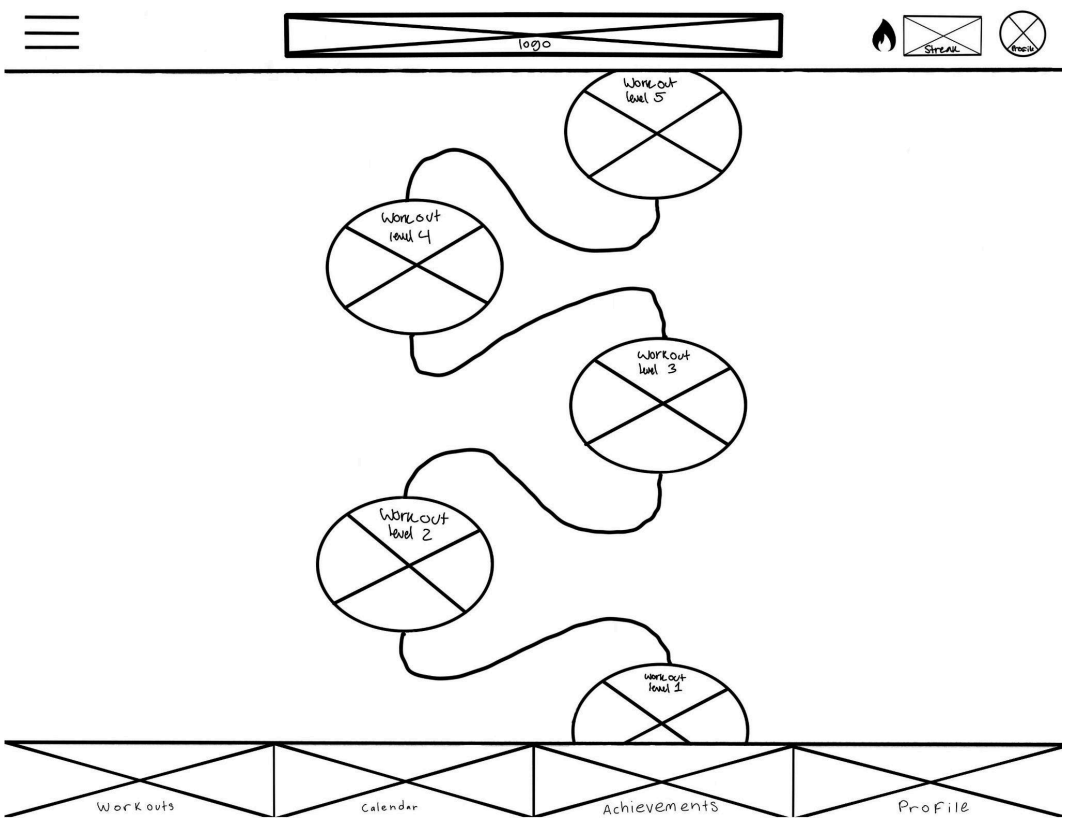

Workout Data
Exercise muscle groups
Day
Notes (Optional)
Go to Workouts Page
Complete Workout
Extension Points
User checks off they did it, option to add notes and PRs
Go to Achievements Page
View achievements
Extension Points
Earn awards for streaks and PRs
History
Personal Bests
Streak
User
Go to Calendar Page
View Workout
Extension Points
View any past workout notes
Create Accountt
Extension Points
Add name, username, password, profile picture
Accout Data
Name
Username
Password
Profile Picture
Workouts Log
Go to Profile
Login
Extension Points
Users can log in
Login/out
Extension Points
Users can log out

Final

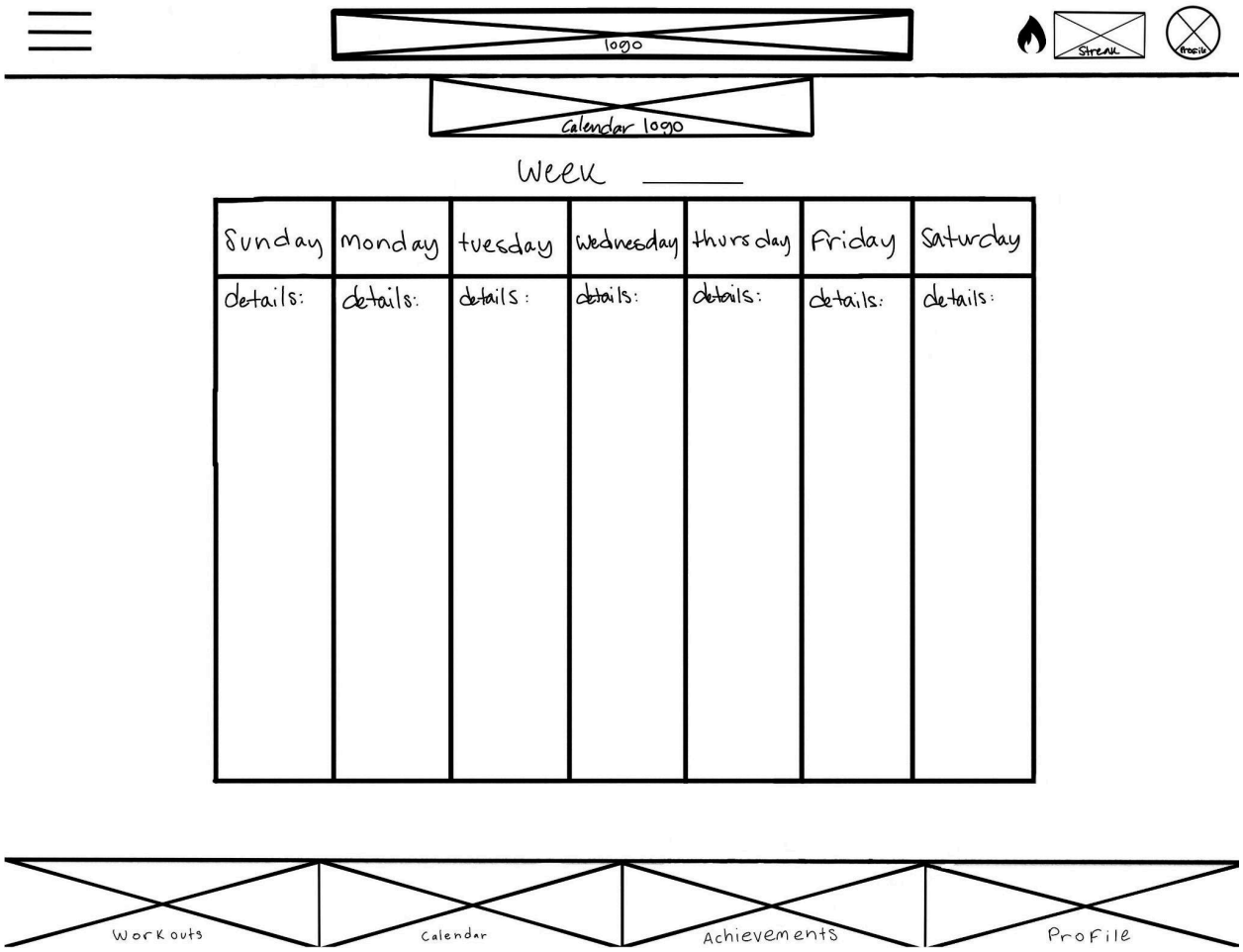


Wireframes:

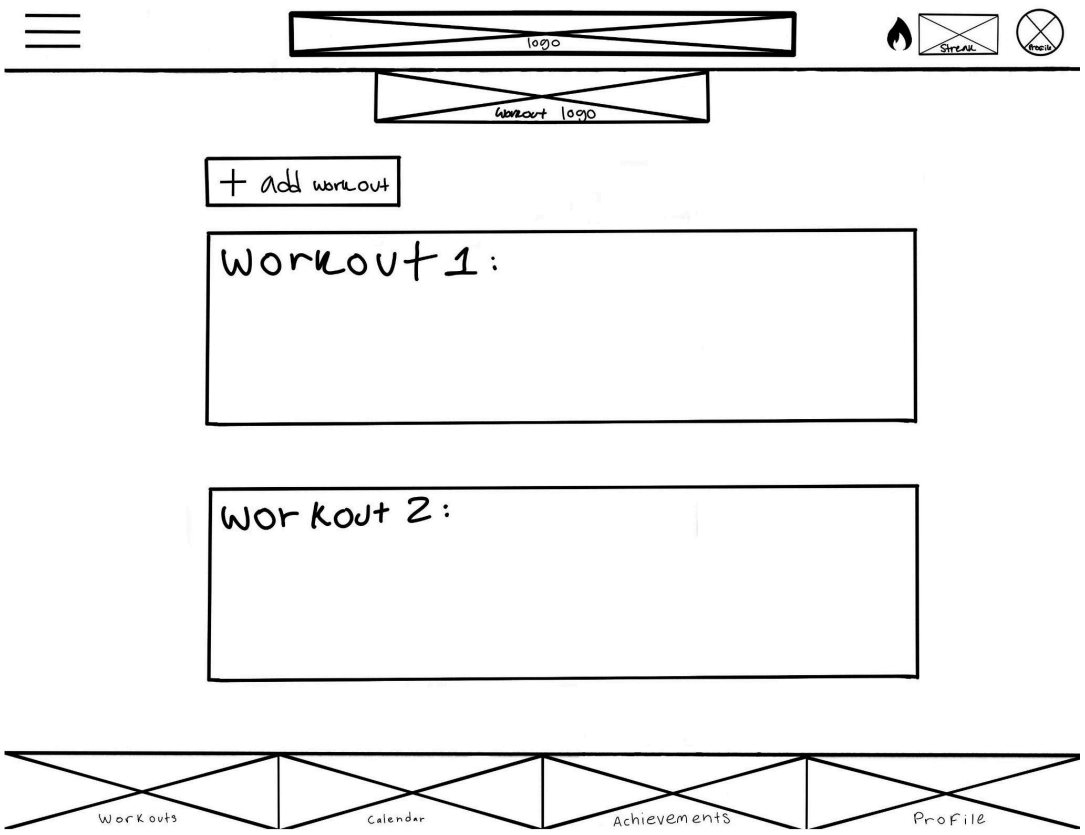
- Wireframe 1:


logo
Streak
Workout level 5
Workout level 4
Workout level 3
Workout level 2
Workout level 1
Workouts
Calendar
Achievements
Profile

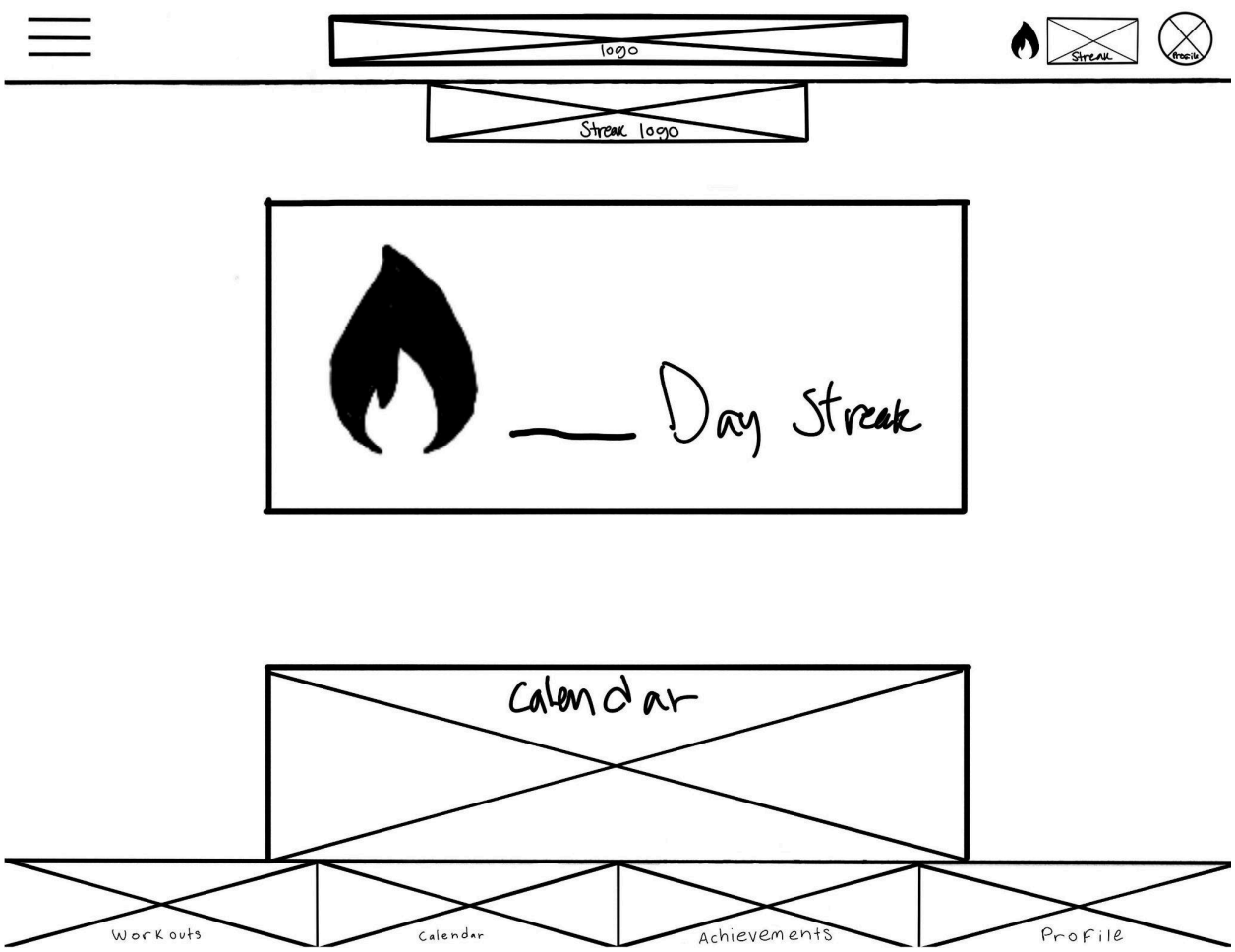
- Wireframe 2:


logo
streak
profile
Calendar logo
Week _____
Sunday
Monday
tuesday
Wednesday
thursday
Friday
Saturday
details:
details:
details:
details:
details:
details:
details:
Workouts
Calendar
Achievements
Profile

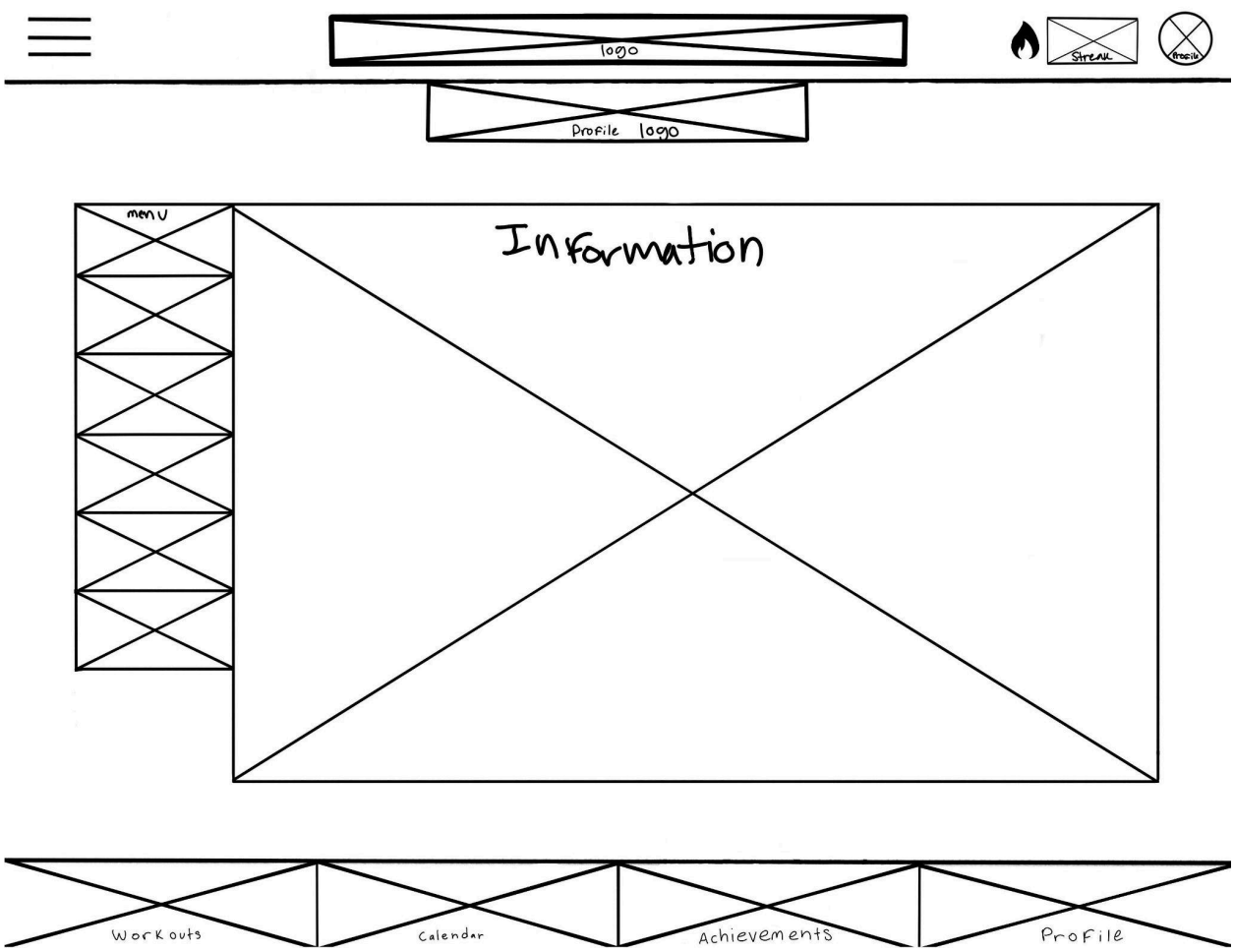
- Wireframe 3:


logo
Streak
Profile
Workout logo
+ add workout
Workout 1:
Workout 2:
Workouts
Calendar
Achievements
Profile

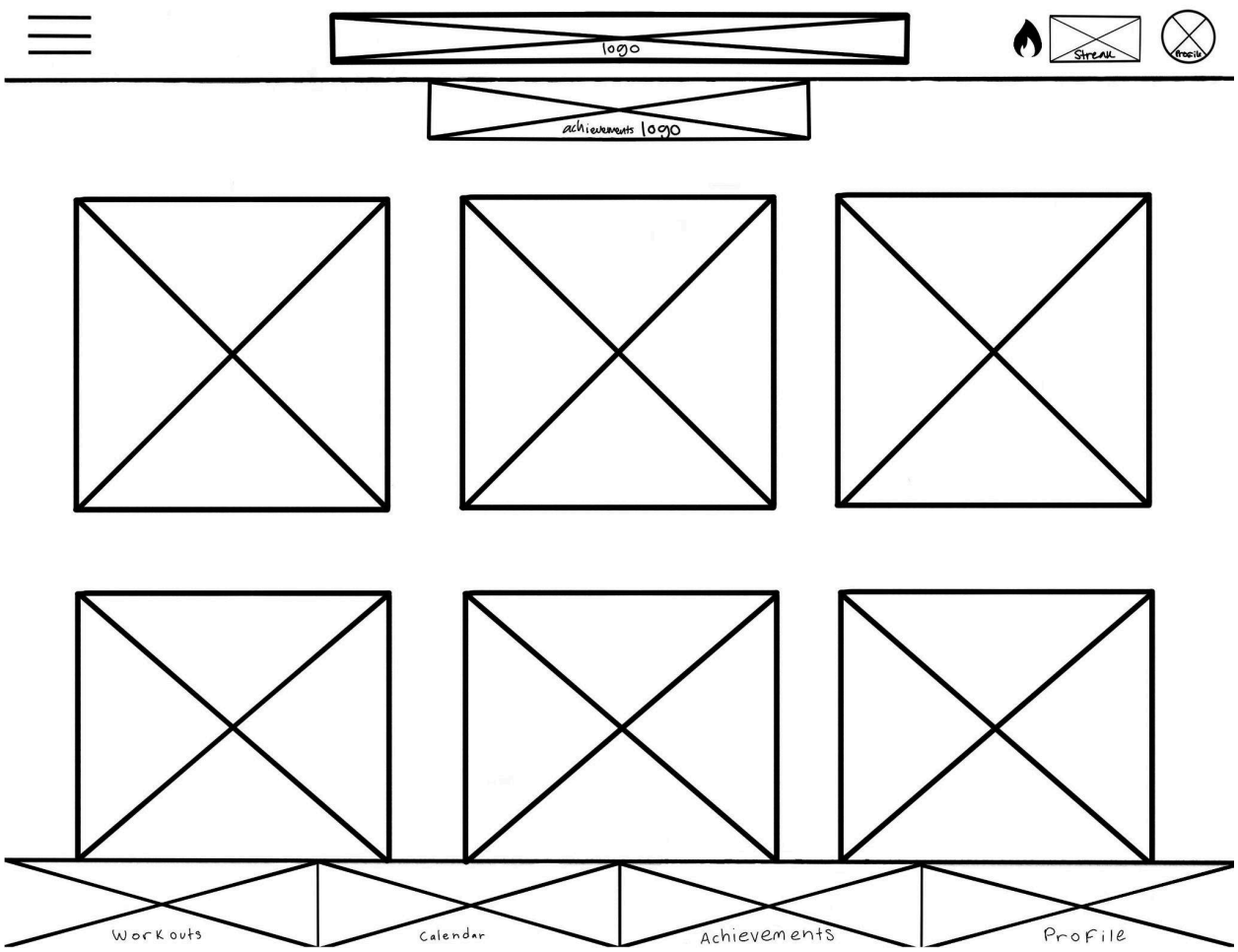
- Wireframe 4:


logo
Streak
Profile
Streak logo
__ Day Streak
Calendar
Workouts
Calendar
Achievements
Profile

- Wireframe 5:


logo
Streak
Profile
Profile logo
menu
Information
Workouts
Calendar
Achievements
Profile

- Wireframe 6:



Test Results:

Test Cases:

1. **Username uniqueness** – Users should not be able to take another user's username.

2. **Log a workout** – Users should be able to log a workout on the home screen via a popup modal that appears.

3. **Change profile picture** – Users should be able to change their profile picture.

4. **View past workouts** – Users should be able to view their previously logged workouts from their profile or home screen.

1. Username Uniqueness:

During testing, users attempted to create accounts with usernames that were already taken. Observations showed that users immediately noticed the validation message when the username was unavailable. Users' reasoning was to try a familiar or simple username first, which aligns

with typical account creation behavior. Their behavior was consistent with the use case, as the system prevented duplicate usernames. One deviation occurred when a user typed quickly and the message appeared after a slight delay, causing brief confusion. This observation led to a minor adjustment in the timing of the validation message to ensure it appeared instantly, improving the user experience.

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2. Log a Workout via Popup Modal:

Users were asked to log a workout on the home screen. Most users clicked the "Add Workout" button and waited for the modal to appear. The reasoning for their actions was clear: they expected a visible popup to enter details. While most users successfully completed the task, a few initially did not notice the modal because it overlapped slightly with existing content. This minor deviation highlighted a design issue, prompting adjustments to the modal's placement and visual cues. Observing users confirmed that the modal workflow was largely intuitive once they recognized it, validating the functionality of the use case.

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3. Change Profile Picture:

During testing, users navigated to their profile page and attempted to change their profile picture. Users' actions were consistent: they expected to click the existing picture or an edit button, and most successfully uploaded or selected a new image. The reasoning behind their actions reflected typical user expectations from social or fitness apps. One deviation occurred when a user tried to drag a file from a new window, and the system did not accept it, prompting clarification on supported upload methods. Observations were used to update instructions and the interface for clearer guidance, confirming that the feature worked as intended when users followed the correct steps.

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4. View Past Workouts:

Users were instructed to view previously logged workouts. Observations indicated that users instinctively navigated to the history section or profile page. Their reasoning aligned with expectations—they expected all workouts to be listed chronologically. Behavior was mostly consistent with the use case, but some users expected additional features such as filtering by date or workout type. This deviation highlighted potential future enhancements rather than an error in functionality. Observing this allowed the team to confirm that the current feature was functional while noting improvements for the next iteration.

Deployment:

Here is the link to our project: https://group-project-buffbuffs-repquest.onrender.com