

# LOW-FI PROTOTYPING & TESTING

A graphic design featuring a solid red background. In the center, the words "LOW-FI PROTOTYPING & TESTING" are written in large, bold, white sans-serif capital letters. Behind the text, there are black silhouettes of two people playing with a frisbee. One person is on the left, mid-air, throwing a frisbee. Another person is on the right, also in mid-air, catching a frisbee. A third frisbee is shown in flight between them.

Yu Chia Kuo, Sophia Chiu, I-Ming Kao

# MEET THE TEAM



**YU CHIA KUO**



**SOPHIA CHIU**



**I-MING KAO**

# PROBLEM

Ultimate frisbee teams struggle with unbalanced playtime between veterans and rookies due to a lack of digitized performance and fitness data. Without clear metrics or tactical support, it's difficult to make fair and strategic player allocation decisions.

# SOLUTION

A dual-interface app that helps coaches manage real-time lineups and helps players track their growth and performance.



# USE OF AI TOOLS

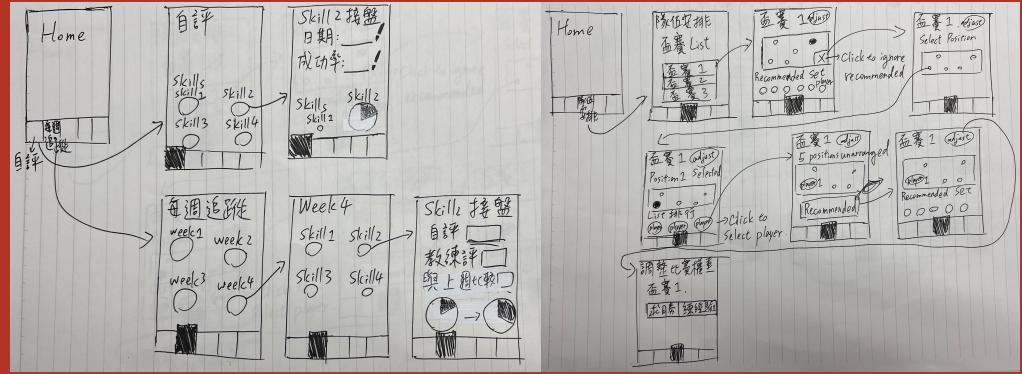
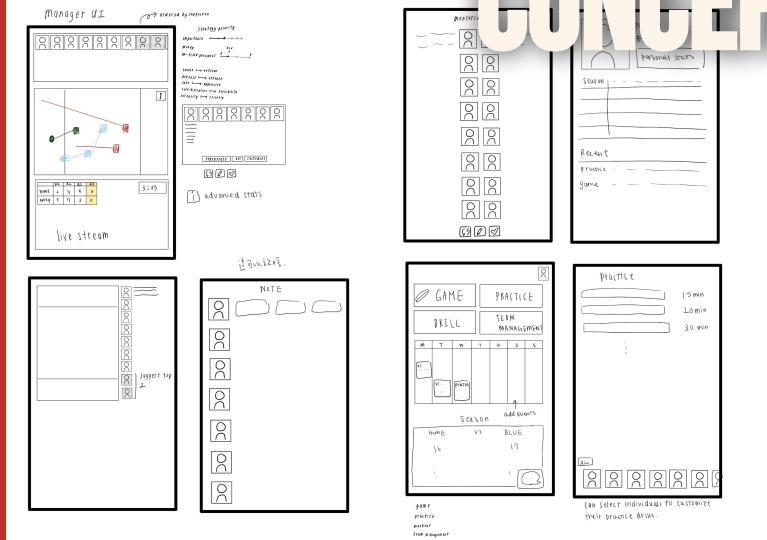
1. Identified key AUDL player metrics relevant to lineup decisions.
2. Suggested which information is most essential to display
3. Organized notes from UI testing.



# SKETCHES



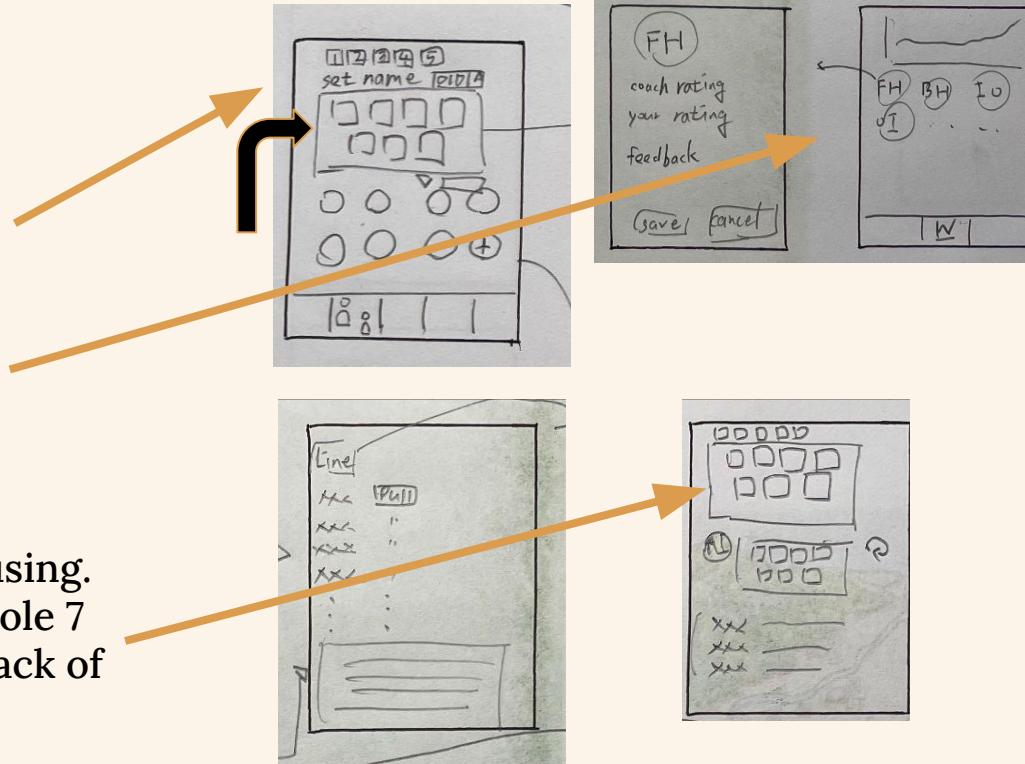
# CONCEPT SKETCHES



# UI SKETCHES

## PROS

- Using drag-and-drop UI to form different set.
- Circle UI to show skills' rating is effective and space-saving.



# UI SKETCHES

## PROS

- Allow coach to see the selected and benched players. Benched players are ranked by AI based on priority.
- Features are categorized into 4 main components. Team schedule is included in the main page for easy reference.

## CONS

- Does not include players info or reasons why they were suggested
- What's included in the 4 features is not intuitive.



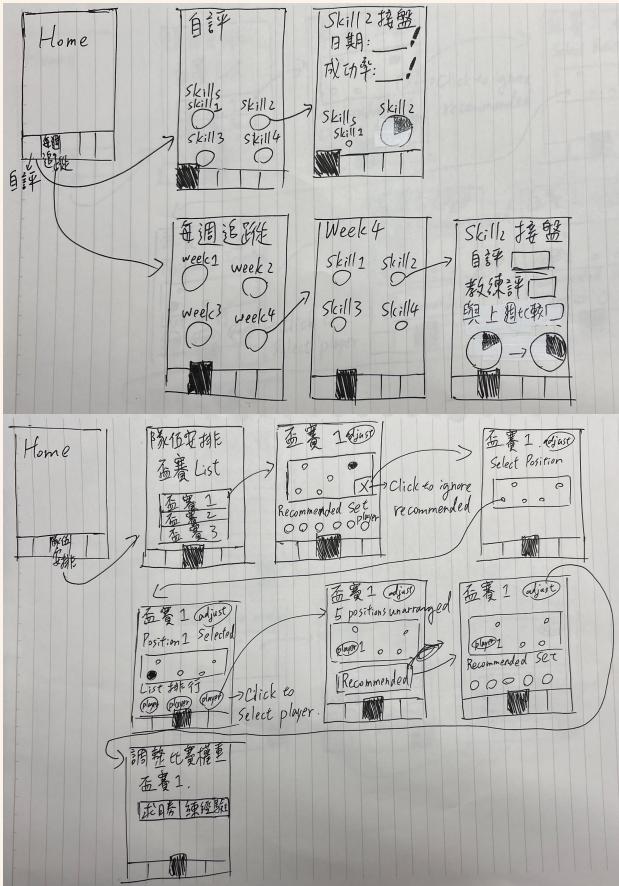
# UI SKETCHES

## PROS

- Straightforward flow for self weekly tracking and comparison between self & coach valuation.
- Pie charts for straightforward and space-efficient comparison.

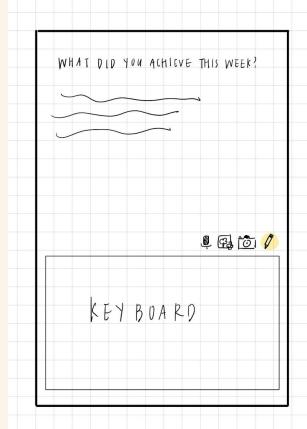
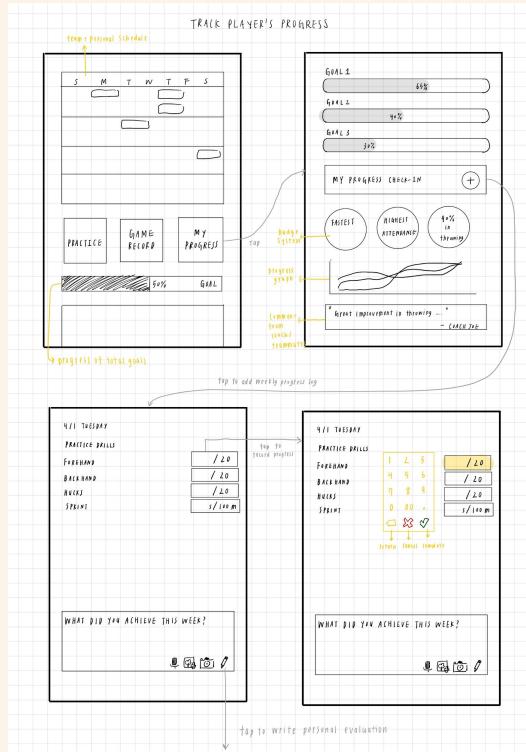
## CONS

- Hard to comprehend how to select position when trying to shift players.
- Confusing “game weights” for first users.



# SELECTED INTERFACE

- Selected interface for player progress tracking.
- Allow user to input progress for each practice drill and self-evaluation for practice session.



# SELECTED INTERFACE

- Selected interface for managers to conduct game setups and player shifting.
- Better suited for the real-time, fast-paced flow of ultimate frisbee games and in-game decision making.
- Built-in tools for strategy and tactical planning.



# LOW-FI PROTOTYPE STRUCTURE

**TRACK PLAYER'S PROGRESS**

Team Personal Schedule

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
|   |   |   |   |   |   |   |

PRACTICE GAME RECORD MY PROGRESS

GOALS: 658  
GOALS: 92%  
GOALS: 320

MY PROGRESS CHECK-IN

Exercise, Strength, Endurance, 4.5% in Recovery

Recent Improvement in Recovery - Check-in

Progress of total goals: 60%

Top to add weekly progress log

WHAT DID YOU ACHIEVE THIS WEEK?

MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY SUNDAY

PRACTICE DRILLS: /20 /20 /20 /20 /100%  
FORWARD BACKWARD SPINS SPEED: /100%

WHAT DID YOU ACHIEVE THIS WEEK?

MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY SUNDAY

PRACTICE DRILLS: FORWARD: 1 2 3 /20 BACKWARD: 4 5 6 /20 SPINS: 0 0 0 /100% SPEED: 0 0 0 /20

Top to update progress

Top to write personal evaluation

WHAT DID YOU ACHIEVE THIS WEEK?

KEY BOARD

WHAT DID YOU ACHIEVE THIS WEEK?

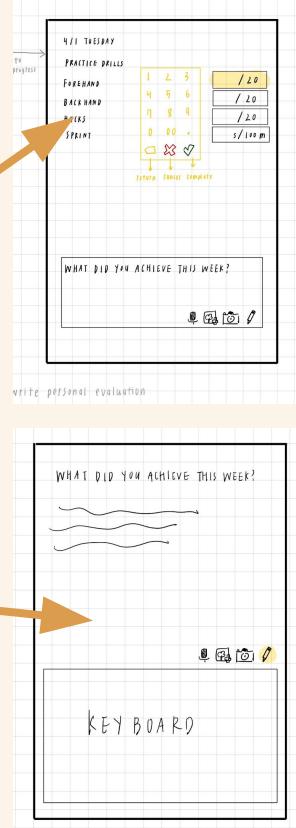
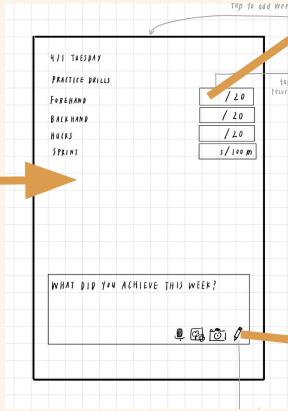
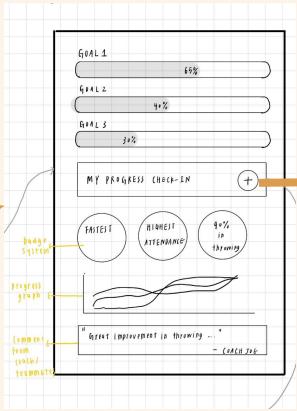
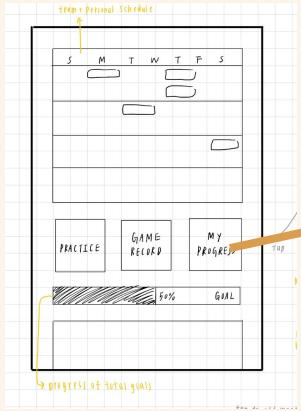


# TASK FLOWS

# TRACK PLAYER'S PROGRESS & SELF-EVALUATION

## Goal:

Player wants to check their training progress and complete a self-review.



1. TAP 'My Progress' from Home.

2. TAP '+' to add a log for progress check-in.

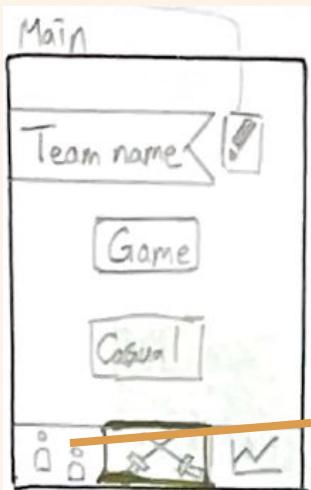
3. TAP to fill in numbers.

4. TAP icons to add self-evaluation.

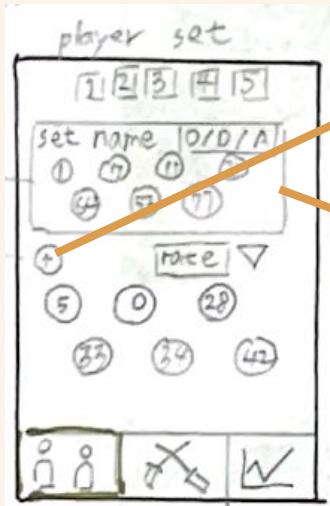
# TEAM & PLAYER SETUP

## Goal:

Coach wants to enter or update team and player information.

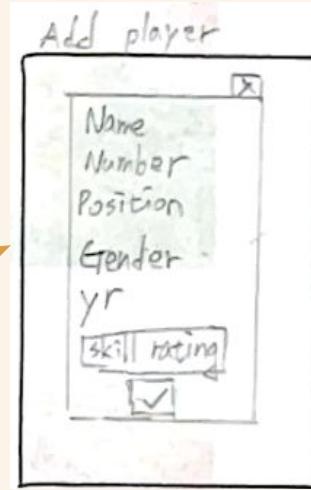


1. TAP player icon from Home.

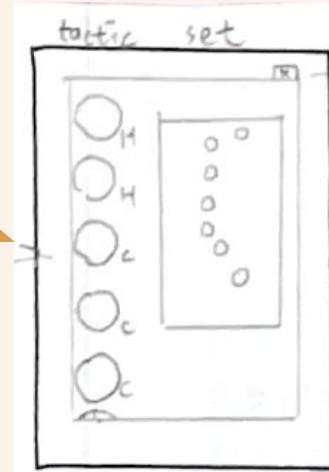


2. TAP add icon for adding new player.

3. TAP player for more detailed player info.



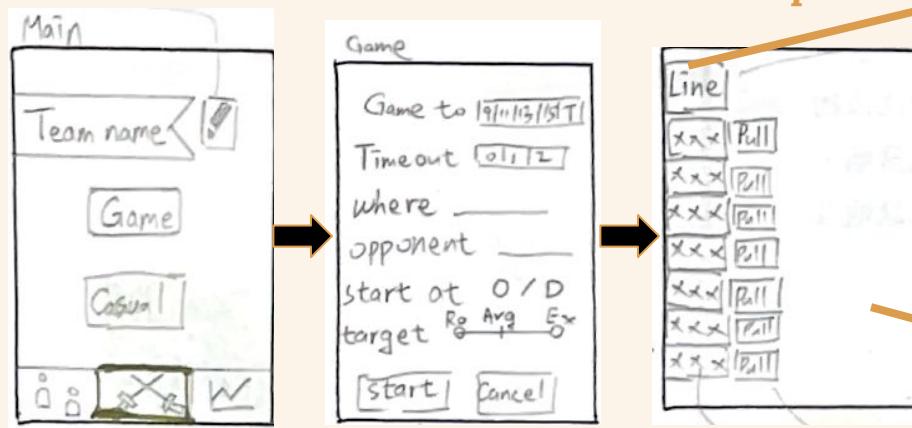
4. TAP top screen to check the players set with court view.



# GAME RECORD & REAL-TIME PLAYER ALLOCATION

## Goal:

Coach wants to track gameplay and allocate players during a game.



1. TAP 'Game' from Home.

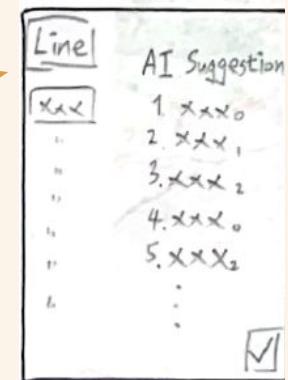
2. Adjust different setting for the game and tap start.

3. Record game stats by tap 'Pull', 'Catch', 'Drop', 'Goal'.

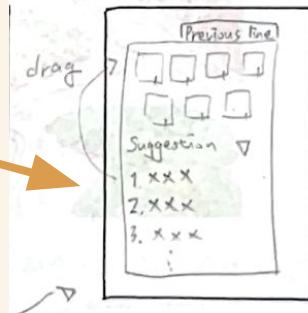
Tap 'Line'

3-1. Change players before the point starts.

when goal



4. Change players before the next point starts.



# EXPERIMENT

# METHOD

## ROLES

- **facilitator** - Yu Chia
- **observer** - I Ming
- **computer** - Sophia

## DEMO

- Feel free to think aloud as you go.
- Show basic layout: Home, Practice, Game, Progress
- Explain: "Players can log progress; managers can track games and set lineups."
- Tasks
  - a. You're a player. Check your training progress and complete a self-review.
  - b. You're a coach. Update player roles and team info for the next game."
  - c. You're starting a game. Record gameplay and use the tool to decide who should be on the field.

## PARTICIPANTS

1. NTU UF Club member (M)
2. Dept. volleyball player (F)
3. Dept. volleyball player (M)

# RESULTS - 1

## 1. Progress Tracking

- users is not sure how to record weekly stats.
- How to define “A good throw(pass)” all passes is counted?

## 2. Team & Player setup

- Not sure if “position” in player setup is required or not.

## 3. Game Record

- “target” is the goal of the game or the level of the opponent
- Page “game recording” is still confusing.
- If there are quick passes between players, should I record them all?

# SUGGESTED UI CHANGES

## 1. Progress Tracking

- Clearer instructions for “weekly” or “monthly” records.
- Clearer definition bout “A good throw” to make records specific.

## 2. Game Record

- More specific definition of the target selection for games.
- Once goal, default set should be presented before AI suggestions.

# RESULTS - 2

## 1. Progress Tracking

- Unclear whether “My Progress” tracks monthly/weekly/daily progress
- Goal tracking logic is not intuitive (if I input 20/20, does this mean I hit 100%)?
- Small buttons for self-evaluation are hard to notice
- Motivational quotes from coach takes too much space

## 2. Team & Player setup

- Too much manual work for the coach to input
- Hard to manage lineups if only player numbers are shown
- Confusing how to save player and game-day lineups
- Thought the bottom players (bench) were the default

## 3. Game Record

- Thought “Game” mode was just a simulation, not real-time
- Didn’t understand what AI suggestions were actually recommending

# SUGGESTED UI CHANGES

## 1. Progress Tracking

- Show how goals scale up
- Clarify who sets the goals
- Clarify progress frequency

## 2. Team & Player setup

- Add a clearer “Add Player” flow
- Use player names with jersey numbers
- Make starting players setup more intuitive
- Rearrange starting players and bench players

## 3. Game Record

- Show context or reasoning behind AI lineup suggestions
- Consider adding tips or pop-ups for first-time users
- Redesign the live action tracking UI

# RESULTS -3

## 1. Progress Tracking

- Users might not know where to adjust the stats for already set up goals.

## 2. Team & Player setup

- Game Icon is not straightforward.
- Confused by the order of clicking the add button and selecting the player to be shifted.

## 3. Game Record

- Confused by “Start” button when going to the game record page.
- Do not know where to start recording, the “Line” button can be ambiguous.
- Do not know the flow when trying to change players.
- Do not know the which position is now suggested by the AI.

# **SUGGESTED UI CHANGES**

- 1. Progress & Tracking**
  - Adjusting already set-up goal tracks would be preferable.
- 2. Team & Player setup**
  - Can have an interface showing comparison between the player on the court and the players on the backseat.
  - Clearer flow for starting the “adding player” process.
- 3. Game Record**
  - Clearer guide to starting the game recording.
  - Change “Start” button to “Record” to be more straightforward.
  - Clearer flow for changing players.

# SUMMARY

1. Workflows should be more detailed and straightforward:
  - Confusing flows for exploring and inputting stats.
  - The order about how to complete a task can be twisted.
2. Definition of the words should be more specific
  - How to define “success” when recording.
3. Icons can be ambiguous, more straight guides for users are needed.
  - Do not know where to start when given tasks.

# THANK YOU!