



# Final Product Report

## Team:

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## 1. Value Proposition

Most exercisers struggle to find a fitness partner who shares their abilities, goals, and schedule. 2Fit empowers users to find a compatible match so that workout buddies can reach their fitness goals, together.

## 2. Problem and Solution

Our needfinding started with a broad and simple premise: to see how people engaged with fitness activities in their daily lives. In nearly every interview, we found the same sentiment: that working out with a friend could significantly boost motivation and engagement, but that several obstacles made finding someone to work out with very difficult. The antisocial atmosphere of the gym made it hard to reach out to strangers. Conflicting schedules made it hard to find time to work out with another person. Differing goals could make a joint workout uncomfortable. Our app, 2Fit, aims to connect people for fitness. We built a buddy finding system that helps compatible workout partners find each other, as well as offering users the capability to create, join, and share larger group workout events.

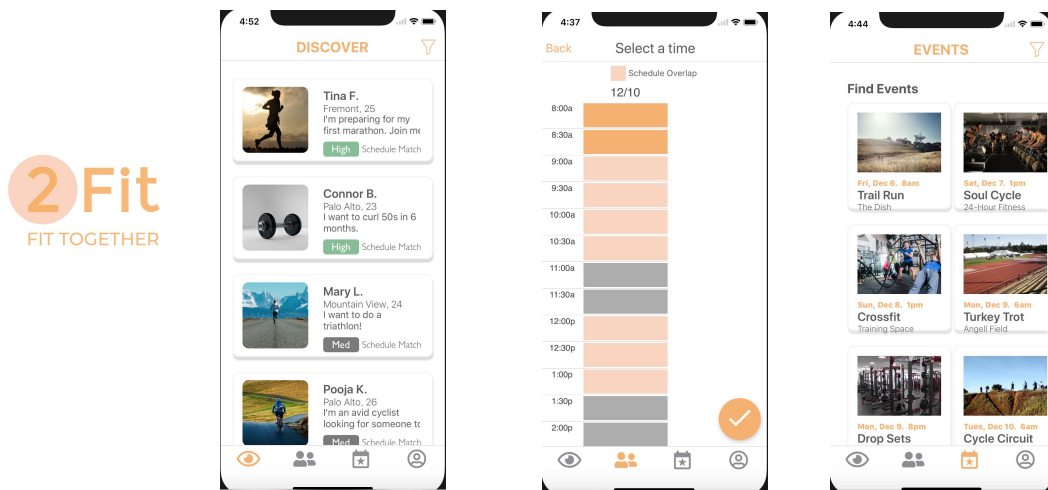


Figure 1: The 2Fit design

### 3. Tasks

2Fit enables users to complete three key tasks.

1. Join group fitness events | Simple
  - a. Originally, the task in this slot was “Offer words of encouragement,” but we changed it based on feedback from our Low-Fi prototype. We found that having the app facilitate words of encouragement was more clunky than useful, and also that many people wanted a ‘group workouts’ feature to complement the buddy finding system.
2. Schedule joint workouts | Medium
  - a. Throughout our needfinding, we found that one of the most consistently frustrating aspects of working out with a buddy was scheduling, both in finding someone with a matching schedule and also in coordinating times to work out from there. As such, we knew that trying to aid people in the scheduling process would be a major component of the value in our app.
3. Find a compatible fitness buddy | Complex
  - a. As mentioned before, the main problem that 2Fit aims to solve is to help people find buddies that are compatible with them. In interviewing and testing, we found that different people had different criteria for what they looked for in a fitness buddy, so we made sure to design a system around a customizable filter that would let users select for people based on their own preferences.

#### Task 1: Find a Workout Buddy

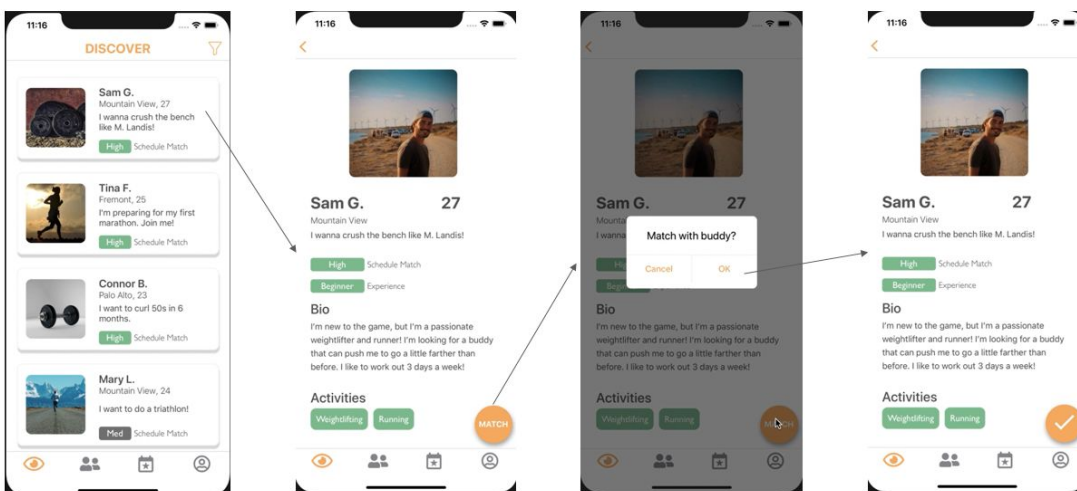


Figure 2a: Find a Workout Buddy, High Fidelity

## Task 2: Schedule Joint Workouts

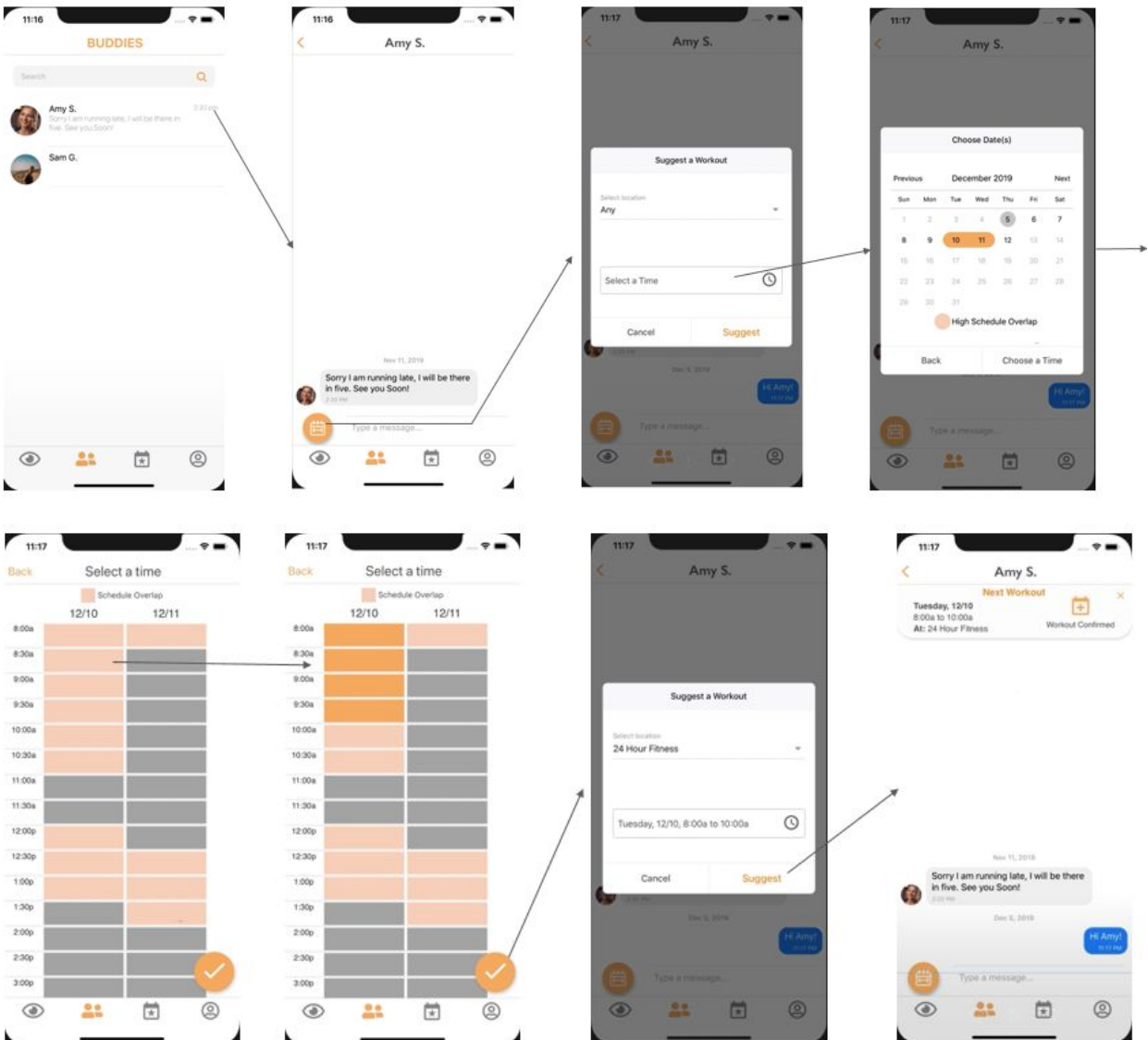


Figure 2b: Schedule Joint Workouts, High Fidelity

## Task 3: Join Group Events

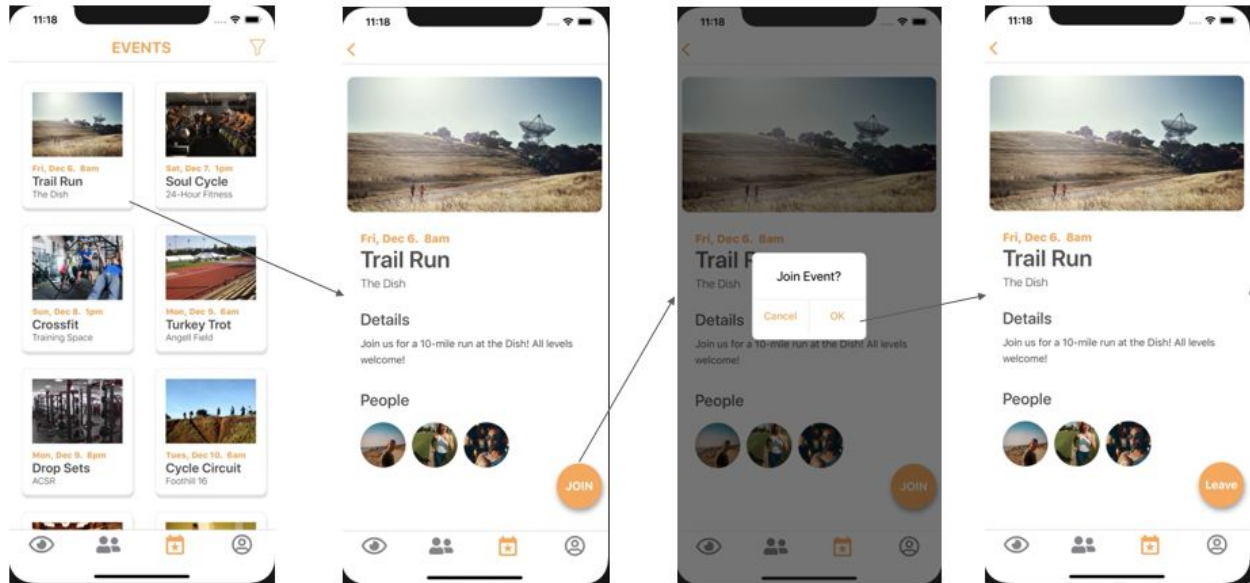


Figure 2c: Join Group Workouts, High Fidelity

## 4. Design Evolution

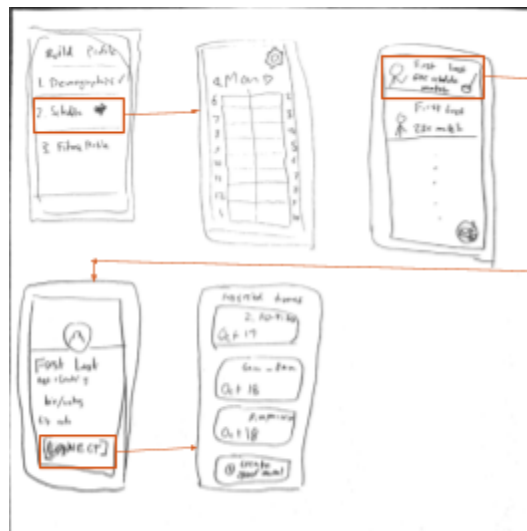
### Stage 1: Sketches and Storyboards

The very first sketches for 2Fit utilized a mosaic-like tile design system. Users selected a buddy by narrowing in sequentially from a set of 16 possible buddies, down to 1, revealing progressively more information each step of the way. The conclusion after an internal design critique within the product team was that this design focused too heavily on comparing buddies before the buddies had a chance to message or meet up with one another; future designs would empower the user to select several compatible buddy matches.



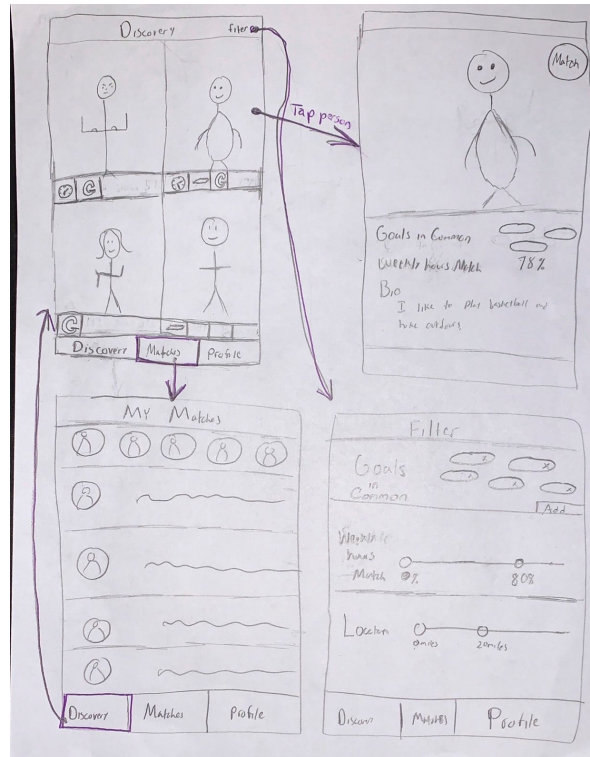
**Figure 3:** Tile Mosaic Sketches

The group also created early scheduling interface sketches to help buddies coordinate workouts with one another. One big benefit of this sketch was that it leveraged a schedule selection design pattern from When2Meet that was familiar to our target market. However, the design made it difficult to tell what times were better matches for workout partners than others.

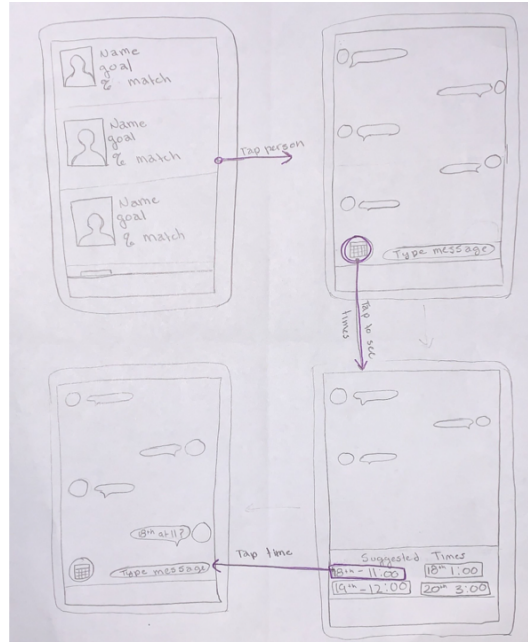


**Figure 4:** Scheduling Sketches

Next, we assembled storyboards of the task flows to map out how the user selected buddies. With the finding a compatible buddy task flow, we introduced the idea of goals, schedule matching, and filtering. With the scheduling task flow, after reviewing our needfinding notes about how users coordinate joint workouts, we decided to integrate the scheduling module into a messaging framework, since we found that scheduling flowed intuitively from coordinating via chat.



**Figure 5:** Find a fitness buddy task storyboard



**Figure 6:** Scheduling and messaging task storyboard

### Stage 2: Paper Prototype

In the next step, we developed a low fidelity paper prototype to help us test our design model with 3 real users. In a controlled environment, we asked users to complete our three main tasks (find a fitness buddy, schedule a workout, send words of encouragement). We logged the errors that subjects made during testing and collected data through qualitative interviews. In the finding a fitness buddy task flow, we found that users remarked our design too heavily weighed the profile picture in surfacing information to help them decide who to match with. We found that users were very confused by our “Distance Away” concept when assessing the quality of fit using location. We also observed that users were confused by where the suggested times came from during the scheduling task flow. Finally, an internal design critique within our section concluded that sending words of encouragement was not as meaningful of a task as joining larger group workouts, so we decided to introduce a new task in the medium fidelity prototype.

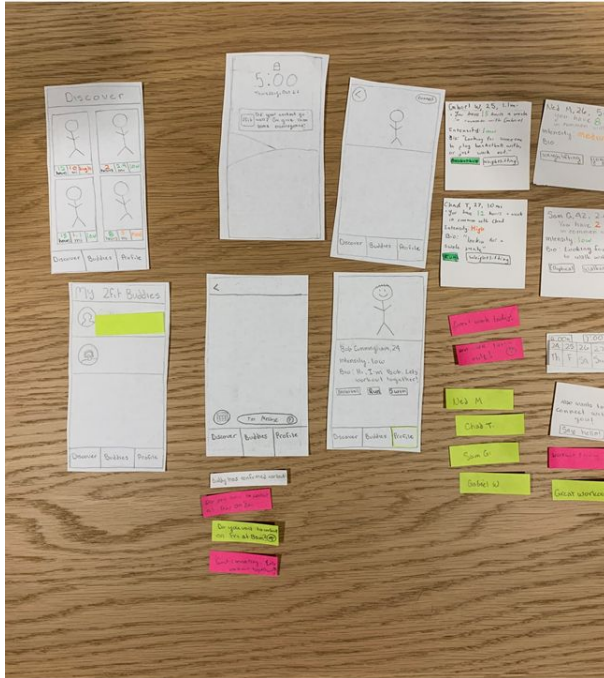


Figure 7: Paper prototype



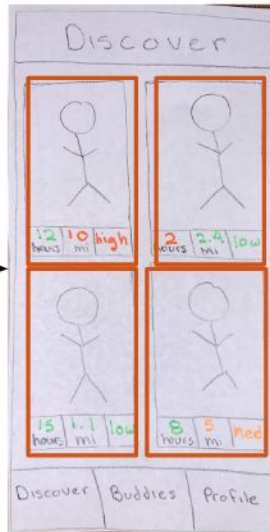
# Task 1: Find a compatible fitness buddy

## Tester's profile page



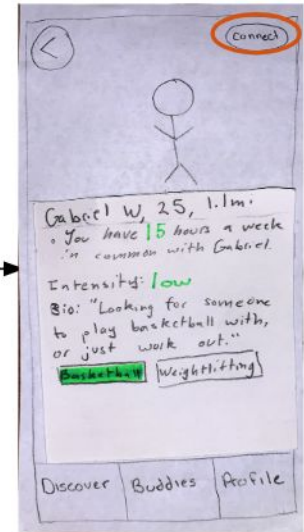
Click "Discover" to go to the discover page

## Discover Page



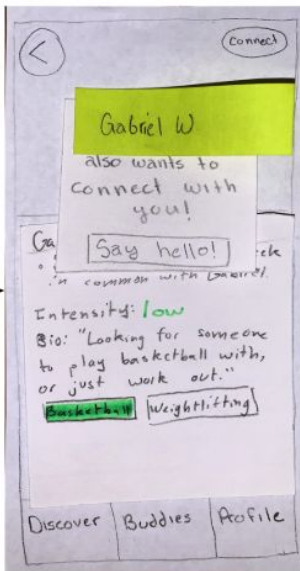
Click on a person to view their full profile

## A buddy profile page



Click on "Connect" to connect with a buddy

## Connected with buddy page



The buddy also connected, so the task is complete

## Possible profiles

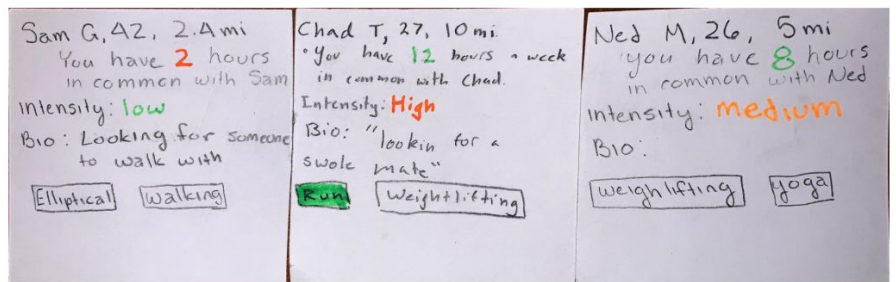


Figure 8: Choose a compatible fitness buddy

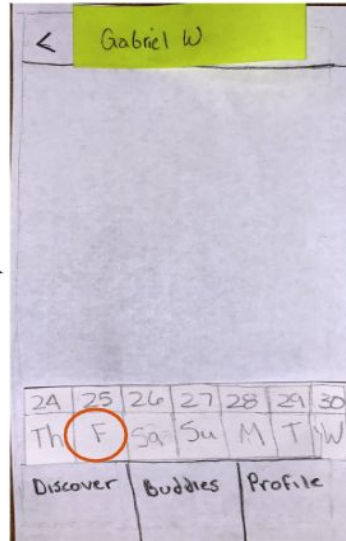
## Task 2: Schedule a workout

### Buddy message screen



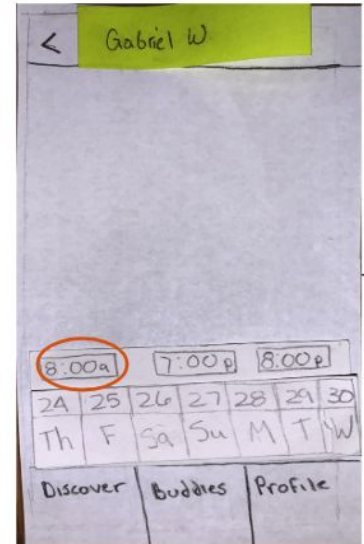
Click the **calendar button** to schedule

### Calendar Screen



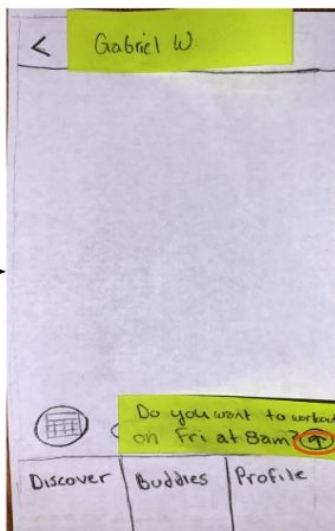
Click the **Friday** to find suggested hours

### Calendar Screen



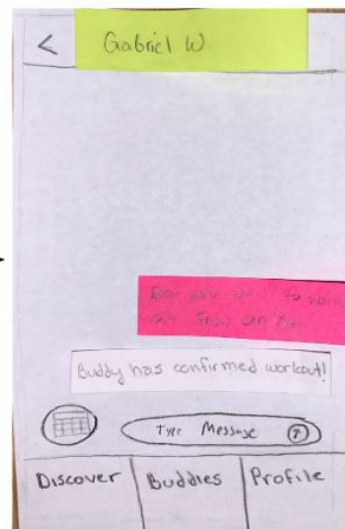
Click **8am** to choose the time to workout

### Message Screen



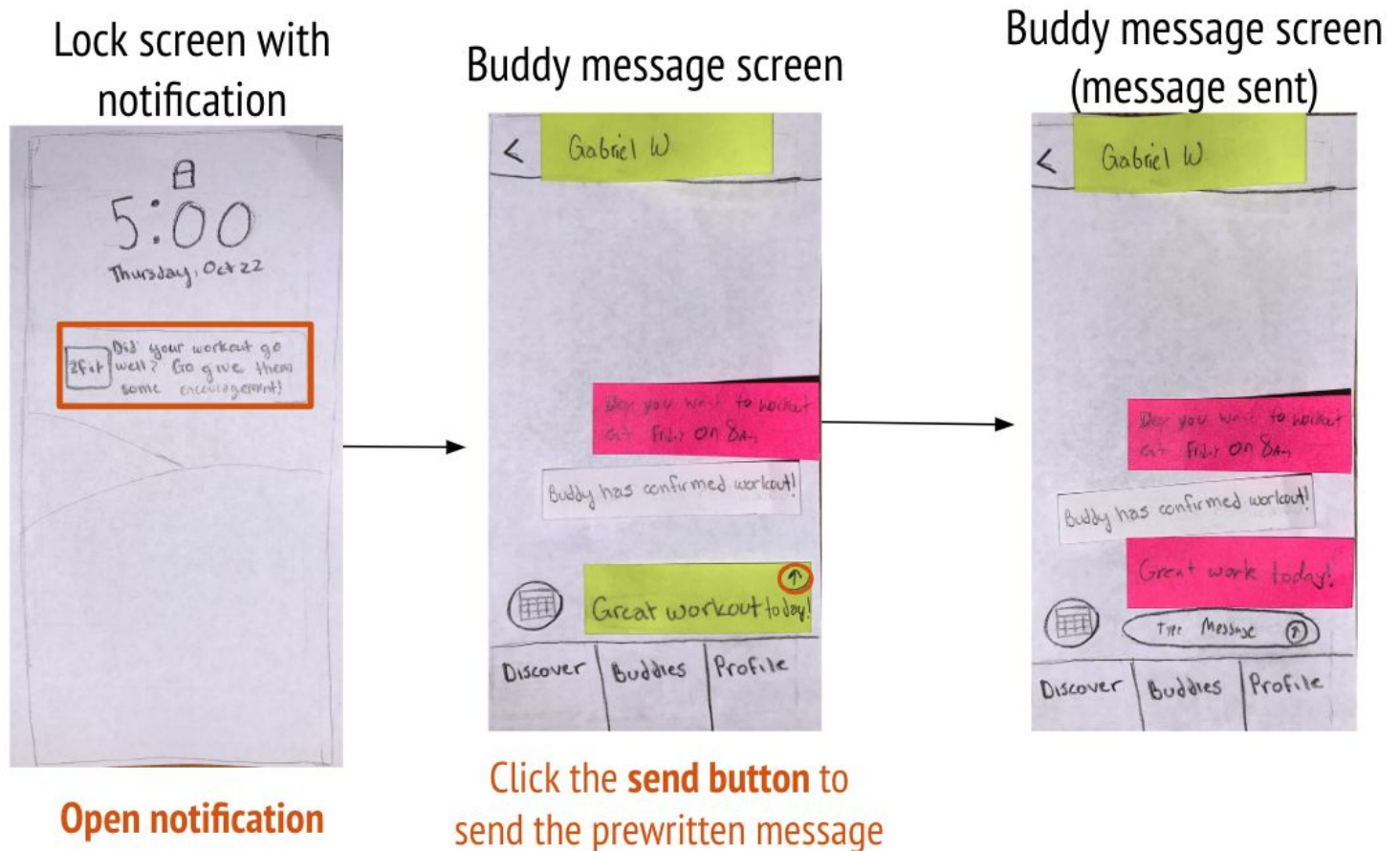
Click **send button** to send the message to schedule

### Workout confirmation



**Figure 9:** Schedule a workout

## Task 3: Give words of support



**Figure 10:** Send words of support

### Stage 3: Figma Prototype

In the next stage, we used Figma as the layout software for our medium-fidelity prototype. For the find a fitness buddy task flow, we did away altogether with using profile pictures in the first stage of the selection process in order to more heavily emphasize goals, workout personality, and workout abilities. For the scheduling task, we implemented a new visual interface for selecting a schedule time that worked for both participants. Finally, we created a new join group events task flow.

We submitted our medium fidelity prototype for review by 4 other designers, who each individually conducted a heuristic evaluation on our designs. For the find a fitness buddy task flow, evaluators pointed out that the use of colors and icons in the Discover screen was overwhelming and cluttered. Users also pointed out that the connect action button was difficult to find. In the schedule workout task flow, evaluators indicated that the colors and fonts didn't feel familiar with the rest of the

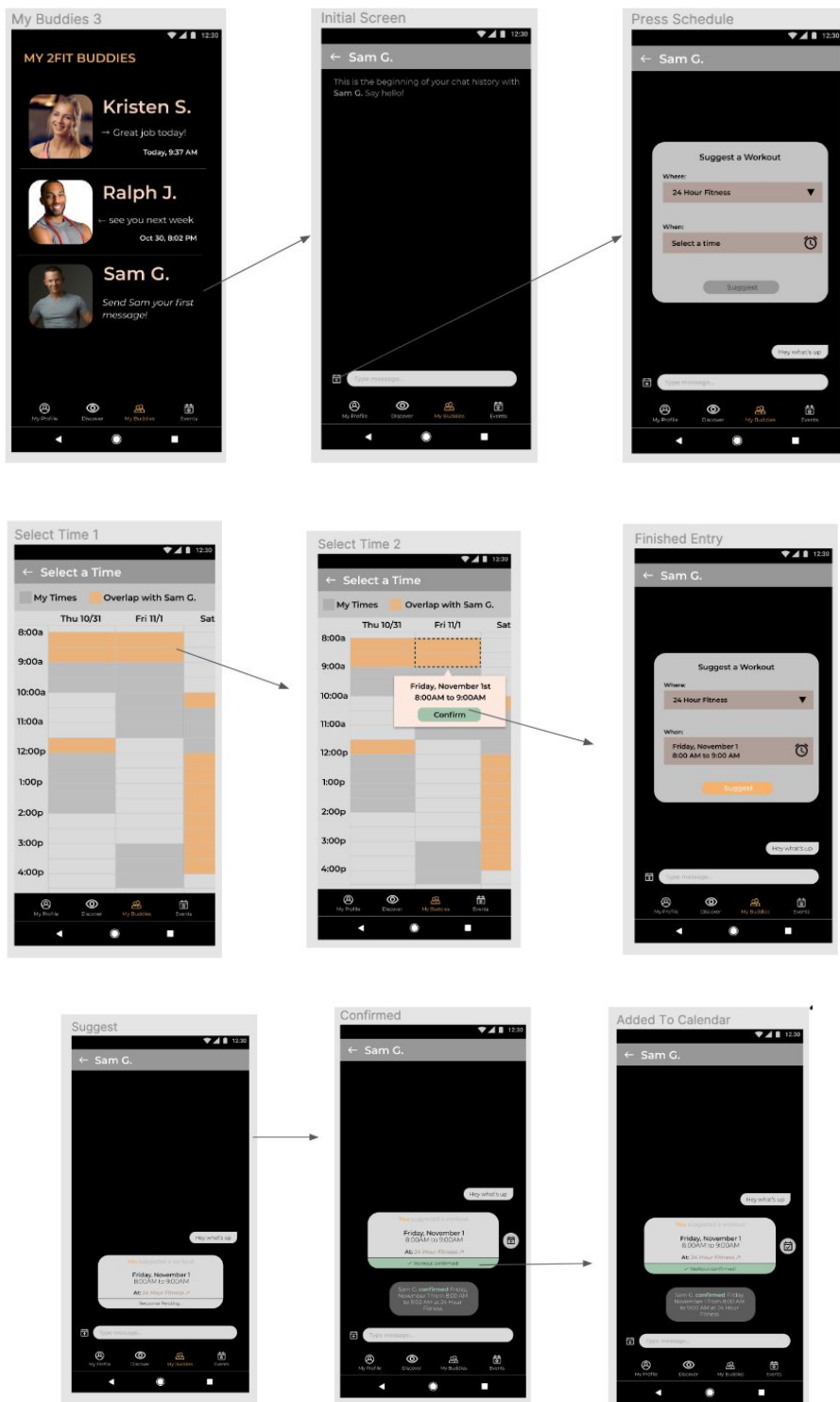
app. In the join events task flow, evaluators pointed out that they expected to see feedback once they joined an event in the attendees list.

## Task 1: Find a Workout Buddy



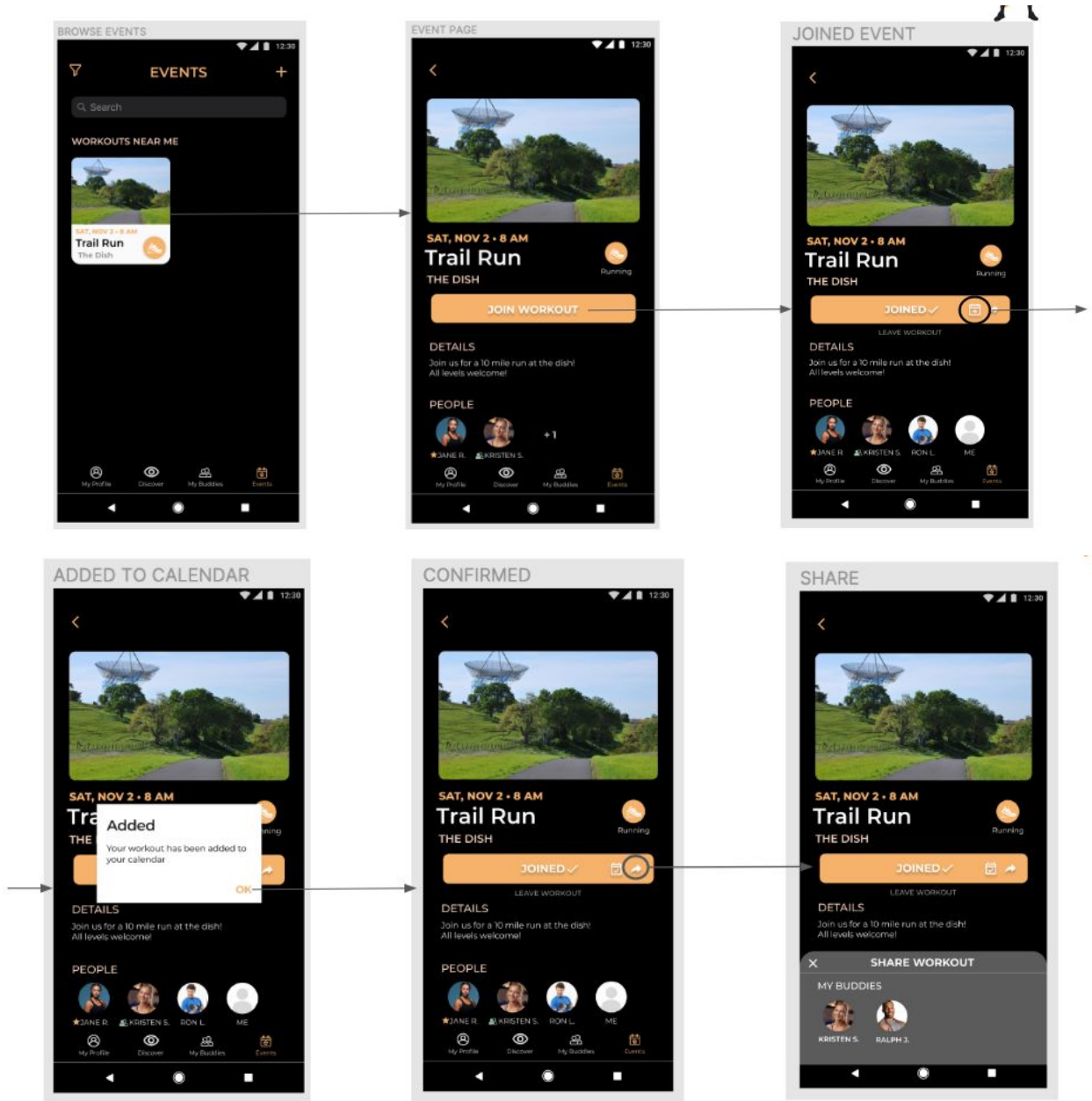
**Figure 11:** Find a Fitness Buddy, Medium Fidelity

## Task 2: Schedule Joint Workouts



**Figure 12:** Schedule Joint Workouts, Medium Fidelity

### Task 3: Join Group Workouts



**Figure 13:** Join Group Workouts, Medium Fidelity

#### Stage 4: High Fidelity Prototype

The designs for our React Native app built on the feedback from the heuristic evaluation. The app moved to a new white background color to make the app feel more familiar and friendly as opposed to dark, formal, and elegant. On the find a workout buddy flow, we dramatically simplified the discover page by eliminating icons and the workout personality construct and moved instead in favor of a high quality picture of the primary activity as the profile avatar. For the schedule a joint workout task flow, the app made more consistent use of colors, fonts, and sizes. We

also bifurcated the time and date selection process by adding a calendar to first allow the user to pick dates and then allow the users to pick contiguous times. Finally, we added confirmation alerts to assist the user in knowing the status of their workout request along the way.

## Task 1: Find a Workout Buddy

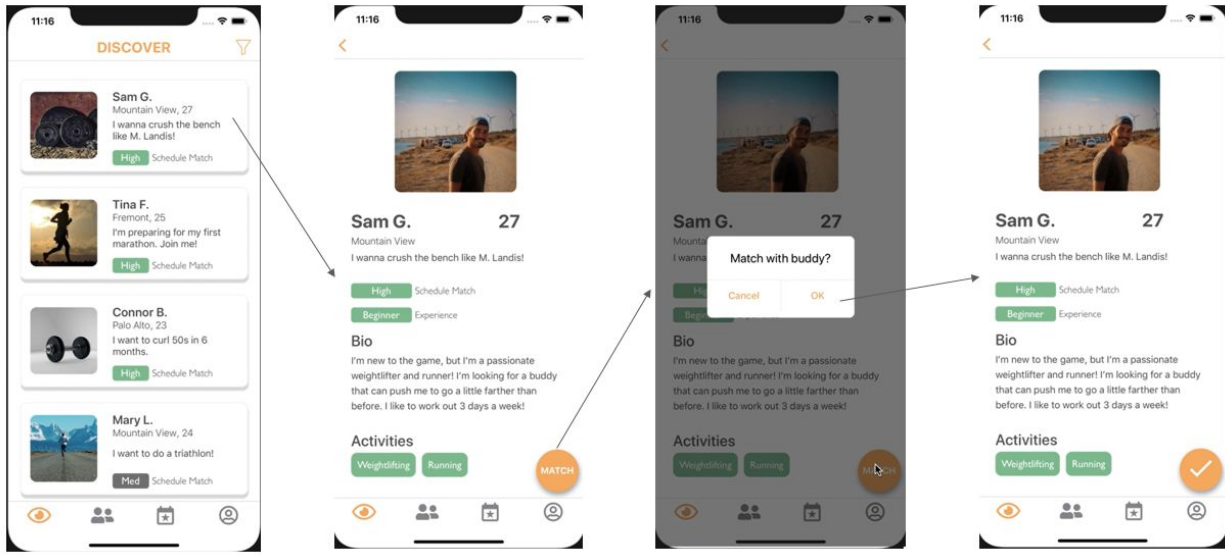


Figure 14: Find a Workout Buddy, High Fidelity

## Task 2: Schedule Joint Workouts

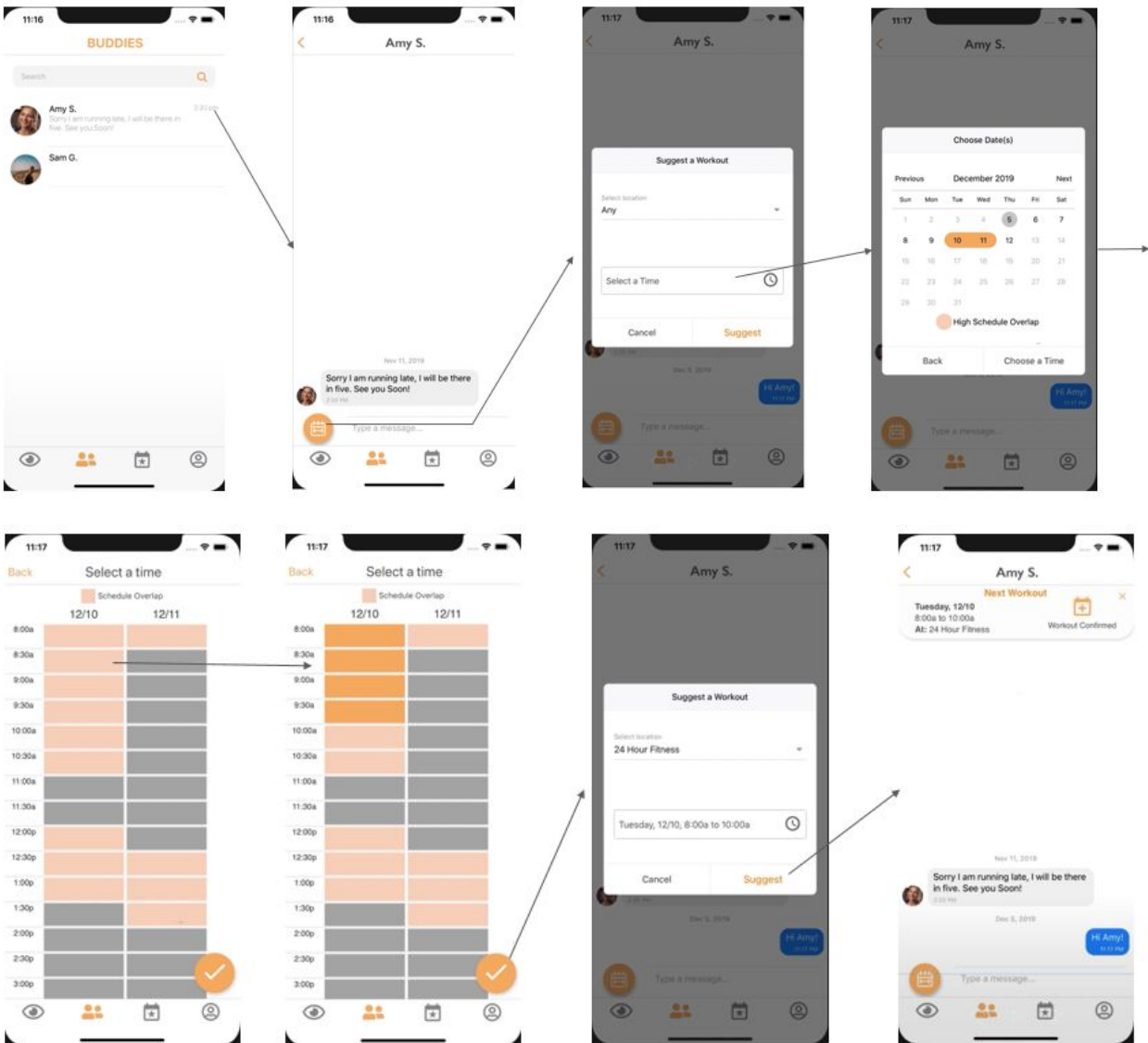
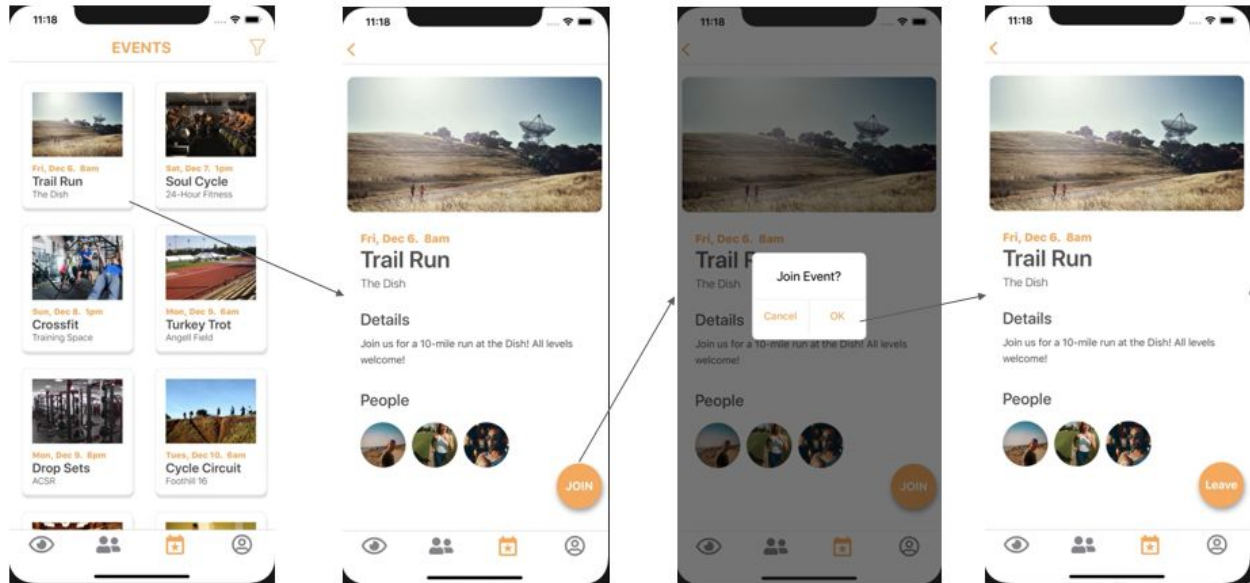


Figure 15: Schedule Joint Workouts, High Fidelity



## Task 3: Join Group Events



**Figure 16:** Schedule Joint Workouts, High Fidelity

## 5. Major Usability Problems Addressed

Upon sharing the Figma medium fidelity prototype with our expert evaluators, we received a heuristic evaluation report that revealed a number of usability issues with our design. Below we list each violation that was scored either a 3 (major usability issue) or a 4 (critical usability issue) and our resolution of each issue.

**Type:** H1: Visibility of Systems  
**Severity:** 3

**Issue:** On the buddy frame, there is no way to keep track of the workouts you've been invited to but did not yet join.

**Fix:** Users are able to track one pending or confirmed workout at the top of each buddy's messaging screen.

Pending workout hard to find



Pending workout at top; easy to locate

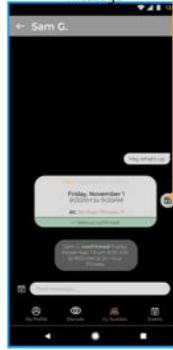


**Type:** H1: Visibility of Systems  
**Severity:** 3

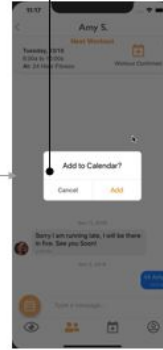
**Issue:** The app informs the user that it has been added to the calendar, but it isn't clear that this is an external calendar or how this is being factored into their availability.

**Fix:** We've added another pop-up to confirm to the user that an event is being added to calendar

Small add to calendar button has no visible confirmation message



Dedicated add to calendar popu



**Type:** H3: Match System to World  
**Severity:** 3

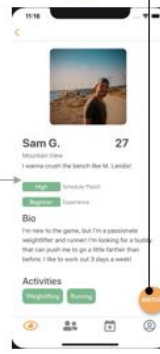
**Issue:** The connect button on profiles is situated before all the information, should be after, so the user doesn't have to double back in how they digest the page info.

**Fix:** We moved the match button to be a floating join button at the bottom of the page

Connect button precedes information



Match button floats near bottom of page as user scrolls

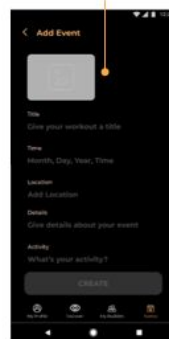


**Type:** H3: User Control  
**Severity:** 4

**Issue:** On the events frame, after creating a workout event, there is no way to delete your event. This is a violation because users should be able to easily delete an event once created.

**Non-fix:** We deprioritized the add event functionality to a later release

No way to delete a workout after one added



**Type:** H3: User Control  
**Severity:** 3

**Issue:** On the events filter frame, there is an option for prioritizing the filter based on every dimension of workouts except for time.

**Non-fix:** Users already have the ability to filter by day. Time filtering was deprioritized to a later release.

Users may filter by day



Date-time filtering would be enhanced with a calendar and clock widget

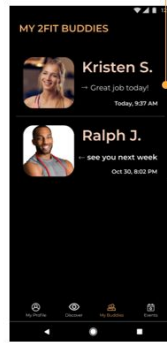


**Type:** H3: User Control  
**Severity:** 3

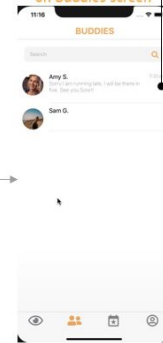
**Issue:** If used frequently the app could accumulate multiple buddies, both pending and matched. In addition, as time goes on users may no longer want to interact with a buddy.

**Non-Fix:** Unmatching a buddy was deprioritized to a later release

No option to unmatch buddies



Buddy unmatch functionality would be added as a button on Buddies screen

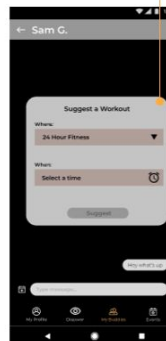


**Type:** H4: Consistency  
**Severity:** 3

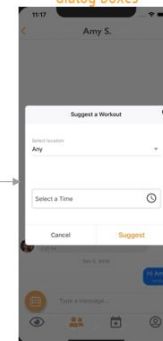
**Issue:** On the workout scheduler suggester, the whole color scheme is grayed out, including the interactive confirmation button. This is a violation because this makes users think it is uninteractable

**Fix:** Changed background dialog box to white to match other interactive popup boxes

Gray suggests the scheduler is uninteractable



Scheduler background now white to match other active dialog boxes

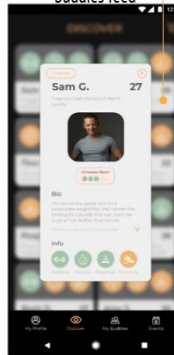


**Type:** H5: Error Prevention  
**Severity:** 3

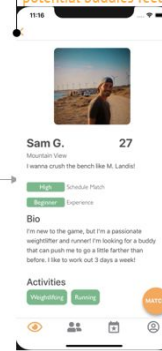
**Issue:** For a user to check on how a match is going, they need to open the person again and see if the response is pending. This can lead the user to forget if they are already opened a profile.

**Fix:** Buddy profile is now a new screen – upon a match request, that pending buddy is removed from the Discover feed

Buddy profile had been a popup over static potential buddies feed



Buddy profile now a separate screen, going back updates potential buddies feed

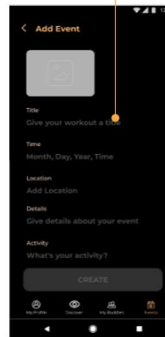


**Type:** H7: Efficiency of Use  
**Severity:** 3

**Issue:** On the creating events page, it would be useful to have saved presets options especially because it seems workout event events would be a consistent event.

**Non-fix:** Deprioritized adding events to a later release

No presets or defaults



**Type:** H7: Efficiency of Use  
**Severity:** 3

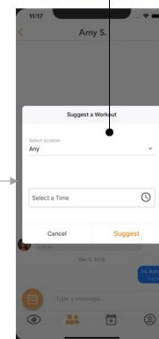
**Issue:** There should be a feature for not just scheduling one meeting time but having a consistent, repeated event, like a weekly run.

**Non-fix:** Deprioritized adding recurring workouts to a later release

No feature for adding recurring workouts



No feature for adding recurring workouts



**Type:** H8: Aesthetics  
**Severity:** 4

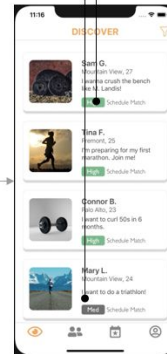
**Issue:** On the search page, the use of green and red on icons is disorienting

**Fix:** Simplified all background colors to white and used green as the only accent color to indicate a high match

Use of orange and green accent colors led to confusion



Green only color used as an accent



**Type:** H8: Aesthetics  
**Severity:** 3

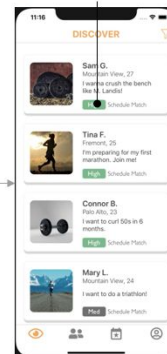
**Issue:** On the search page, the white stencil icons on pastel badges is difficult to see.

**Fix:** We removed icons from the discover page

White icons difficult to see on pastel background



Replaced icons with clear text



**Type:** H8: Aesthetics  
**Severity:** 3

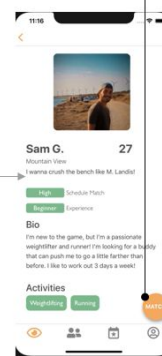
**Issue:** On the discover page, the connect and send a message buttons are difficult to see because of the thin orange on white background.

**Fix:** We removed icons from the discover page

Connect button is difficult to see because of thin orange on gray



Match action button now much clearer orange button



**Type:** H10: Help Documentation  
**Severity:** 4

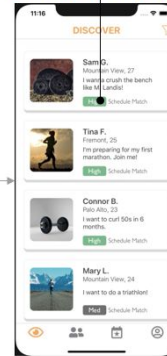
**Issue:** I imagine users will need to look up what the icons on the discover page mean in order to understand their matching, but there is no information screen for the icons.

**Fix:** Eliminated icons from the Discover screen

Array of icons requires documentation to understand



New Discover screen eliminates confusing icons



**Type:** H10: Help Documentation  
**Severity:** 4

**Issue:** Users will need to look up what the star icon and two people icon on the events page means in order to understand the make-up of their group workout

**Fix:** Eliminated person icons from the Events screen

Star and 2-person icon unfamiliar to user



Eliminated icons from the people list in Events screen

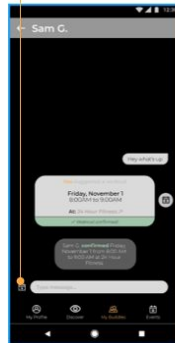


**Type:** H10: Help Documentation  
**Severity:** 3

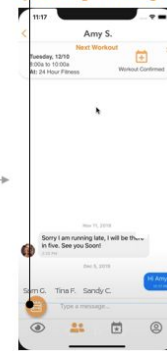
**Issue:** When the user wants to suggest a workout in Task Flow 3, the user has to tap on the calendar icon next to the Type Message space. This button is unintuitive.

**Fix:** We elevated the prominence of the action by encasing it in an orange button.

Schedule workout button has little affordance - hard to know it is actionable



Elevated hierarchy of button by encasing it in orange



**Type:** H10: Help Documentation  
**Severity:** 3

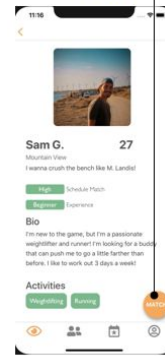
**Issue:** In Task Flow 2: Continued, the user is shown the various information about the person that had just selected. When the user wants to connect with the person, he/she has to find the +Connect button at the top left.

**Fix:** New button much more intuitive and follows familiar action button design patterns

Connect button unfamiliar design



Familiar floating Match button



## 6. Prototype Implementation

We leaned entirely on React Native and various packages to build our app. We planned to involve quite a bit of functionality, such as a working filter for users, the ability to connect with users, and a functional chat and workout scheduling system for each one. While the structure of React Native naturally lends itself to flexibility and reusability, this system largely ended up getting in our way as we were focused on a one-time use, mostly hard-coded, front-end prototype. Luckily, we were able to find a local storage package that let us circumvent React Native conventions for our own purposes, and the wealth of pre-existing components in React Native were extremely helpful for building several parts of the app, like scrolling lists, schedule selection, and even the chat system.

As far as Wizard of Oz techniques go, we were actually able to legitimately implement much of the functionality with our app. There are only two aspects that are really “faked.” Firstly, the existence of other users is spoofed, any buddy or workout request you send is automatically accepted, and no chat messages you send will get a response. Secondly, for the locations, it is implied that there is some sort of intelligent detection of nearby workout facilities compiled into a list, but we just chose a few gym names and compiled them into a list.

A significant part of our app is hard-coded specifically the two aspects mentioned previously. All the users have pre-made, hard-coded profiles, interests, and schedules, all of the locations and their relative distances are hard-coded, and even the base profile that the user has is hard-coded (since profile creation was not one of our tasks).

Two features were left out of this prototype: firstly, as just mentioned, profile creation, and secondly, the ability to create and host group events. These were relatively minor features that were not critical to our main three tasks, however, they

would have taken a disproportionately long time to implement, and so we made the decision to leave them out. However, they could be added in the future.

## 7. Summary

Using user insights collected through interviews and testing since the needfinding stages of our project, our team was able to assemble a high-fidelity prototype for 2Fit, a product that helps exercisers find a fitness buddy who can help them reach their fitness goals. We developed the high-fidelity prototype using React Native, a flexible development platform that allowed us to build in some of the advanced filtering and flow functionality that was defined in our medium-fidelity prototype. We are able to use feedback from the expert Heuristic Evaluation to dramatically improve the aesthetics and usability of the product. Thus, the quality of the high-fidelity prototype is largely attributable to the iterative design-thinking process practiced by our team over the last ten weeks.