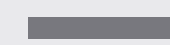


FITTNEY



RIT Spring 2019 | Interactive Design

Haena Lee



“ Designing a system to deal with **Gym frustration** ”

People in modern society, who are highly interested in their fitness and appearance, usually start exercise at the gym because of its convenience and affordability. However, many beginners are frustrated by the gym for many reasons. In this project, I will figure out difficulties that gym users experience and make a good user experience that helps them achieve their goals.

Problem to Solve

01

Most people use their mobile device just for listening to music during exercise. **How can users actively use a mobile device as a fitness manager in the gym?**

02

There are many useful fitness equipments in the gym but users don't know what to use first, how to use properly. **How can users take advantage of gym machines?**

03

Many users don't have a personal trainer that cost much so they quit exercise because of lack of motivation. **How to motivate and encourage users to achieve their fitness goals in a cost effective way?**

Goals

*“ Help **beginners** to take advantage of **gym** and acheive their **goals** ”*

01 Synergic

Do not disturb user's workout by unnecessary distraction and complex tutorial.

02 Functional

Offer practical information and function in order that user can learn to use the gym effectively.

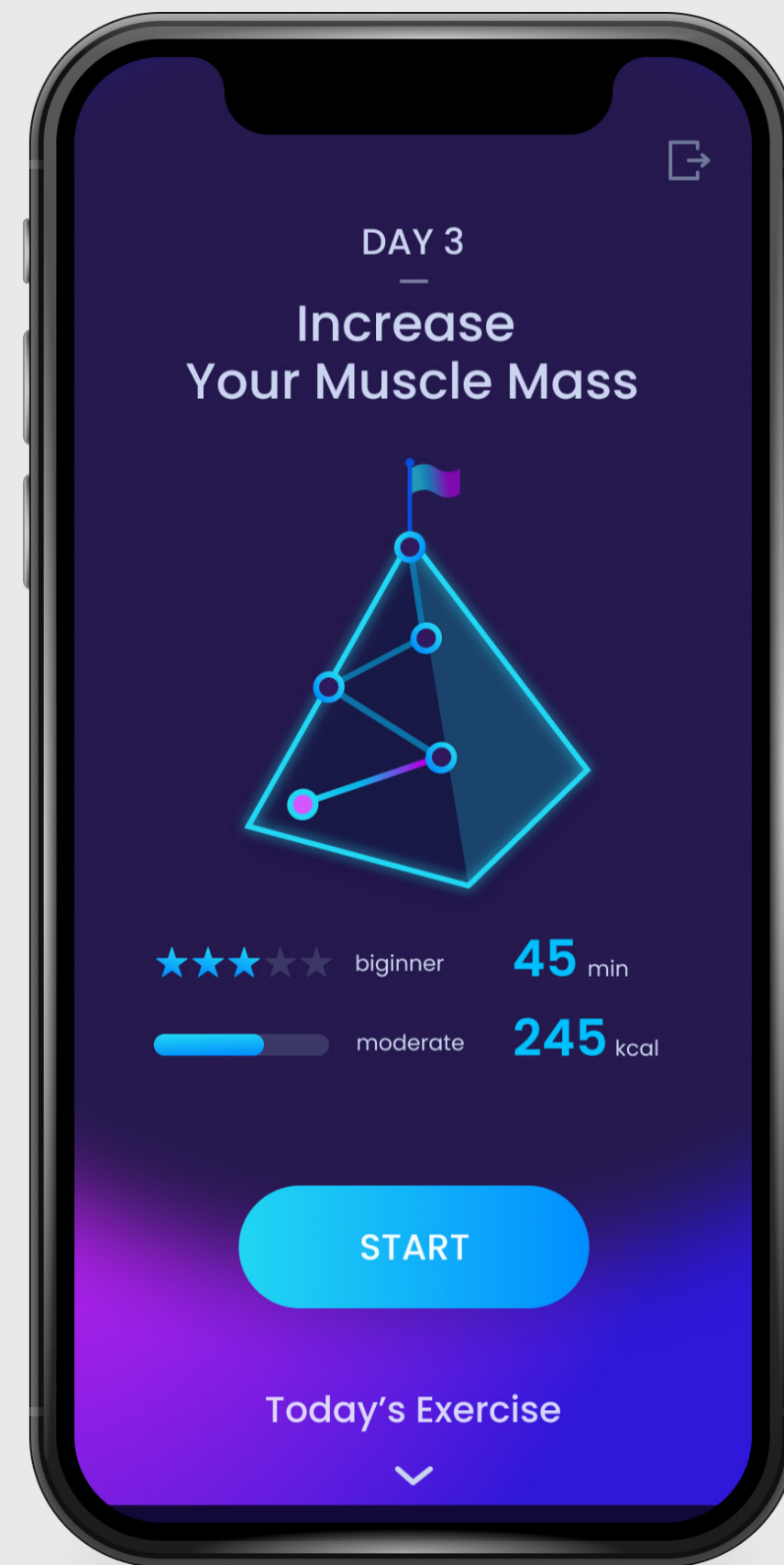
03 Encouraging

Give continuous motivation and feasible goals to the user until they achieve goals

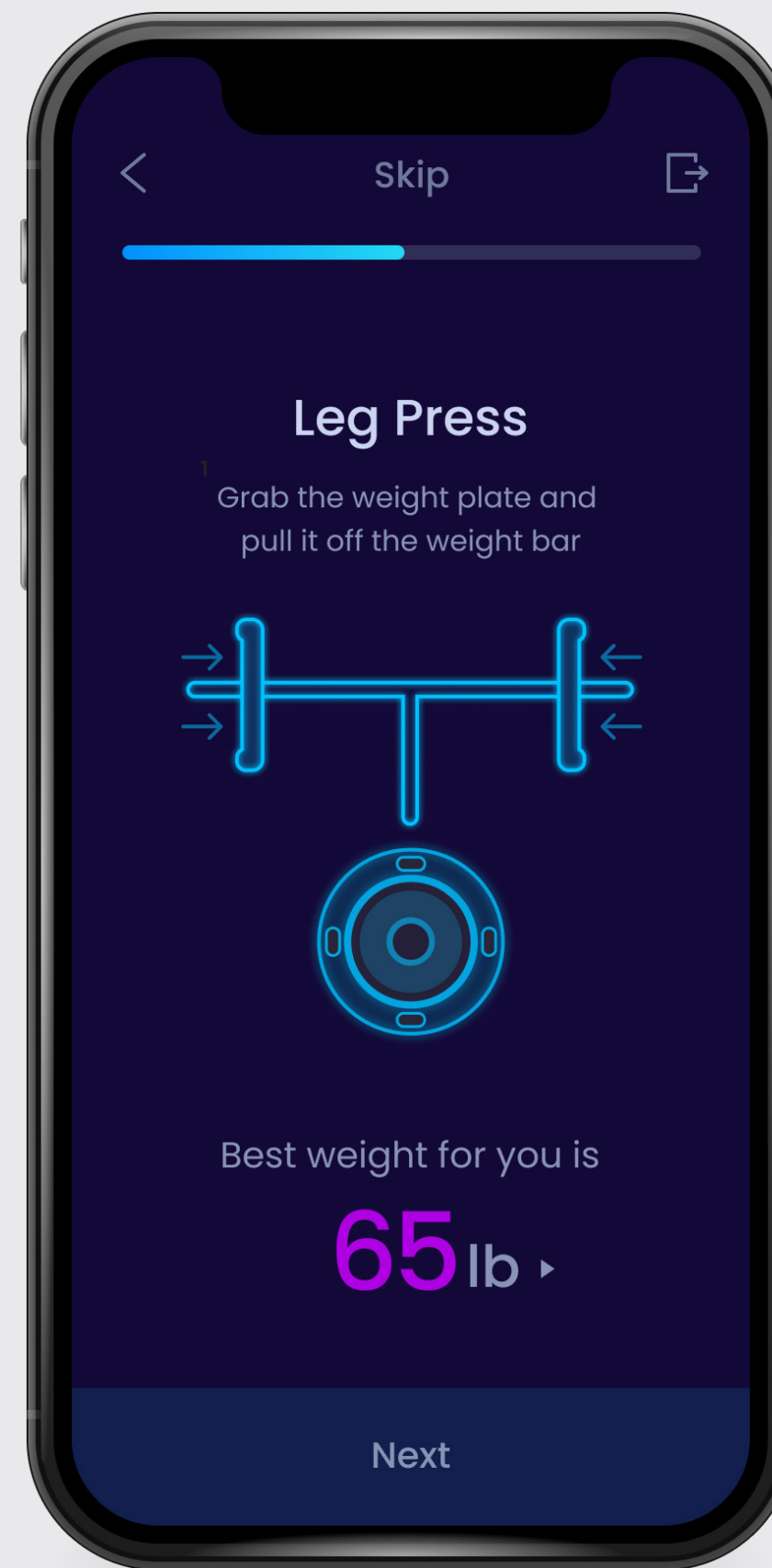
Design Solutions



Home Screen



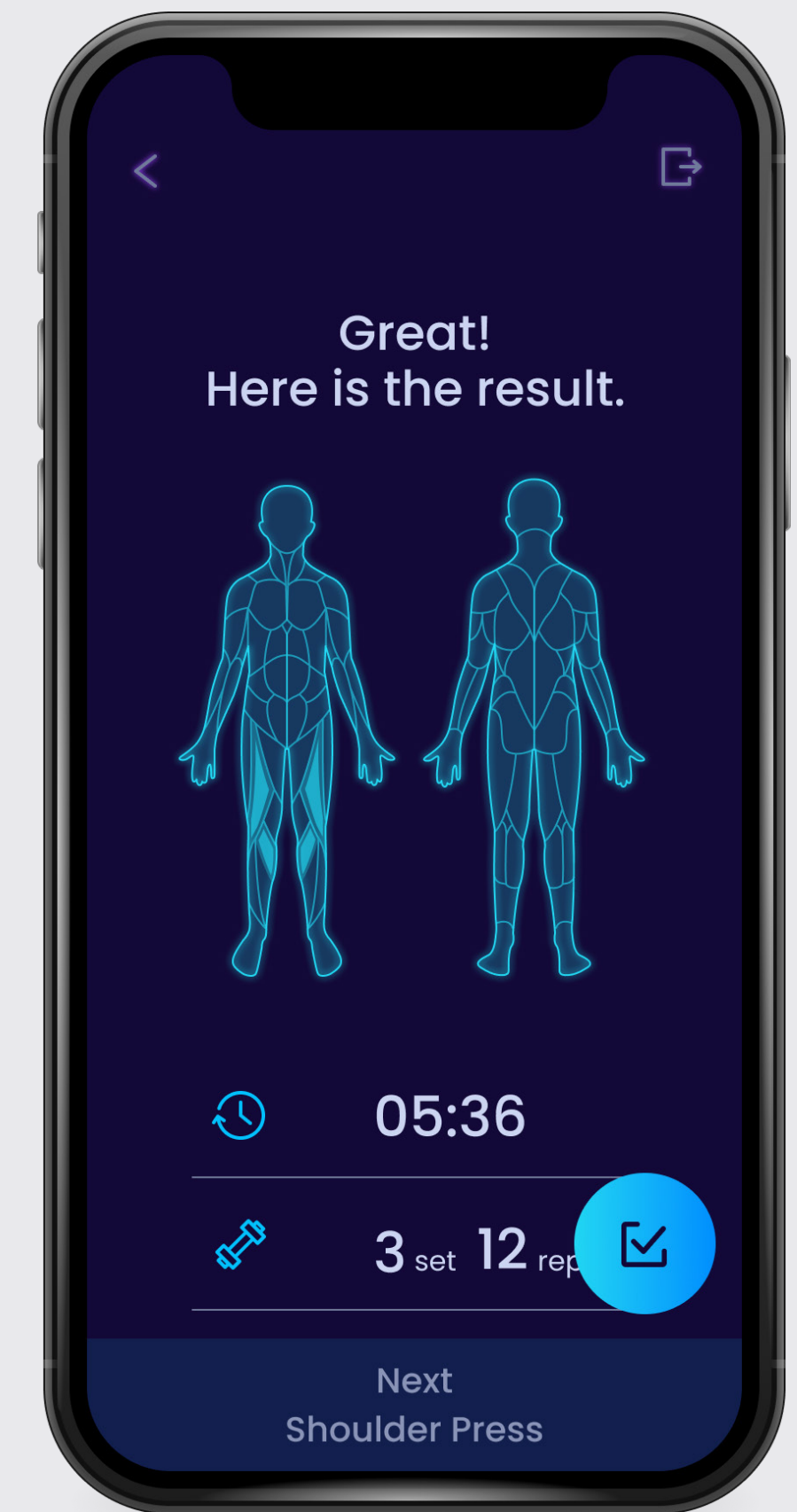
Today's Goal



Tutorial



Timer



Workout Summary

Research

Current Fitness System

Cognitive Mapping

Observation

Problem to Solve

Goals

Current Fitness System

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Lower Push/Upper Pull/Core	Lower Push/Upper Push/Core	Phyo/Aerobic Flow	Active Rest	Lower Push/Upper Pull/Core	Lower Push/Upper Push/Core	Full Rest Day
A1. Warm Up 3 Steady Rounds 1min Jump Rope, Single Unders 7 Pause Squat Jumps 10 Pause March Switches 7 Banded Face Pulls 5 Internal Hip Rotation Flows B1. 3 Rounds For Quality 10-12 DB Hip Thrusts rest: 30 8-10 Supinated Ring Row, w/ 1-see Rest 1:00 B2. 3 Rounds For Quality 10-12 DB Box Step Ups, ea leg rest: 30 15 Pronated Pull Up Hold* Rest 1:00 *can be accumulated time B3. 3 Rounds For Quality 10-12 KB Goblet Squats rest: 30 10-12 Dual DB Curl to Press Rest 1:00 C1. 3 Rounds For Quality 15 Cammell Plank, R, slow and c :30 Plank March rest: 20 15 Cammell Plank, L, slow and c Rest 1:00	A1. Warm Up 3 Steady Rounds 1min Row, easy pace 3 Glute V Walkouts 10 Quartered Crossbody Shoulder 3 Downdog to Updog Rows B1. 3 Rounds For Quality 10-12 Death March rest: 30 B2. 3 Rounds For Quality 10-12 Goblet KB Good Mornings rest: 30 10-12 DB Shoulder Press Rest 1:00 B3. 3 Rounds For Quality 10-12 Push Ups, slow down/fast up rest: 30 10-12 Push Ups, slow down/fast up rest: 30 C1. 3 Rounds For Quality 20-30 Hollow Body Hold rest: 20 15 Hanging Knee Raises rest: 20 20-30 Plank Hold Rest 1:00	A1. Warm Up 3 Steady Rounds 57 Butt Kickers 57 High Knees 57 Side Shuffle, 25' ea direction 57 Single Leg Broad Jump to Land B1. 3 Rounds For Quality 10-12 Alternating DB Bench Press rest: 30 5 Single Leg Box Jumps, ea leg rest: 30 5 Single Leg Lateral Jump to Land, ea leg Rest 1:00 B2. 3 Rounds For Quality 5 Seated Box Jumps rest: 30 5 Plyo Push Ups Rest 1:00 C1. Aerobic Flow (outside if possible or indoor track) Continuous 15 Minute Steady Pace 400m run 14 Walking Lunges 14 Burpees 14 Sit Ups Note Total Rounds and Reps Completed.	Active Rest Day Get outside, go for a walk, do something you enjoy that's outside the gym and gets you moving!	A1. Warm Up 3 Steady Rounds 1min Bike, easy pace 5 Slow Squats 5 Banded Raise to Pull Apart :20 Passive Bar Hang 3 Sampson to Half Split Flows, ea side B1. 3 Rounds For Quality :30-60 Wall Sit rest: 30 8-10 Single Arm Dumbbell Row, ea arm Rest 1:00 B2. 3 Rounds For Quality 8-10 Dumbbell Reverse Lunge, ea leg rest: 30 10-12 Lat Pull Downs Rest 1:00 B3. 3 Rounds For Quality 10-12 Wall Ball Shots rest: 30 10-12 Archer Ring Rows Rest 1:00 C1. 3 Rounds For Quality :20-30 KB Side Plank, R rest: 20 10-15 Weighted Tuck-Ins rest: 20 :20-30 KB Side Plank, L Rest 1:00	A1. Warm Up 3 Steady Rounds 1min Jump Rope, Single Unders 7 DB Hip Thrusts 57 Single Arm KB Overhead Carry, ea side 5 Single Arm KB Crossbody RDL, ea side 3 Downdog to Updog Flows B1. 3 Rounds For Quality 8-10 Split Stance Kettlebell Deadlifts, ea side rest: 30 10-12 Single Arm KB Press Rest 1:00 B2. 3 Rounds For Quality 15-30 Soreness Hold rest: 30 8-8 Bar Dips Rest 1:00 B3. 3 Rounds For Quality 8-10 Machine Hamstring Curls rest: 30 10-12 Push, down slow/up fast Rest 1:00 C1. 3 Rounds For Quality 8-10 Arm Supported Leg Lifts rest: 20 15-20 Russian Twists rest: 20 15-25 Arch Body Hold Rest 1:00	Full Rest Day
VIDEO LINKS:	VIDEO LINKS:	VIDEO LINKS:	VIDEO LINKS:	VIDEO LINKS:	VIDEO LINKS:	
Jump Rope, Single Unders	Glute V Walkouts	Butt Kickers		Banded Raise to Pull Apart	DB Hip Thrusts	
Pause Squat Jumps	Quartered Crossbody Shoulder	High Knees		Passive Bar Hang	Single Arm KB Overhead Carry	
Pause March Switches	Downdog to Updog Flows	Single Leg Broad Jump to Land		Sampson to Half Split Flows	Single Arm KB Crossbody RDL	
Banded Face Pulls	Death March	Single Leg Box Jumps		Wall Sit	Downdog to Updog Flows	
Internal Hip Rotation Flows	Alternating DB Bench Press	Single Leg Lateral Jump to Land		Single Arm Dumbbell Row	Split Stance Kettlebell Deadlifts	
DB Hip Thrusts	Goblet KB Goodmornings	Seated Box Jump		Dumbbell Reverse Lunge	Single Arm Kettlebell Press	
Supinated Ring Row	DB Shoulder Press	Plyo Push Up		Lat Pull Down	GHD Soreness Hold	
DB Box Step Ups	GHD Hip Extensions	Walking Lunge		Wall Ball Shots	Bar Dip	
Pronated Pull Up Hold	Hollow Body Hold	Burpee		Archer Ring Rows	Machine Hamstring Curl	
KB Goblet Squat	Hanging Knee Raises			KB Side Plank	Russian Twists	
Dual DB Curl to Press				Tuck-Ins	Arch Body Hold	
Plank March						
Cammell Plank						

Current Exercise Training Program by Personal Trainer James Whelan, used with permission.

Distracting

Hard to figure out the entire process quickly.

- This content is full of text but it isn't organized with a hierarchy aesthetically and functionally.
- Titles don't stick out from the detail in the design aspect.
- The listing doesn't help for user to understand the entire process

Time-consuming

Time-consuming to understand and follow the process.

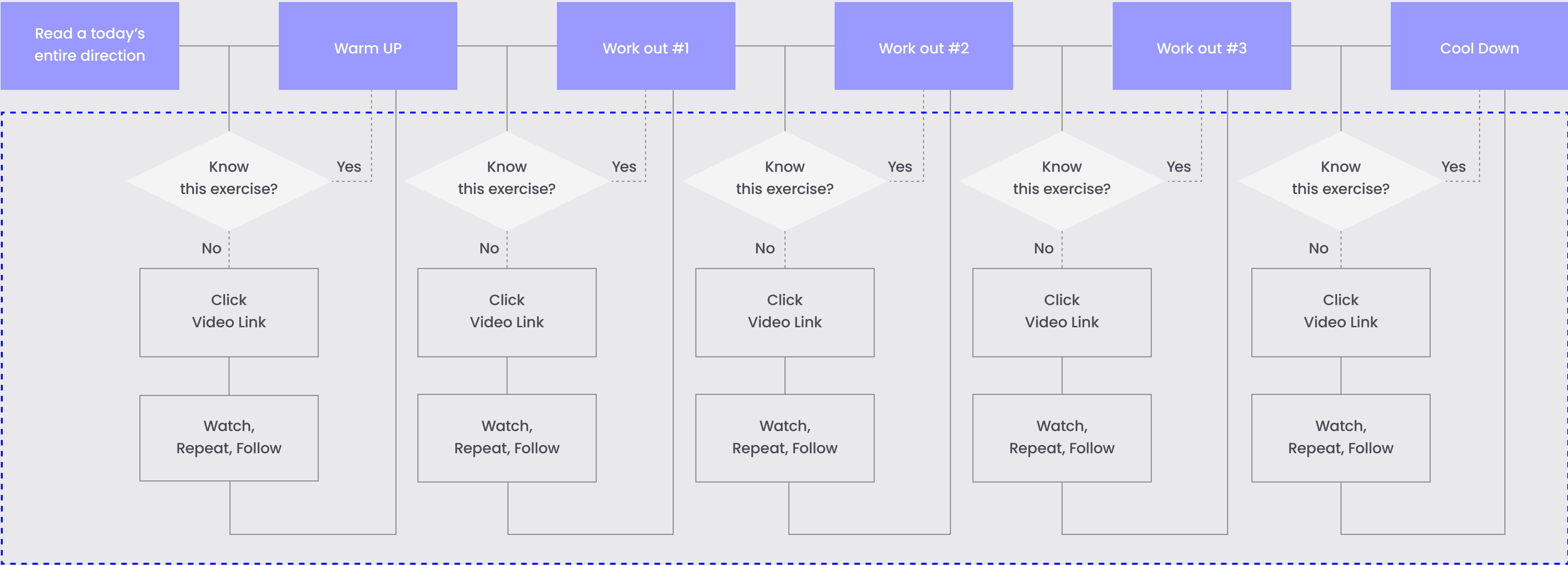
- This content contains lots of fitness terms so it's difficult to understand.
- A user has to see the direction first, find the link second and open link in a new window.

Unfriendly

Unkind information for the beginner

- The content needs a kind of legend for some abbreviation.
- In case of Active Rest Day, beginners would need some direction because they don't know what to do.

Cognitive Mapping



unnecessary, excessive steps on each exercise!

This may make users lose thier interest

Observation

I went to RIT gym for the first time and did a fly on the wall observation. I sometimes exercise in my home with Youtube. Therefore, I don't have much experience and **I don't know how to use a gym.**



Pain point

- As a beginner, it was hard to know **what exercises to do in order.**
- There was **no tutorial** of fitness machines for beginners.
- I can't easily find **which body part** this machine was intended for?
- I didn't know the **proper weight** for me when I use a machine.
- Some equipment I want to try wasn't empty for a long time.

Findings

- Most people gathered on **a treadmill and bike area.**
- Many people on the treadmill and bike area didn't try to use other machines.
- There is an empty area because users don't know how to use the machines.
- Most people are wearing **earphones and headphones**
- Mostly, people used a cell phone for music but some people used it for weight exercise.

Interviews

I interviewed 4 people with a different background who go to the gym regularly. I got some valuable insights from them.

This is their brief bio.

Frank (store manager)

Gene (patient care aide)

Hana (research assistant professor)

Min-Hye (international student)

Devices

Hana and Min-Hye use a smartphone during exercise, not for workout purposes but entertaining one during exercise.

Frank uses a smartwatch for fitness purposes because it is wearable and convenient to work out.

Information Source

Three of them get information about fitness and gym by themselves without expert's help.

Achivement

Motivation and habit are important factors to achieve their goals.

User Mapping

Behavioral Profile

User Story

Journey Map

User Flow

Beginner's Behavioral Profile

"I frequently use apps whenever I want to get fitness information and make a schedule"

Beginners just started the workout for the purpose of getting in shape or watching their weight. They feel hopeful and but overwhelmed because they don't have much knowledge about fitness and the gym. They also fight laziness to achieve their goals. Therefore, they want to **get the information** they need, make a **effective and reasonable schedule** and **to be motivated** to continue their workout.

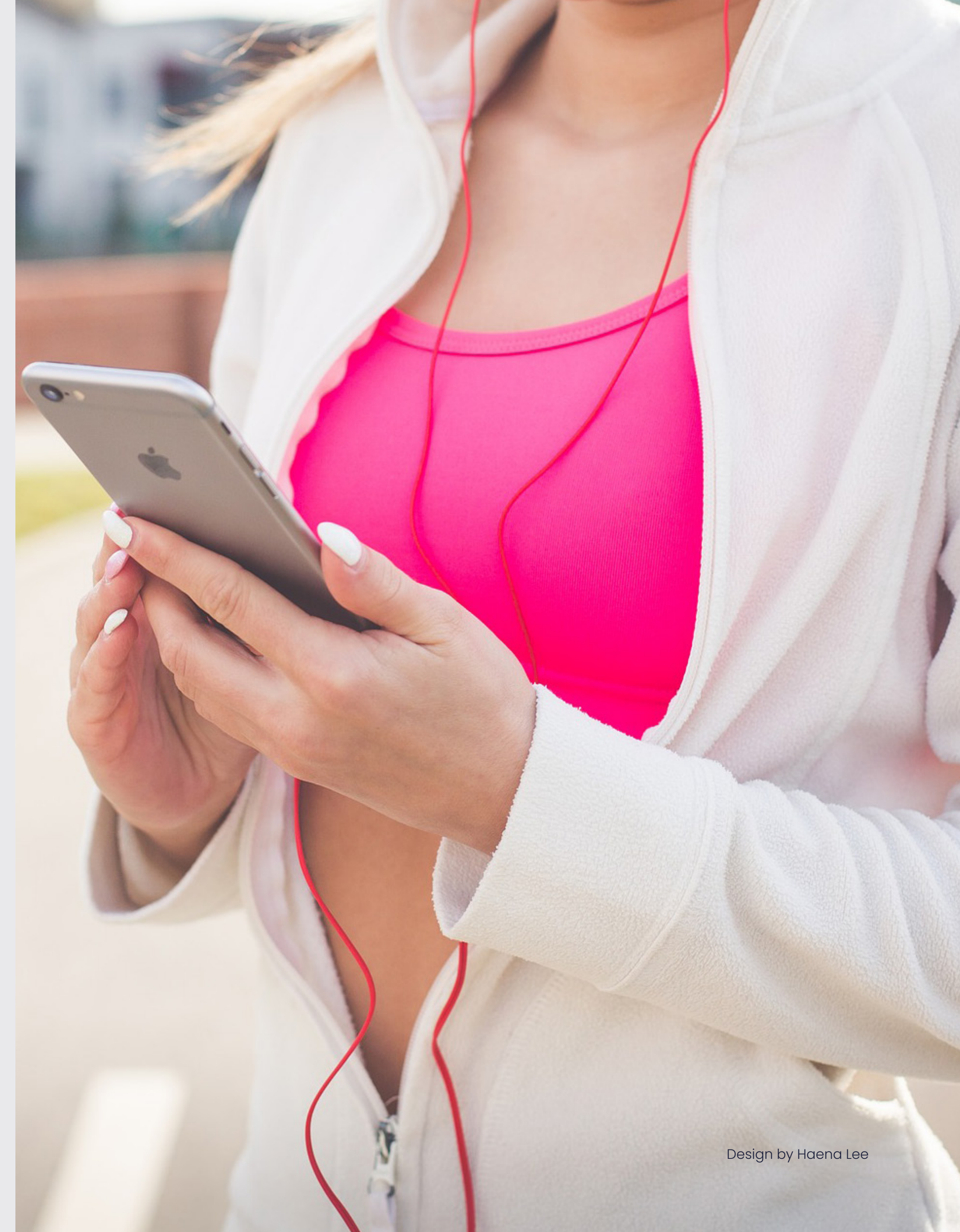
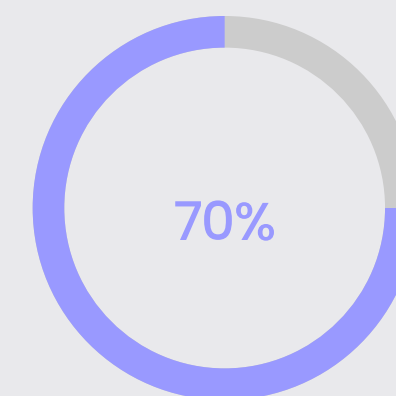
Activity



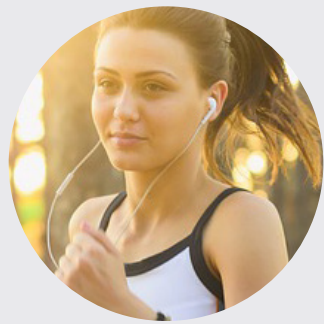
Reliance



Mobile Device Use

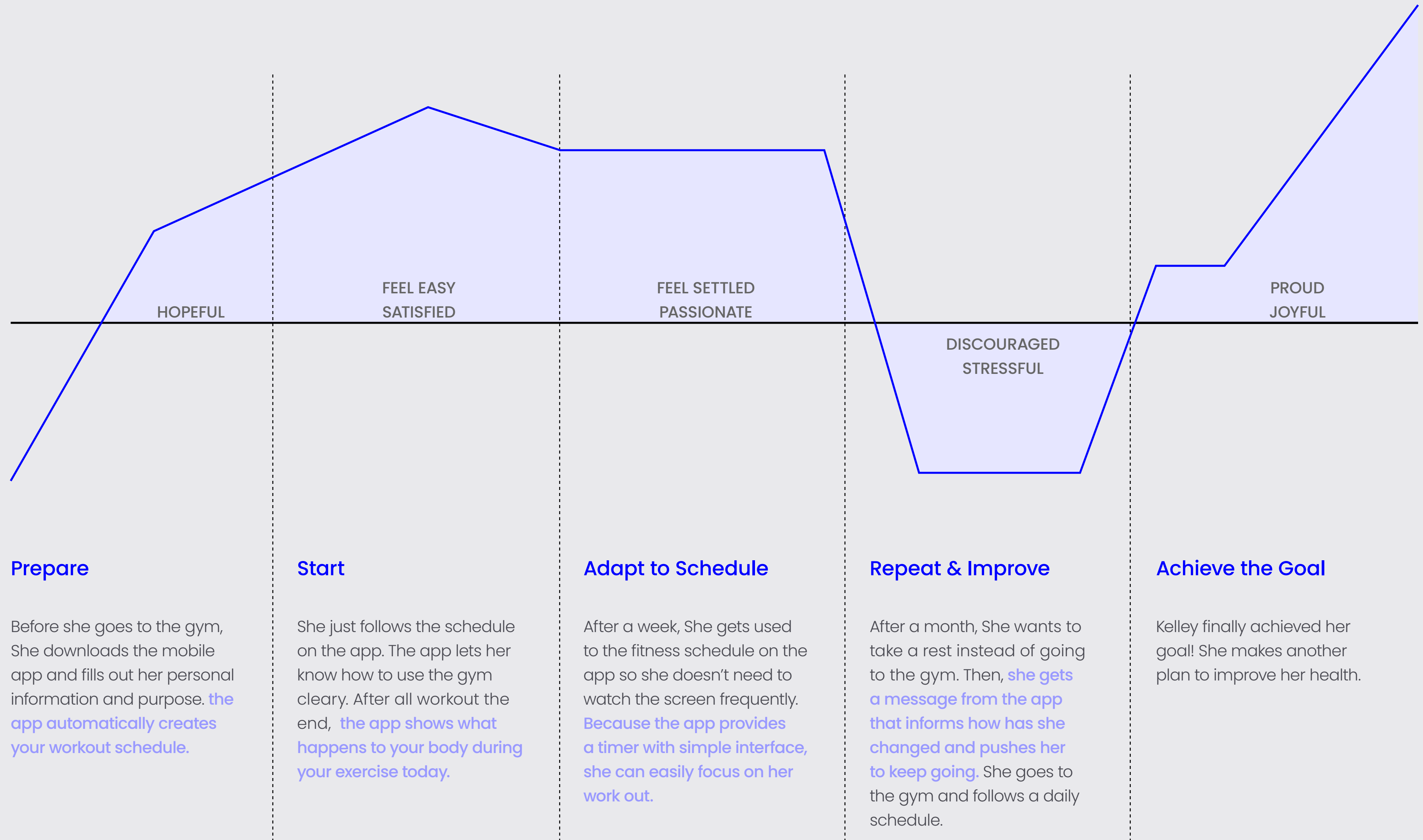


Journey Map



Kelley Brown (21)

It's a new year. Kelley decided to lose belly fat. Due to the lack of budget, she chooses to go to the gym in the college. However, she is frustrated because she doesn't know what to start and which exercise is good for her purpose.



Prepare

Before she goes to the gym, She downloads the mobile app and fills out her personal information and purpose. **the app automatically creates your workout schedule.**

Start

She just follows the schedule on the app. The app lets her know how to use the gym clearly. After all workout the end, **the app shows what happens to your body during your exercise today.**

Adapt to Schedule

After a week, She gets used to the fitness schedule on the app so she doesn't need to watch the screen frequently. **Because the app provides a timer with simple interface, she can easily focus on her work out.**

Repeat & Improve

After a month, She wants to take a rest instead of going to the gym. Then, **she gets a message from the app that informs how has she changed and pushes her to keep going.** She goes to the gym and follows a daily schedule.

Achieve the Goal

Kelley finally achieved her goal! She makes another plan to improve her health.

User Story



01 Enthusiastic user

As a musical singer who want to get in good shape, I want to know the proper weight at my level and track my record so that I can move forward.



02 Inactive user

I'm a college student and not a big fan of exercise but I want to exercise regularly for my health. I need something to push me so that I can go to the gym regularly.



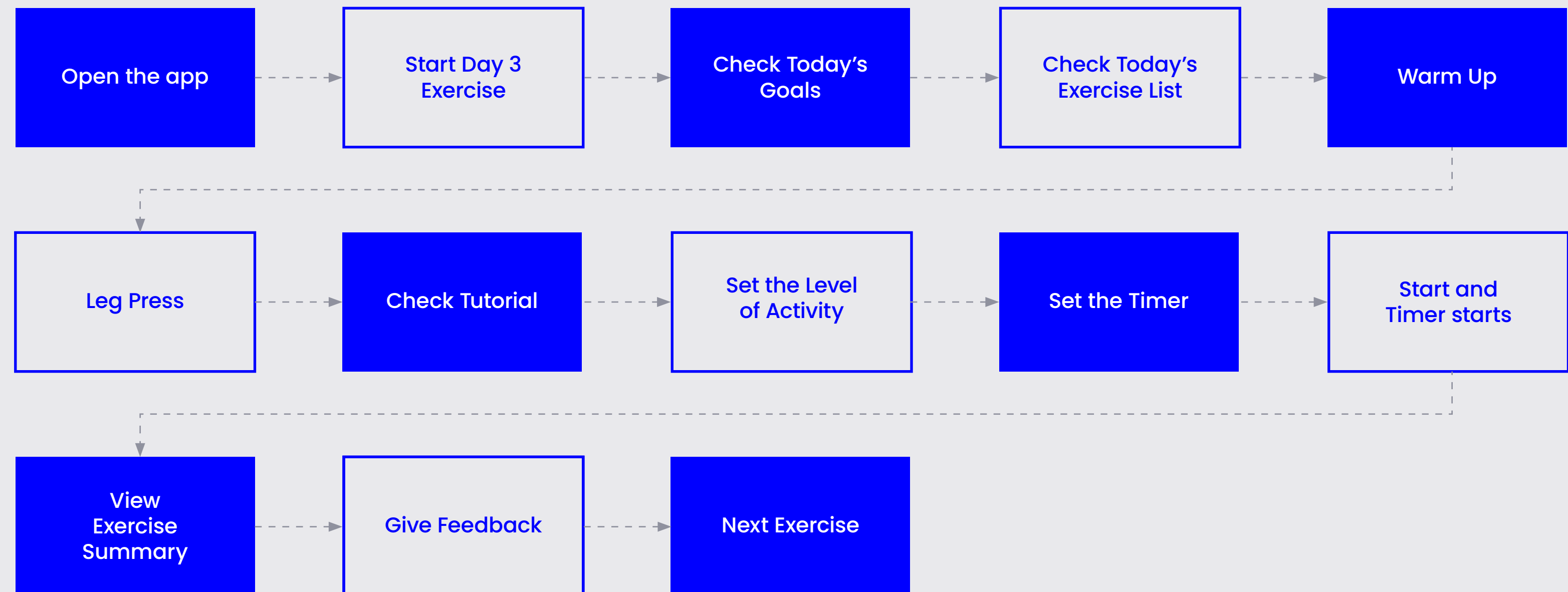
03 shy user

I always overwhelmed whenever I go to the gym. I want to get a good schedule and tutorial so that I don't need to wander around or ask for help to someone at the gym.

Shy User's Flow

Shy users on day 3 still feel overwhelmed at the gym and not familiar to use the gym yet. The biggest situation they want to avoid is roaming around the gym because they don't know what to do next and hesitate to ask someone to help.

After they enter the gym, they put earphones on, opens the app, and then just press the start button and follow the step. This will help shy users feel comfortable and boost their confidence until they get used to the gym.



Competitive Analysis

Competitive Apps

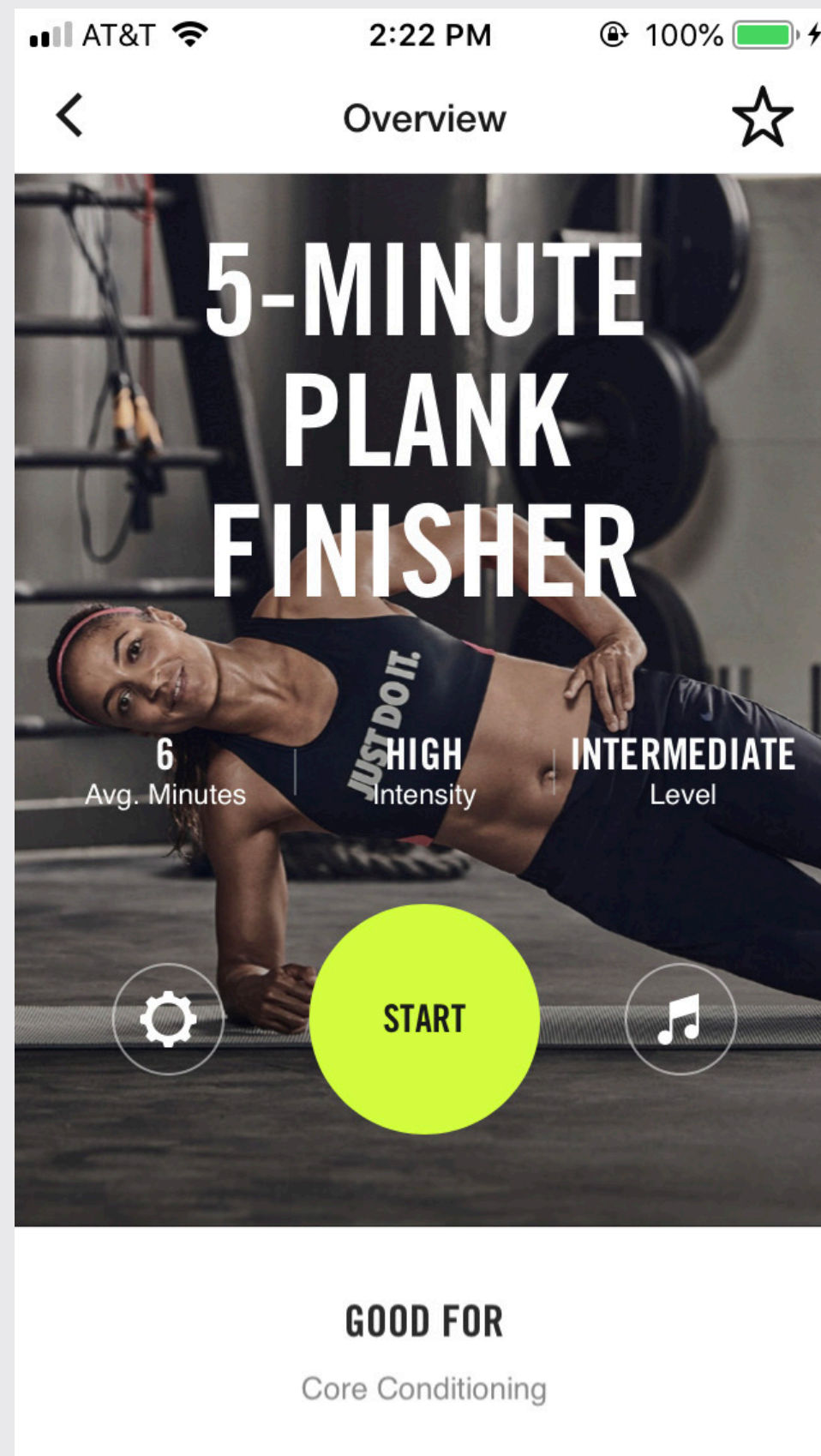
-Today's Goals

-Workout Tutorial

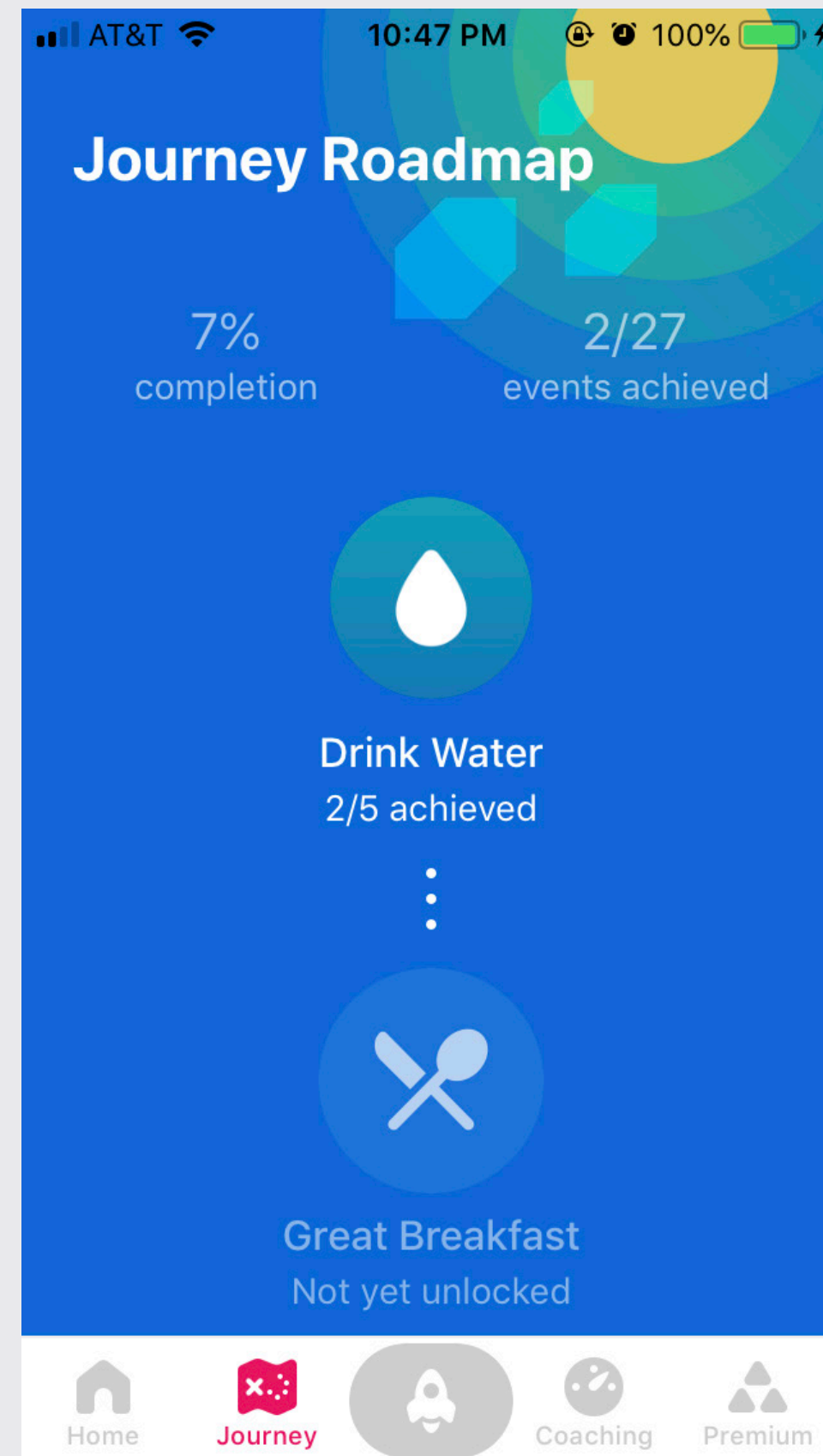
-Timer

How might we...?

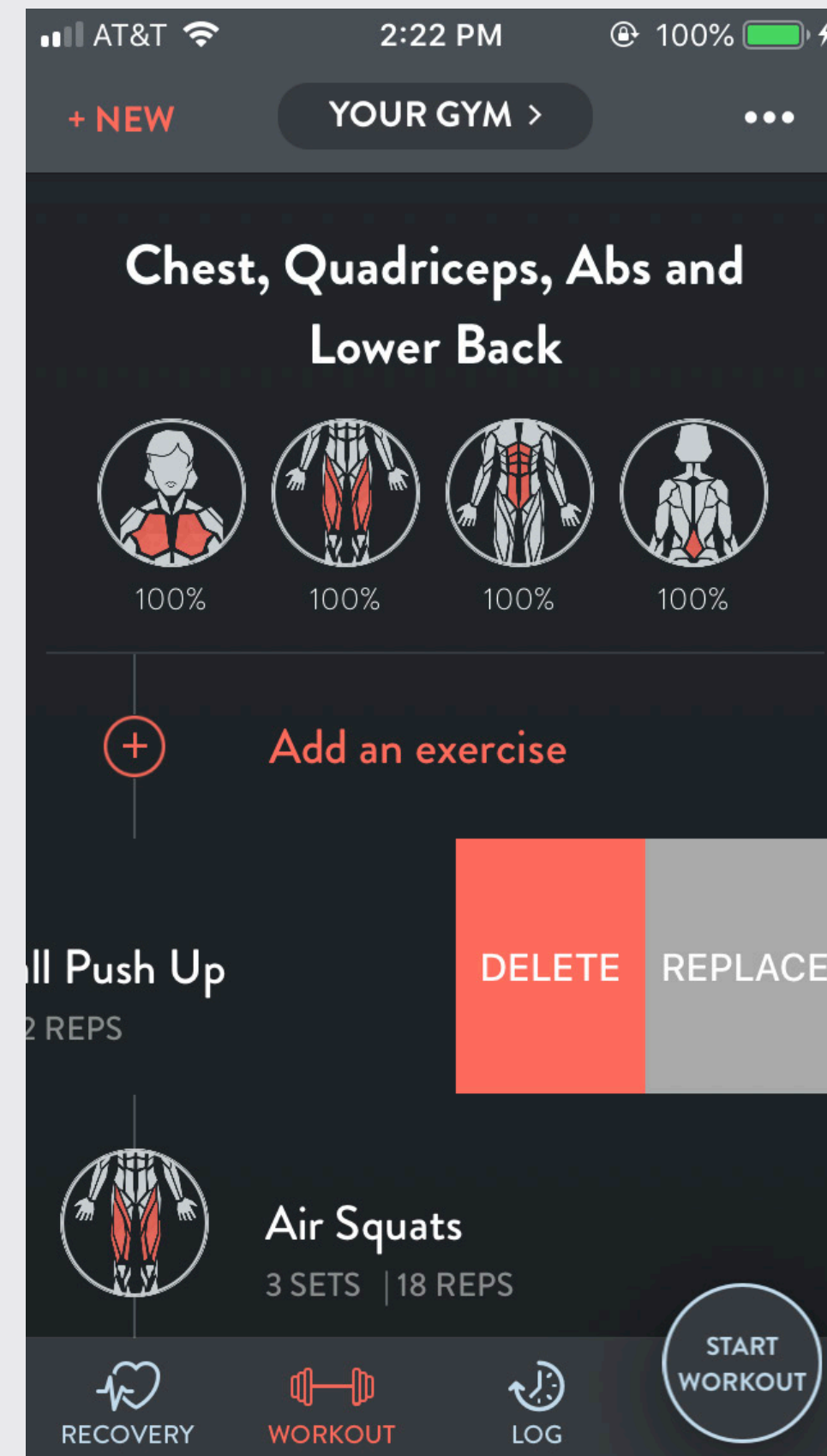
Today's Goals



Nike Training



Fabulous

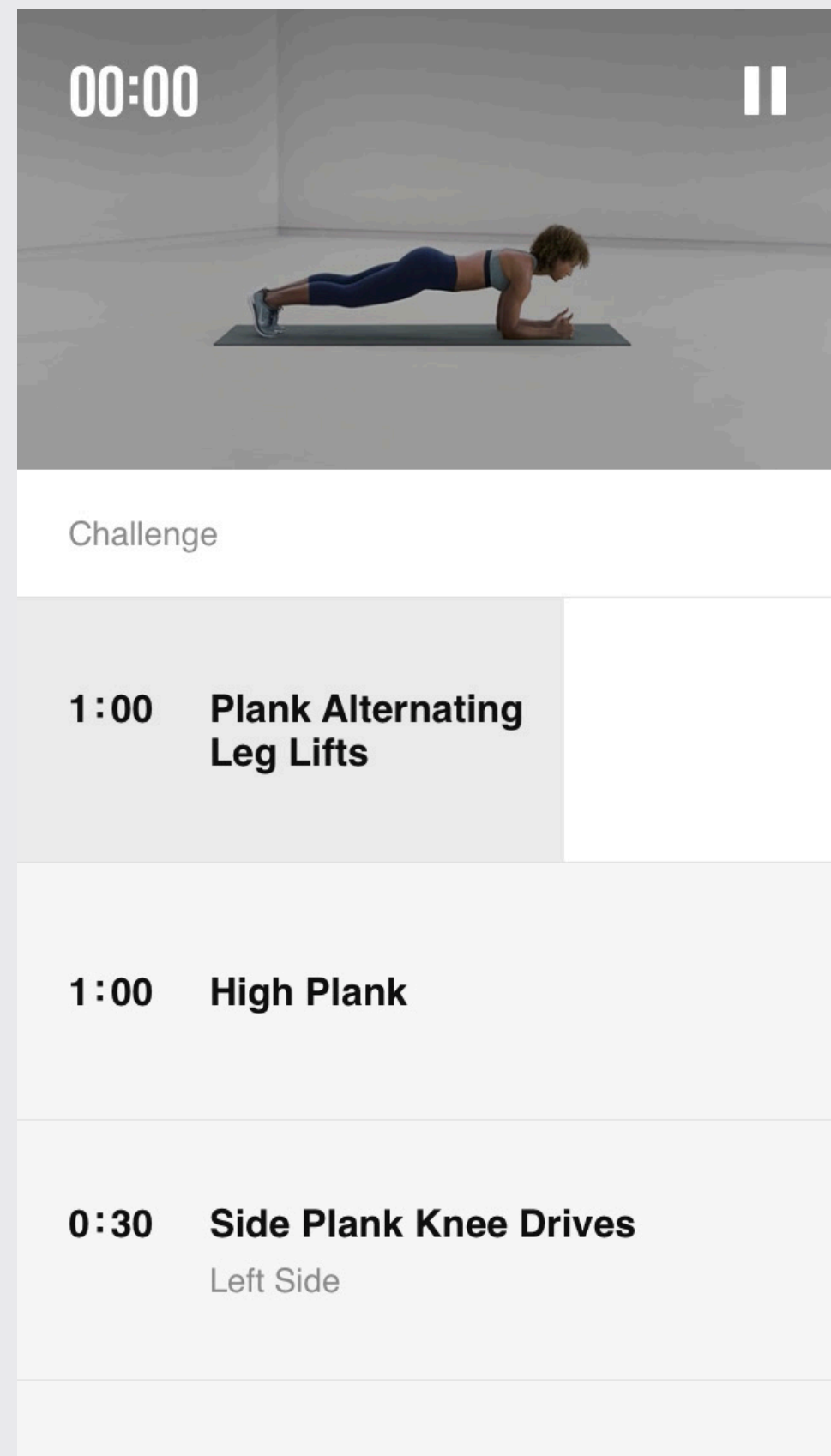


Fitbod

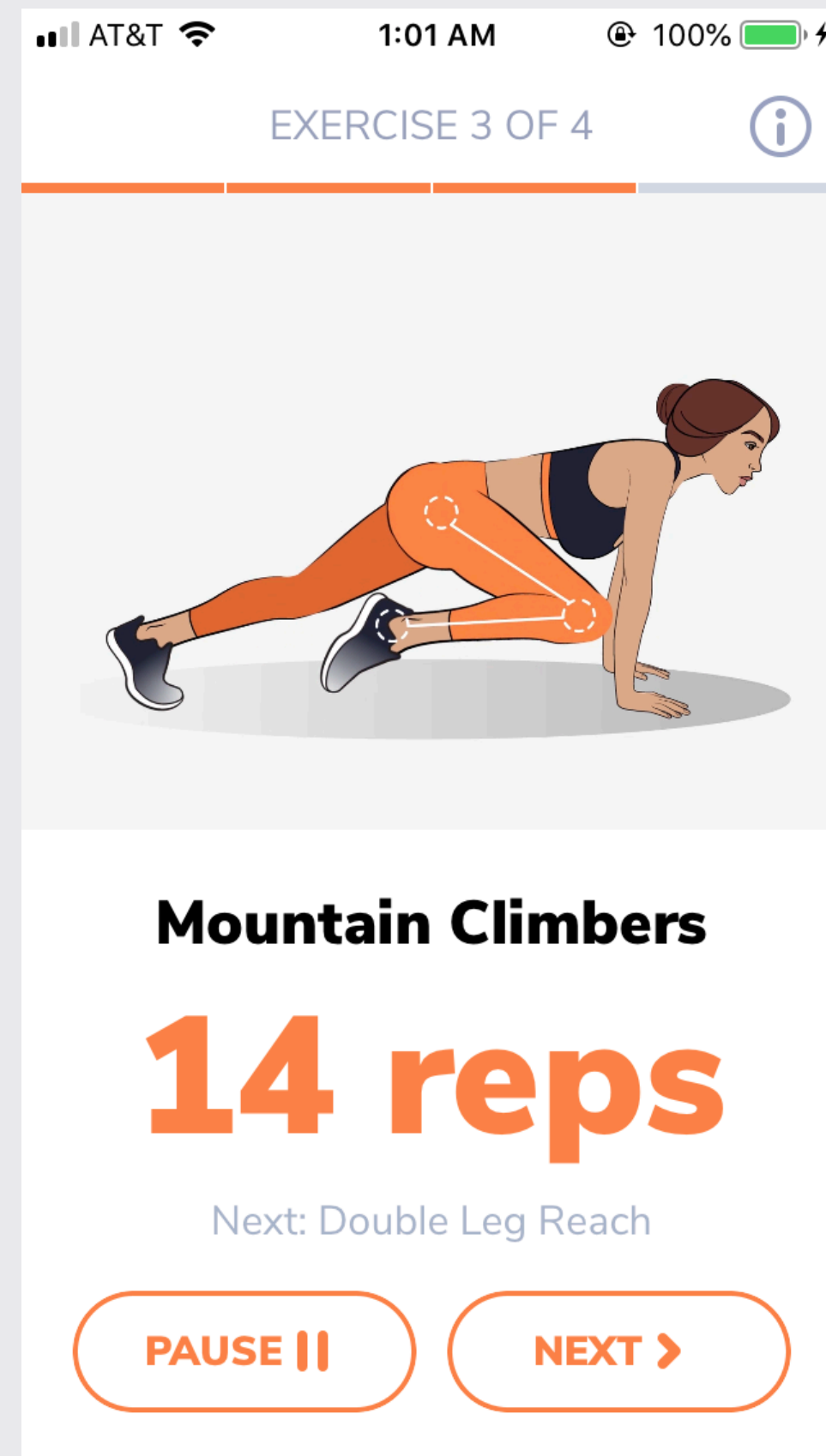
Today's goal shows and schedule what users will achieve that day.

Nike Training has a nice visual hierarchy with an overall achromatic color, desaturated photo and lime point color. Fabulous which is goal achievement app, has a good and simple infographic that shows steps easily. In Fitbod, users can delete or replace a workout and make a customizable plan by swiping

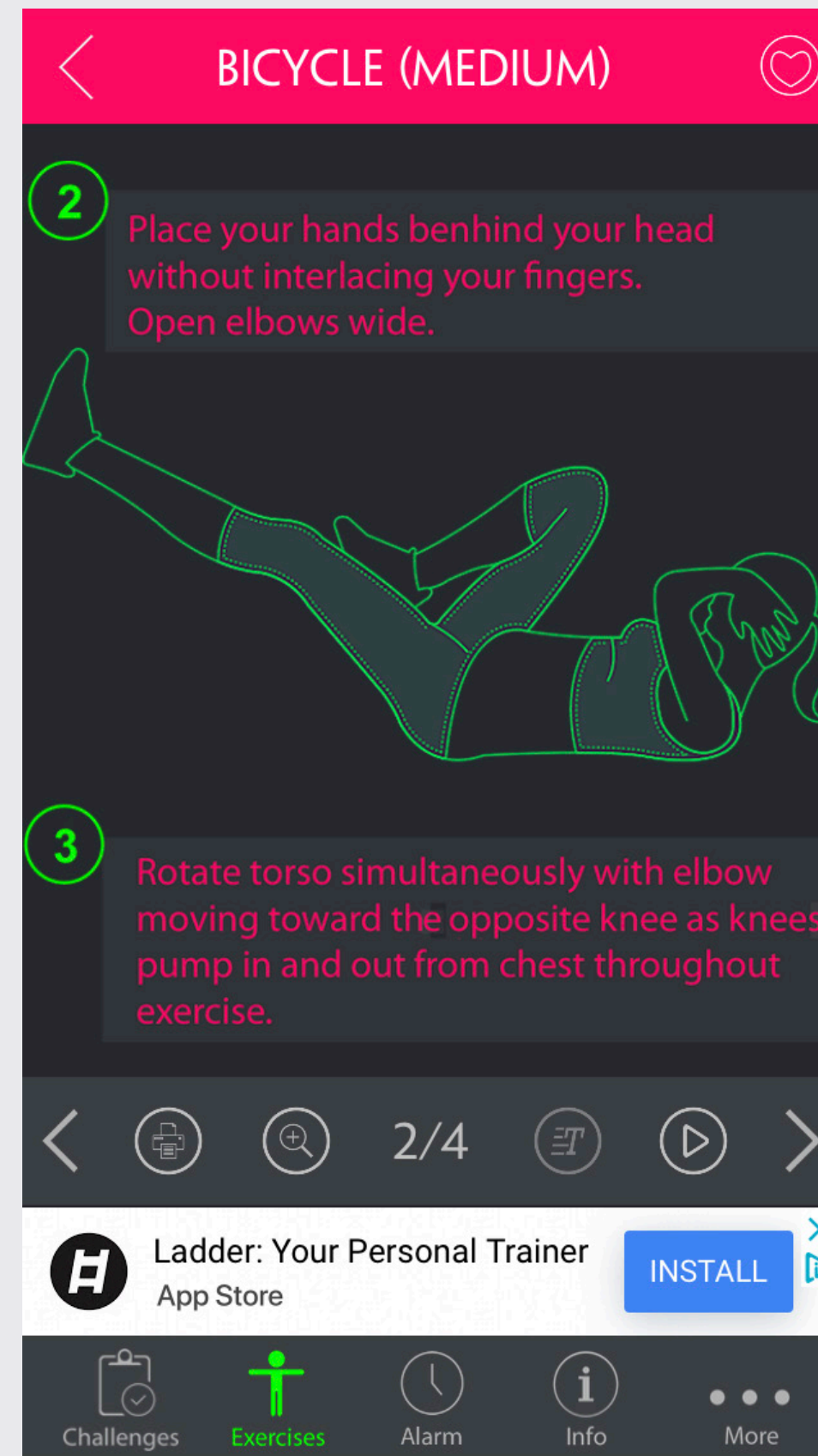
Workout Tutorial



Nike Training



BetterMe

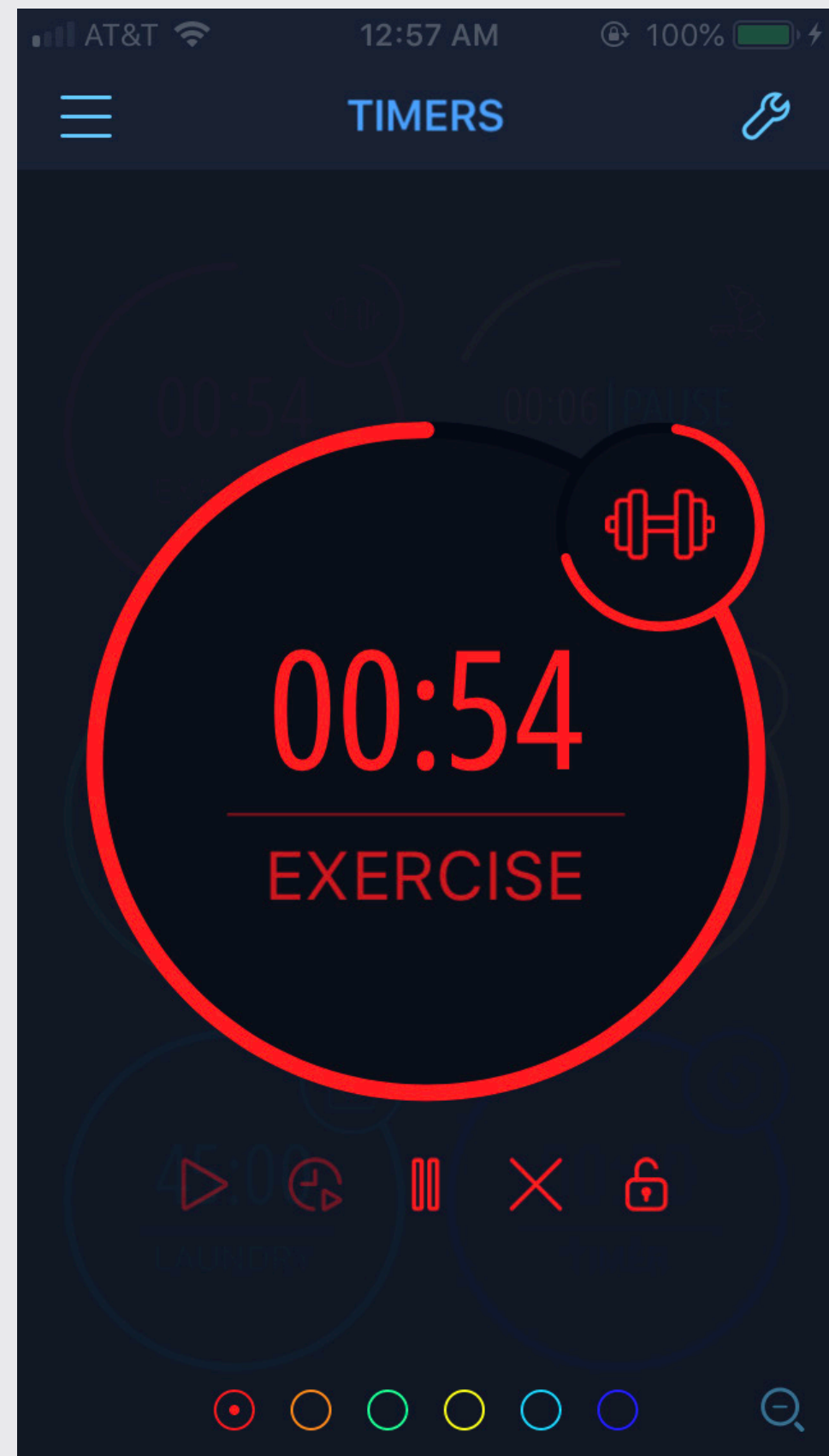


30DeayFitness

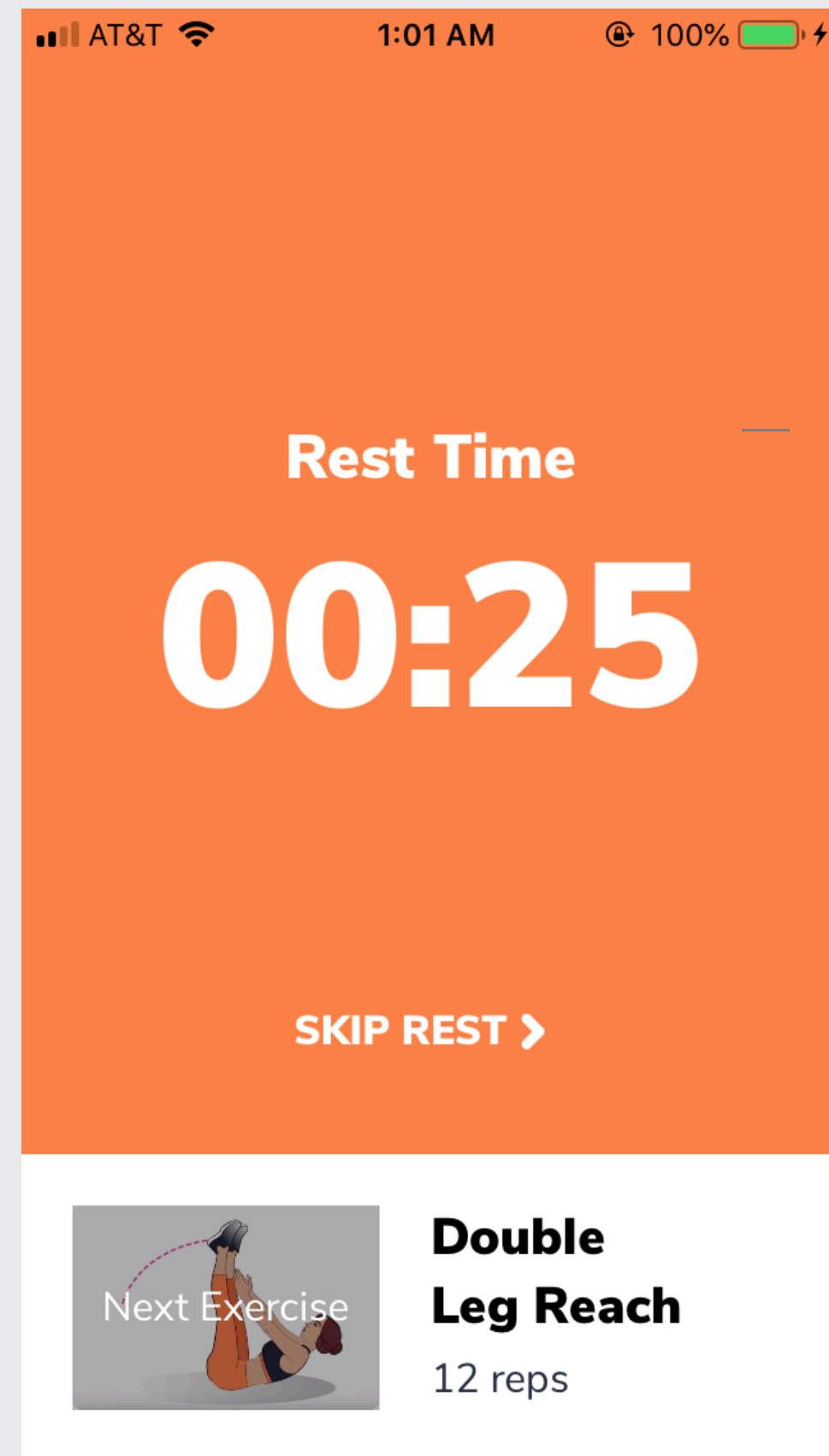
Workout Tutorial shows how to do exercise and how to use a machine in the gym. This is the most important function that the app should pay attention to the interface.

[Nike Training](#) is the best app that I don't need to touch much during exercise. It shows tutorial video quickly and starts the workout. [BetterMe](#) has an animation tutorial with good illustration but doesn't have a timer so users need to check their number by themselves. [30DayFitness](#) has a simple graphic direction and explanation which doesn't need to play video.

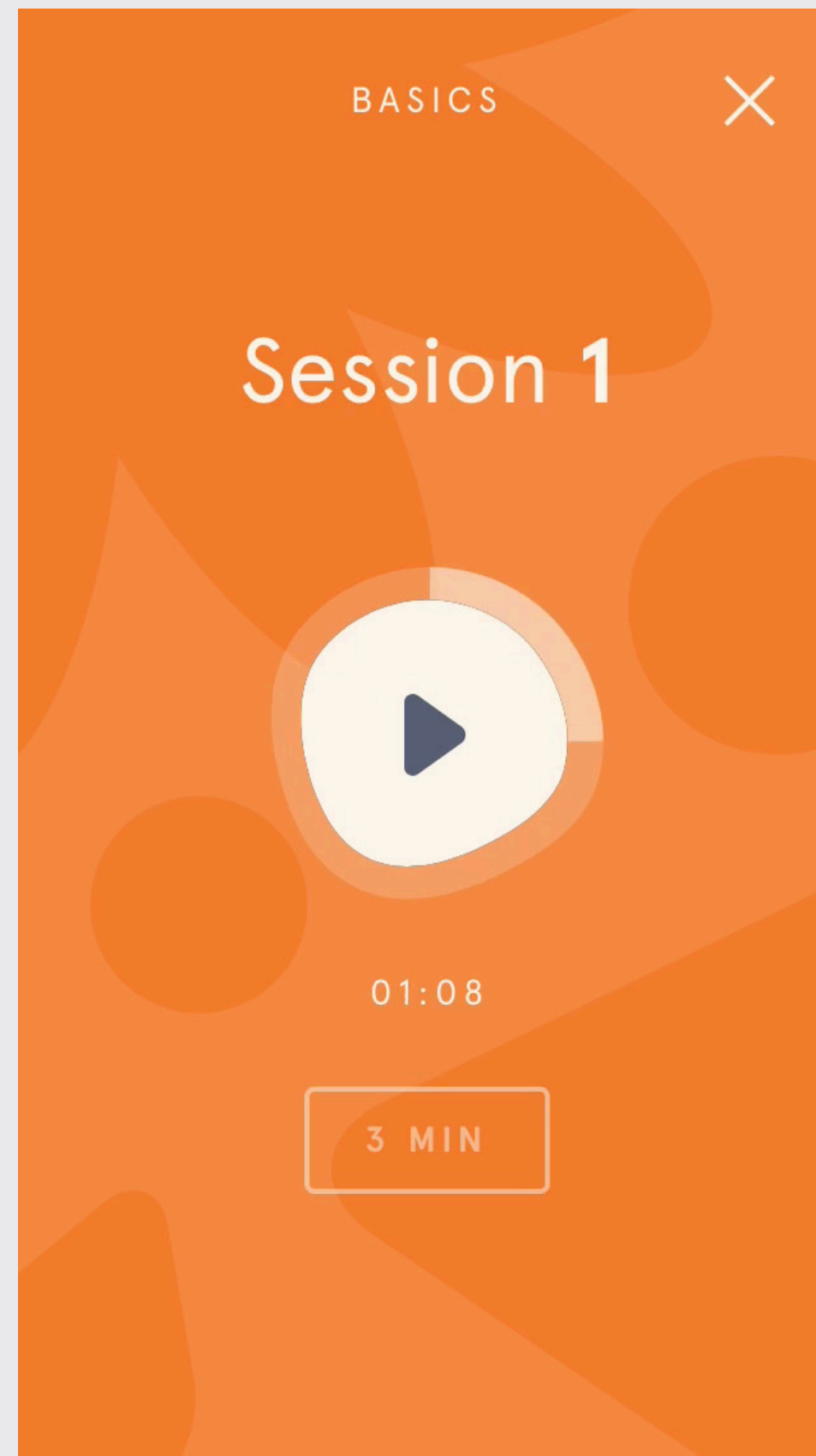
Timer



MultiTimer



BetterMe



Headspace

Timer appears when users start the workout. Because users usually use this at a distance, it is important to make the interface big enough and not complex.

—
[MultiTimer](#) is easy to figure time with a big ring that shows time and small ring that shows contents. [BetterMe](#) has a highly simple interface. It offers timer only in the rest time and lets users know the next exercise. [Headspace](#), which is a meditation app, can set a timer easily and control time just by pressing hard the screen.

How might we...?

How might we make the process not disturbing and focus on exercise?

Make interface big and simple especially during the workout process.

Put the timer during the workout and do not put many contents and text.

Make minimal screen mode that can user rely on voice.

How might we educate users about how they use the gym machines effectively?

Provide proper weight and workout time for each user.

Use infographic for teaching how to set a machine.

Use simple animation for teaching the right pose.

How might we make the process not disturbing and focus on exercise?

Put encouragement screen whenever before user go to the next exercise?

Make an illustration and this encourages users during the exercise?

Put voice encouragement during the workout?

Visual Exploration

Sketches

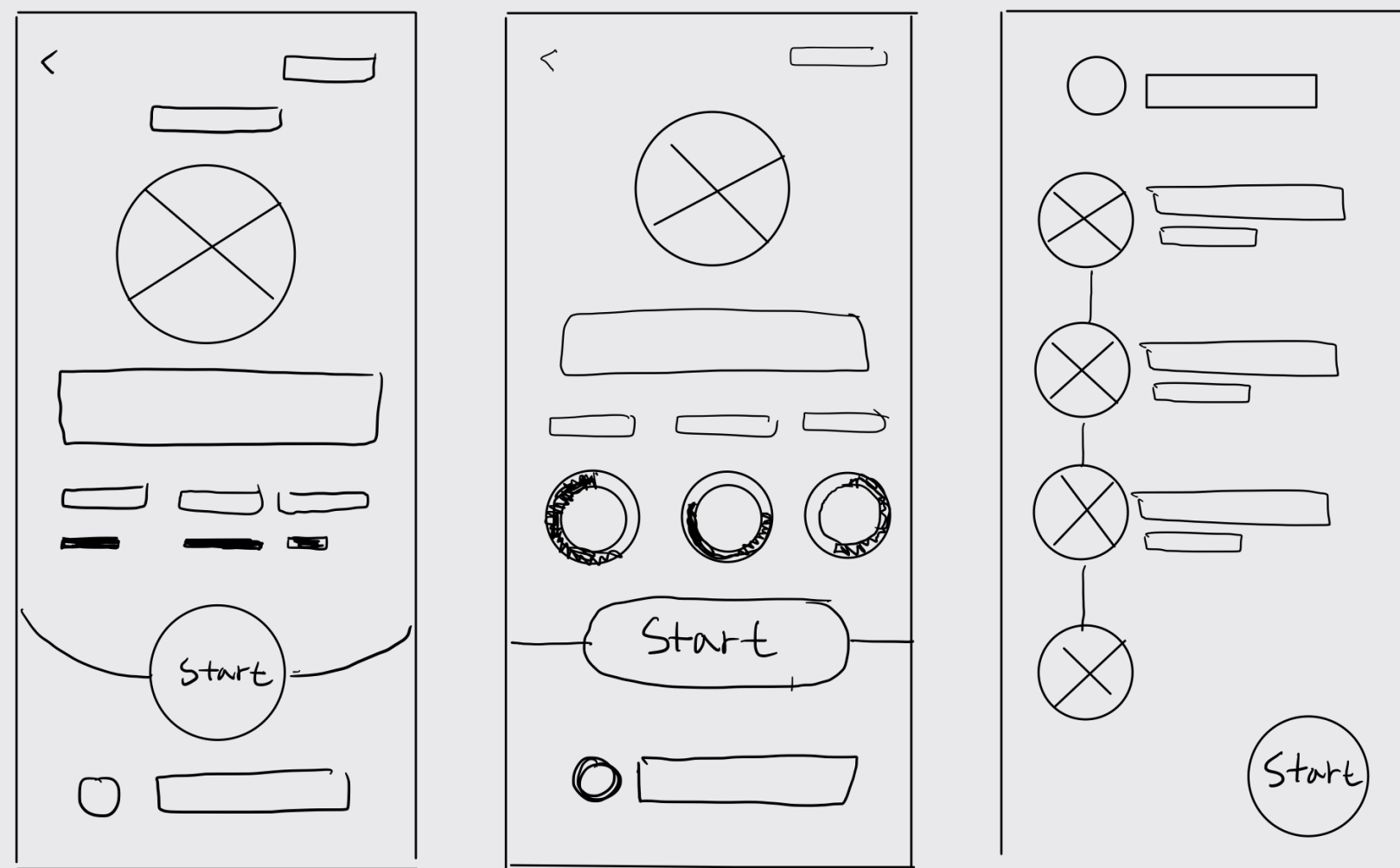
Initial Wireframe

Direction 1_ Morning Challenge

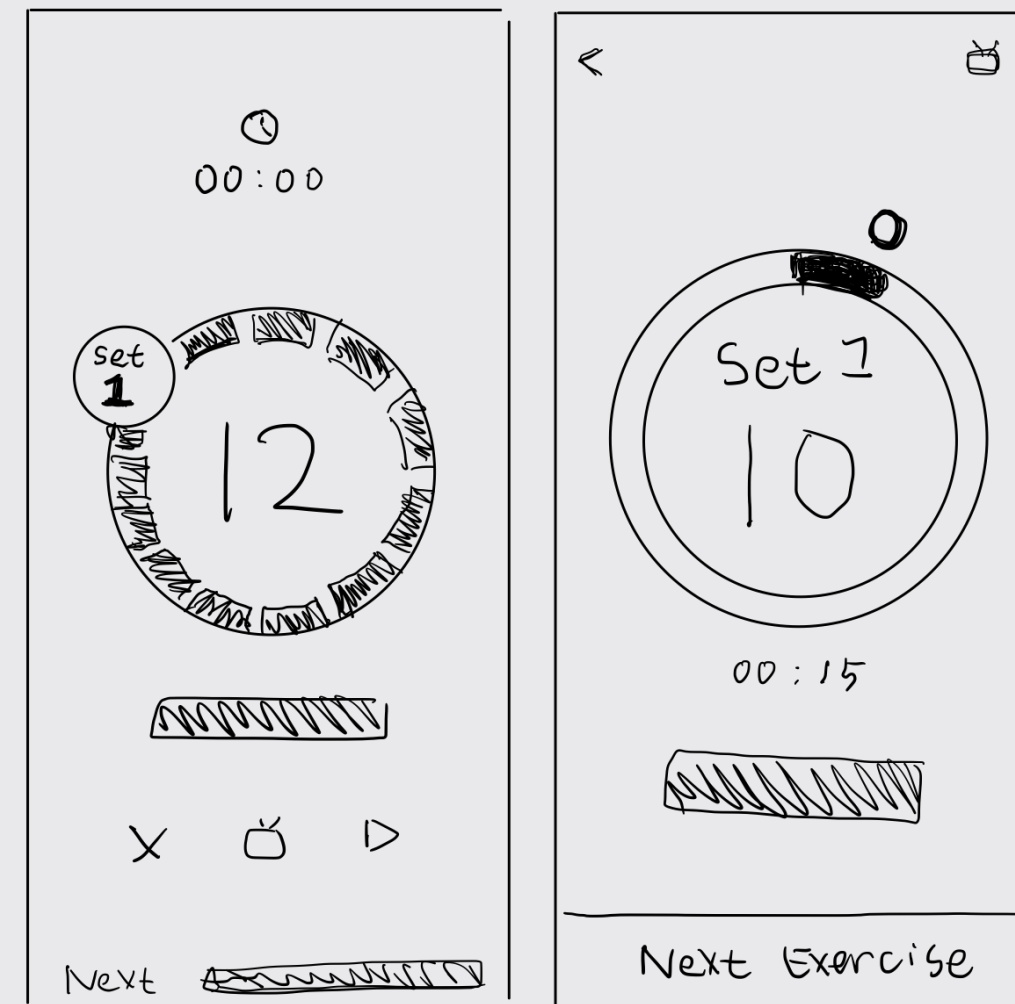
Direction 2_ Evening Meditation

Sketches

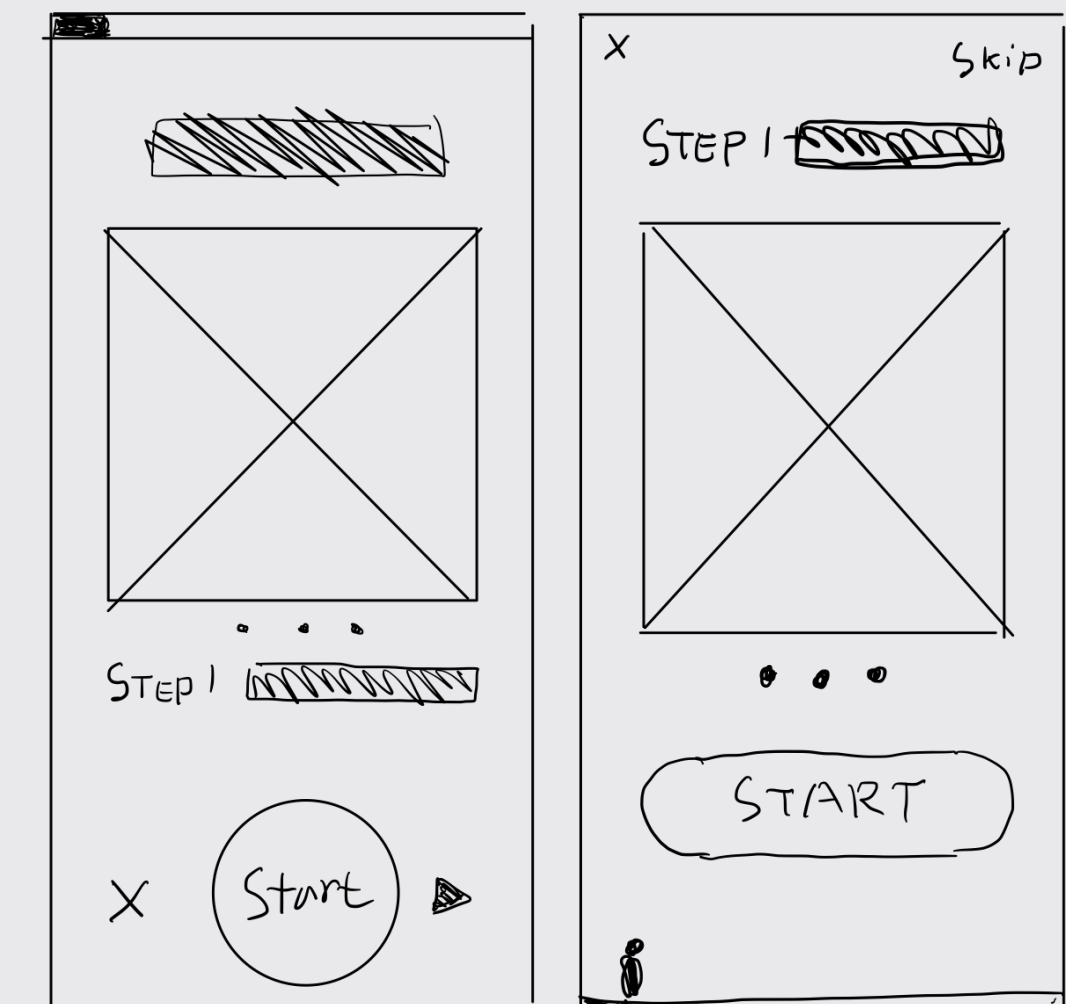
Today's Goals



Timer

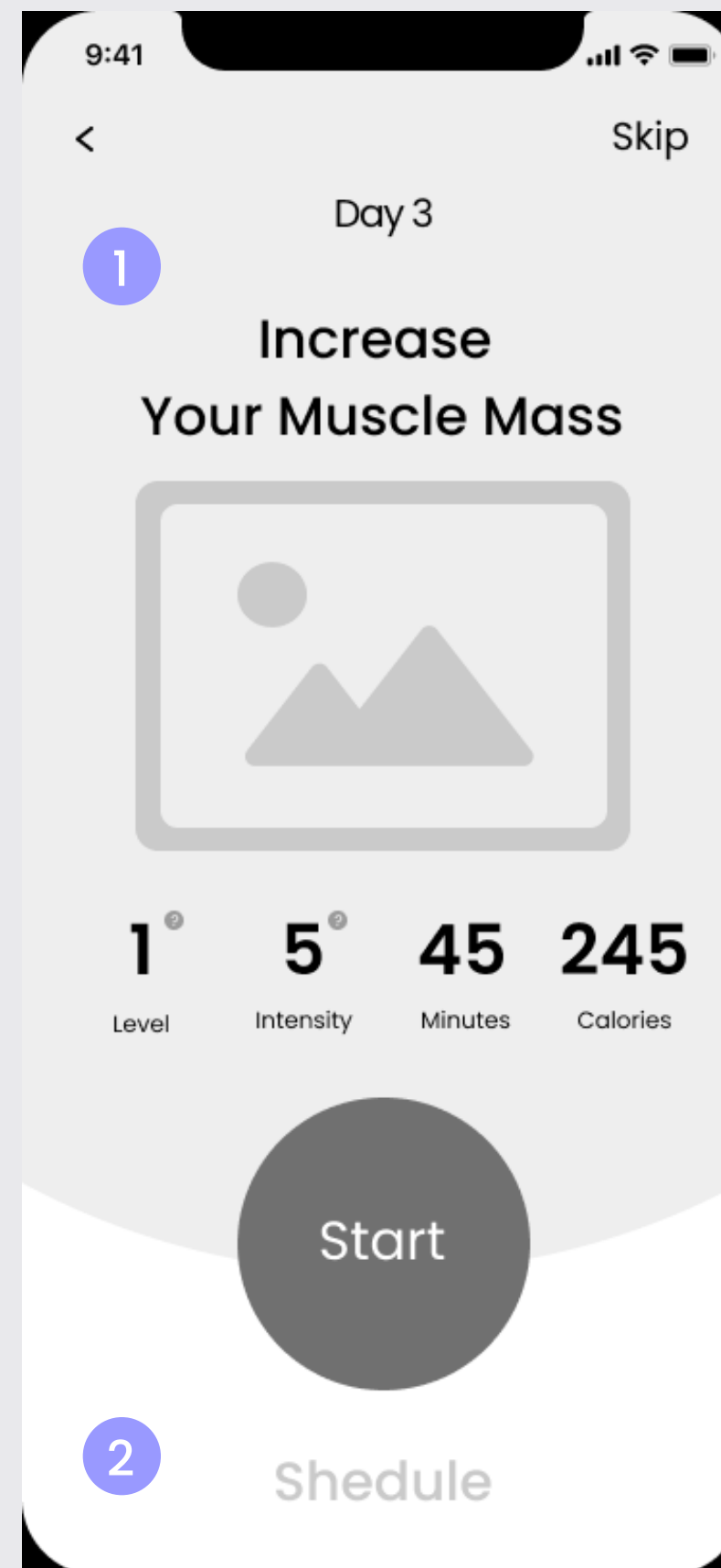


Exercise Manual

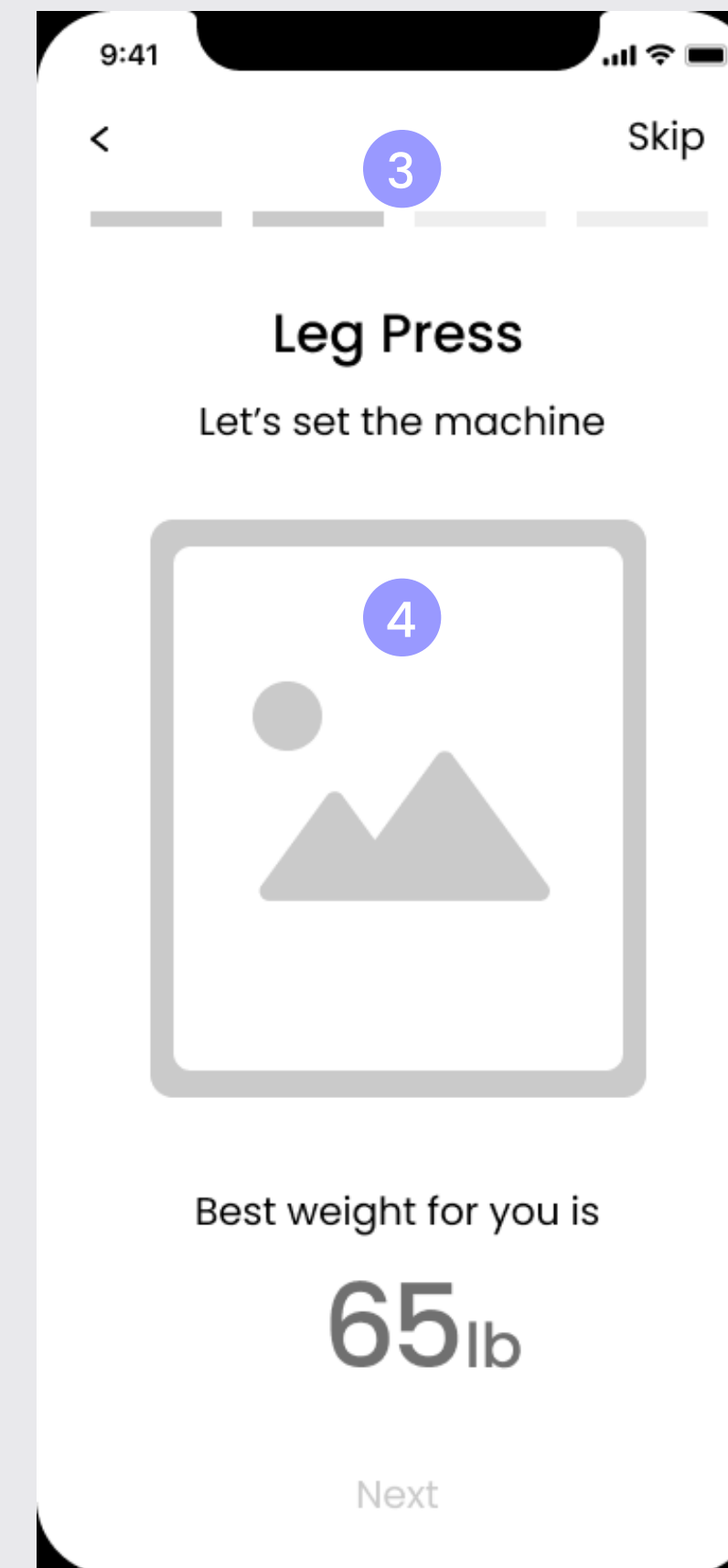


Wireframe

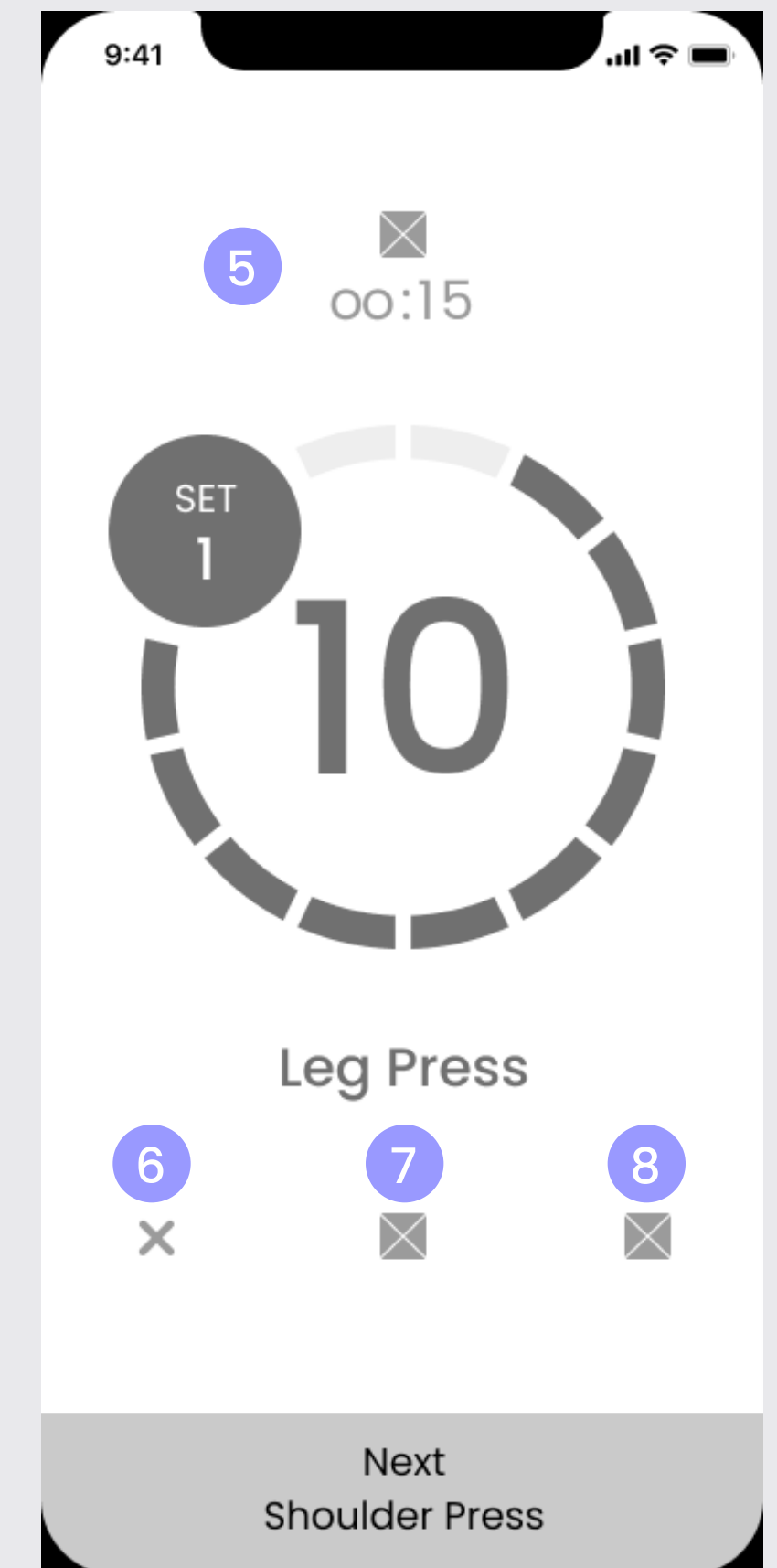
- 1 Today's goal
- 2 Today's workout (scroll down)
- 3 Progress
- 4 Tutorial (Video or Illustration)
- 5 Overall workout duration
- 6 Cancele workout
- 7 Show tutorial again
- 8 Setting



Today's goal



Tutorial

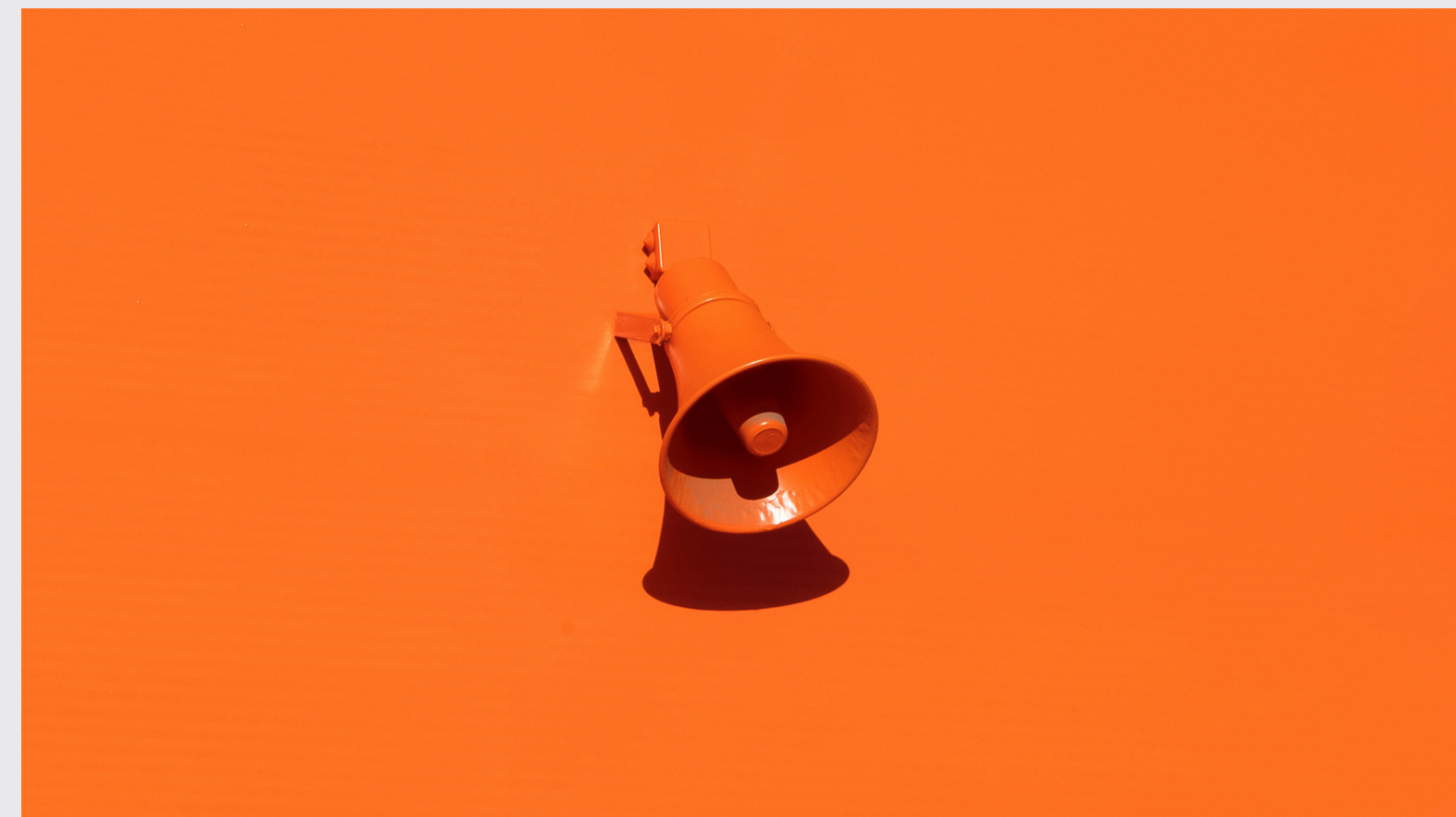
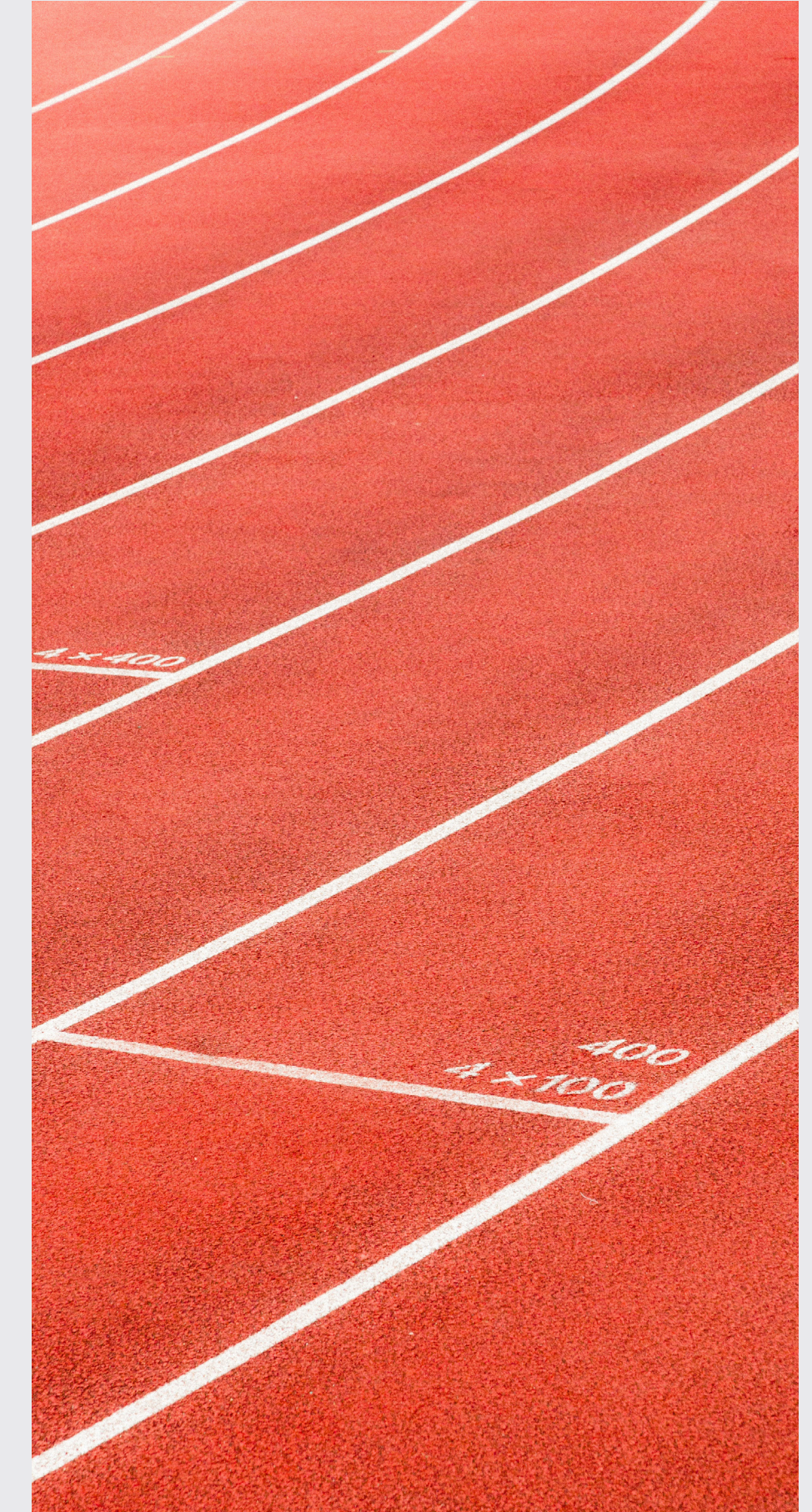


Timer

MOOD BOARD

Morning Challenge

Bright
Sunny
Warm
Cheerful
Vivid
Inspiring
Chunky

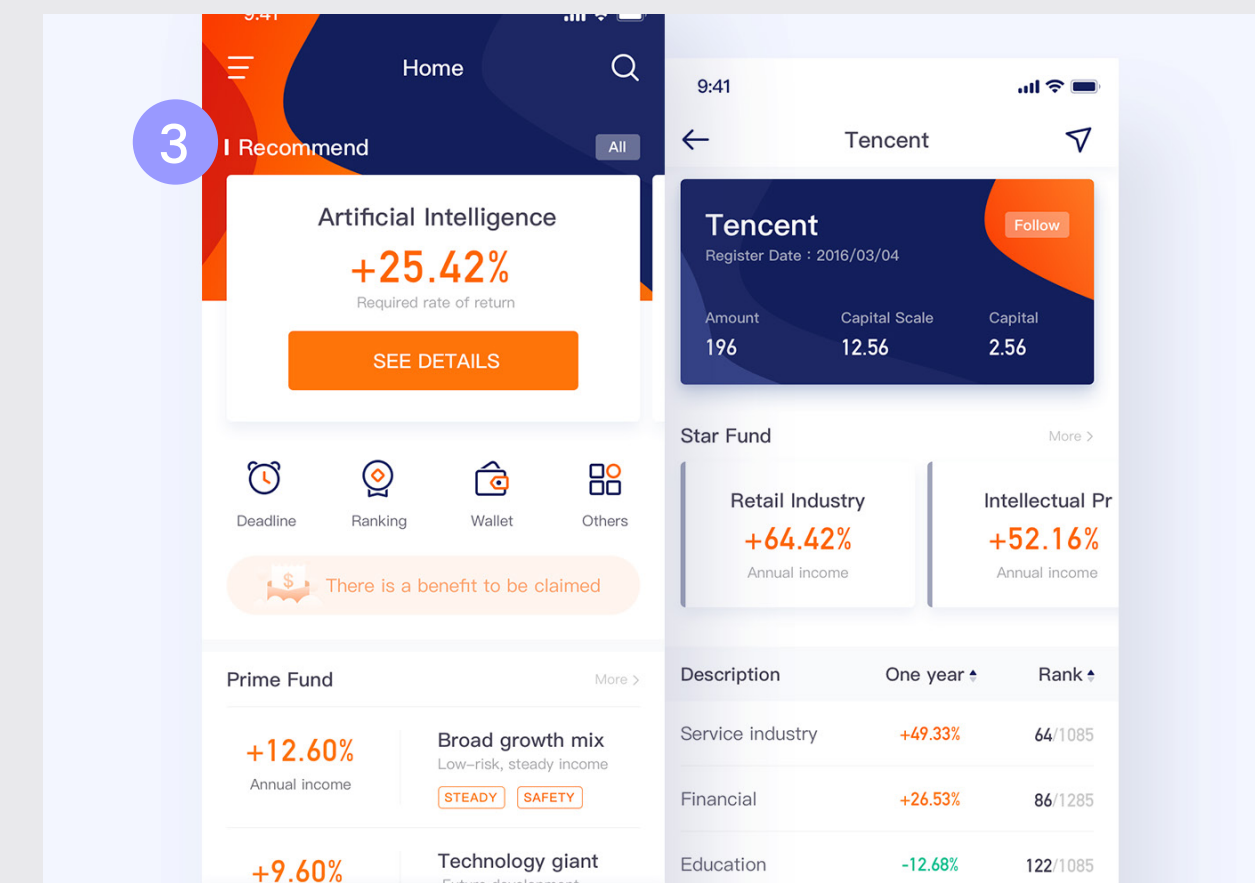
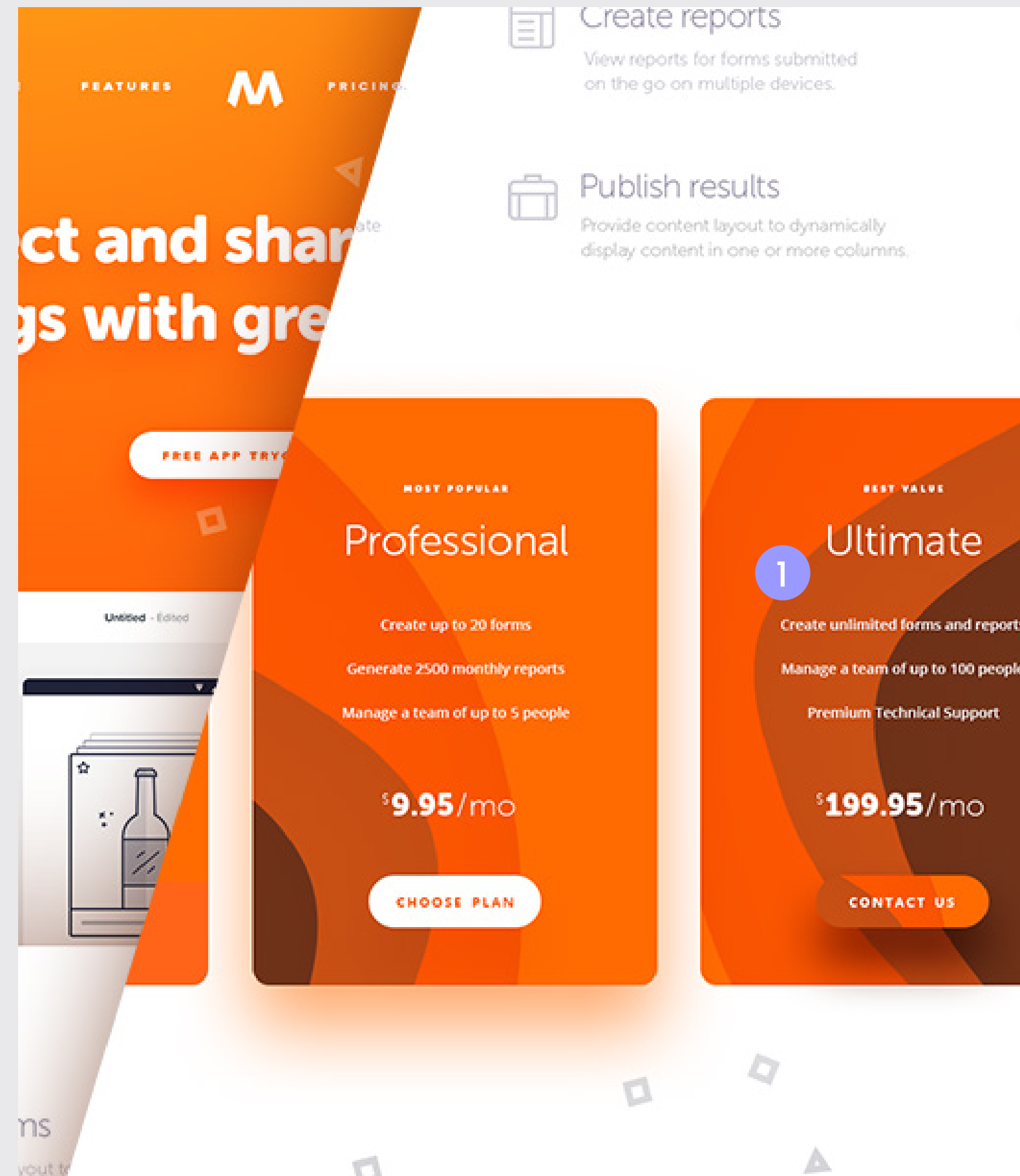


INSPIRATION BOARD

Morning Challenge

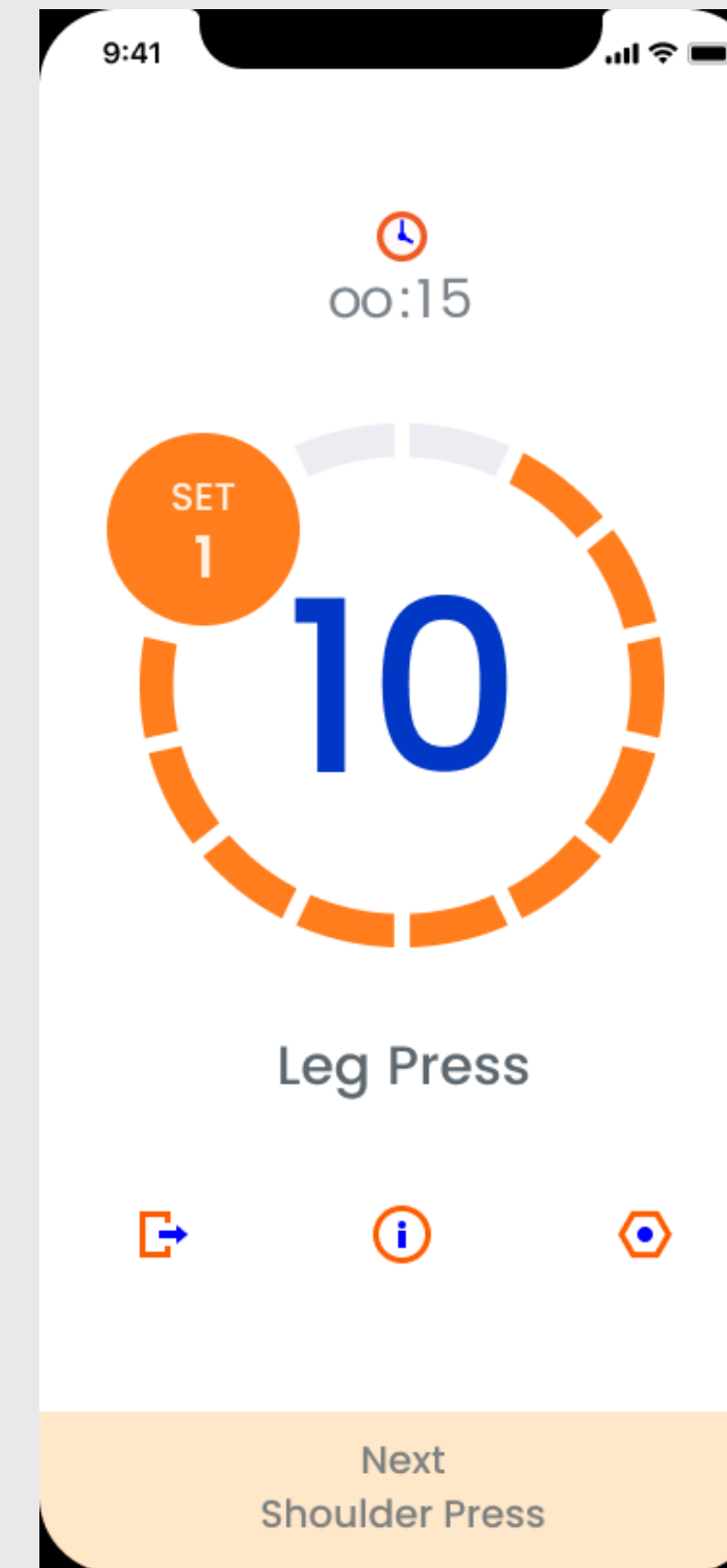
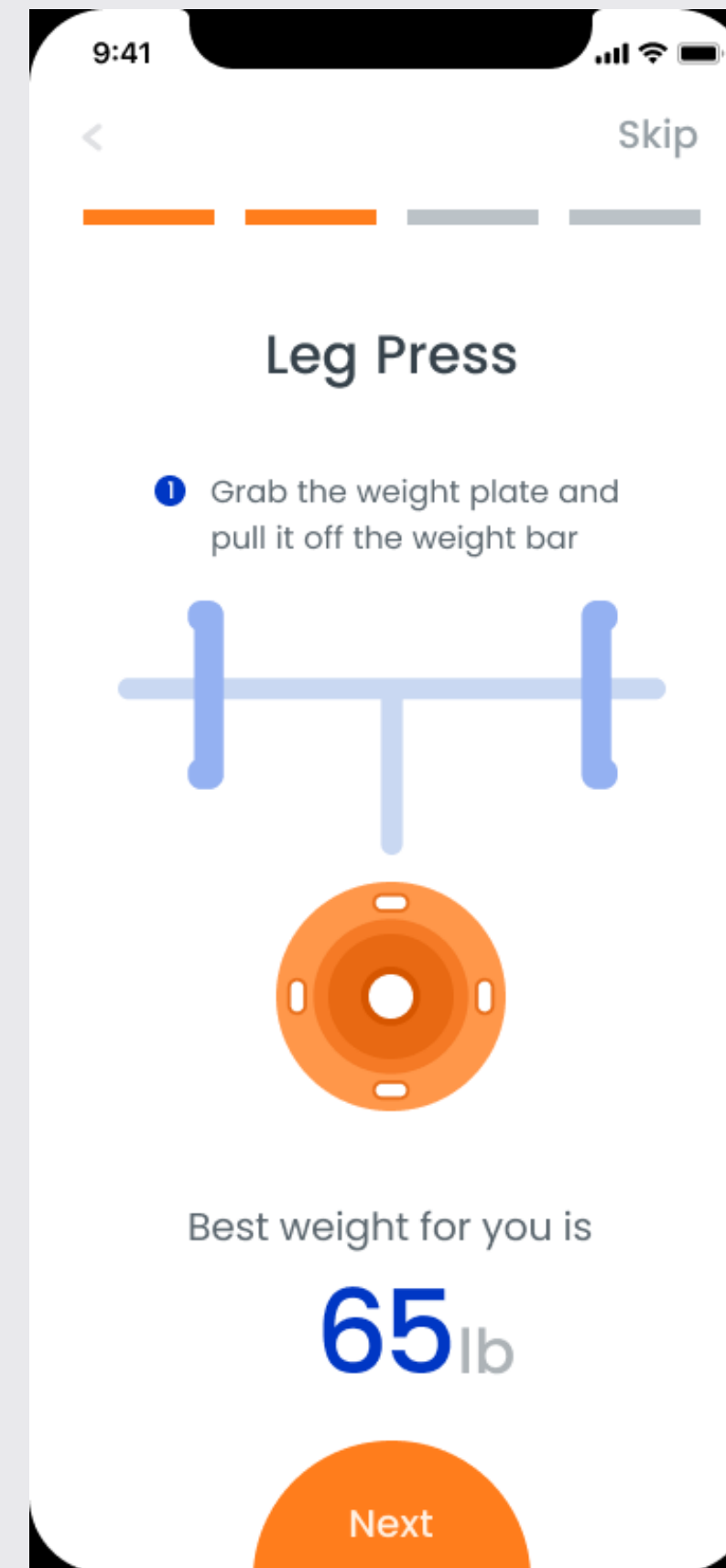
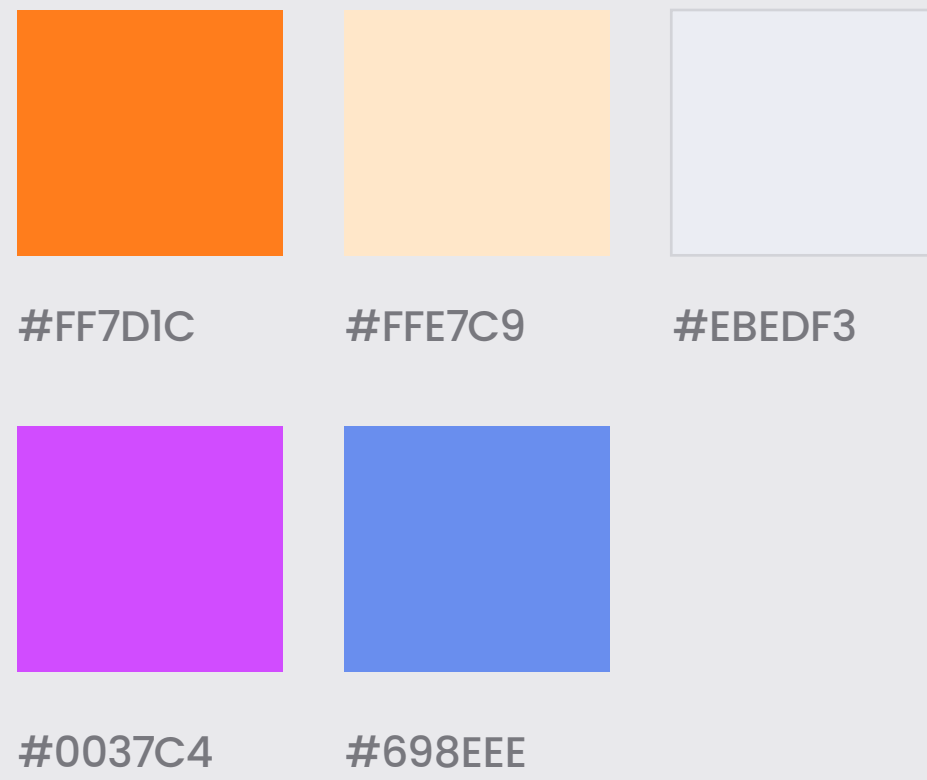
I was inspired by orange and blue contrast with a light background. This warm and energetic color will increase the user's motivation. Chunky graphics will also give users a powerful feeling

- 1 Point area
- 2 Color contrast
- 3 Point area & typo color hierarchy
- 4 Color & illustration
- 5 Illustration Style



STYLE BOARD

Morning Challenge



MOOD BOARD

Evening Meditation

Dark

Cool

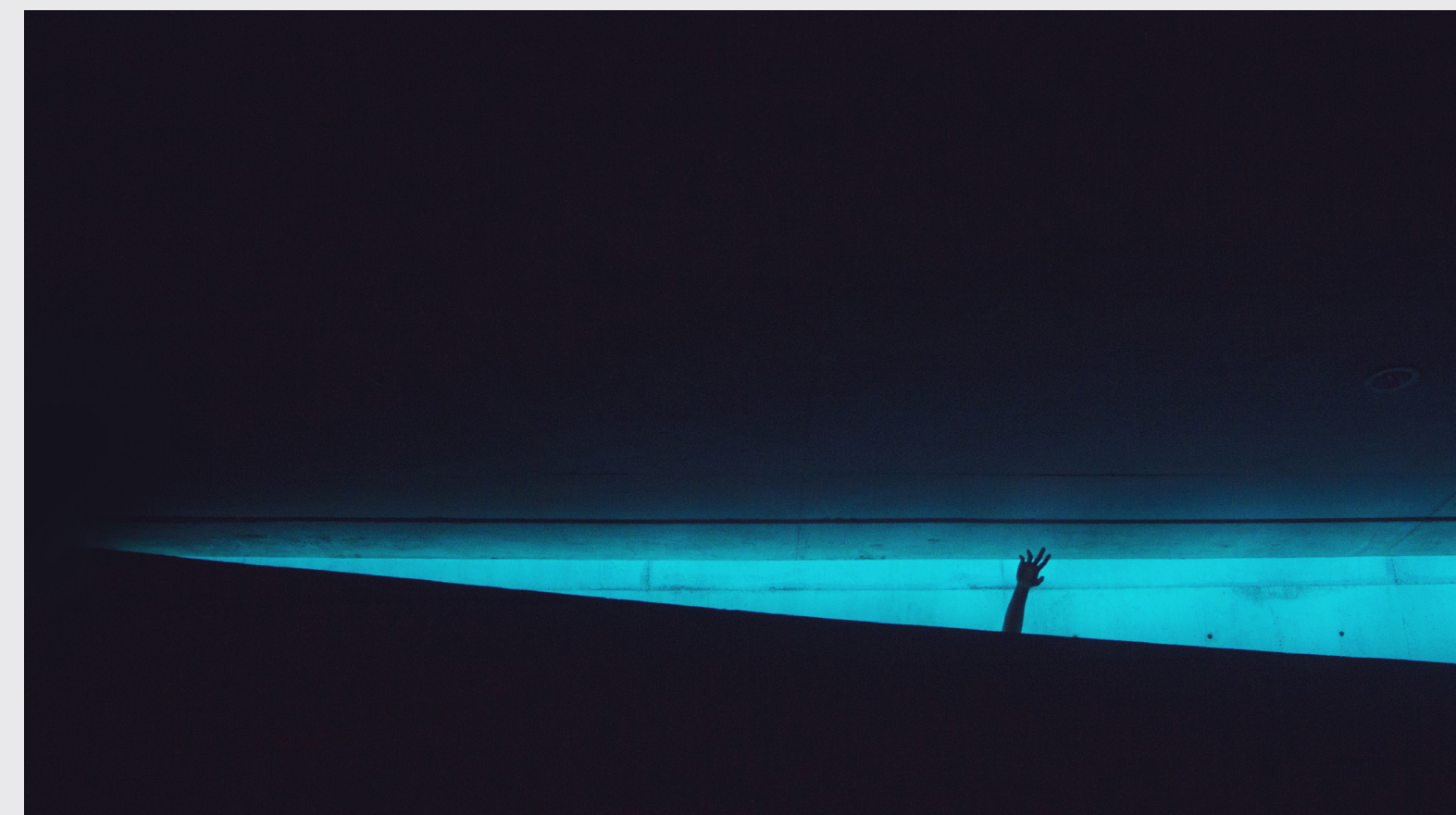
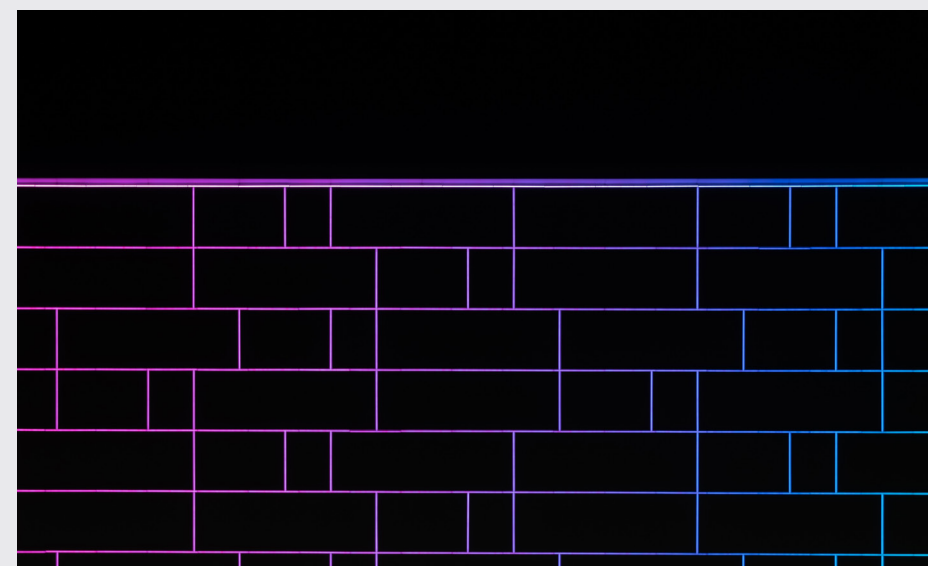
Relaxed

Calm

Patient

Smooth

Luminous

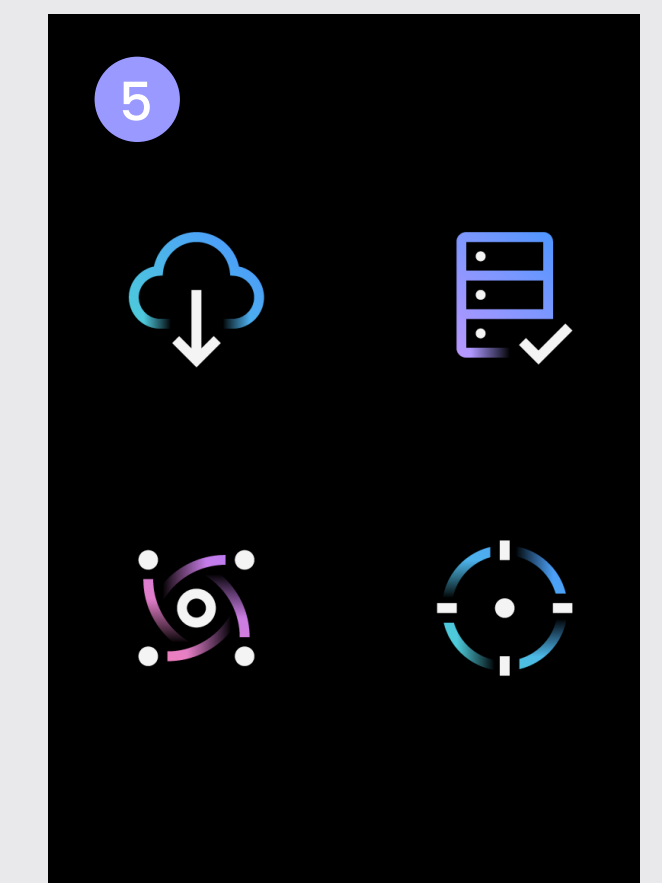
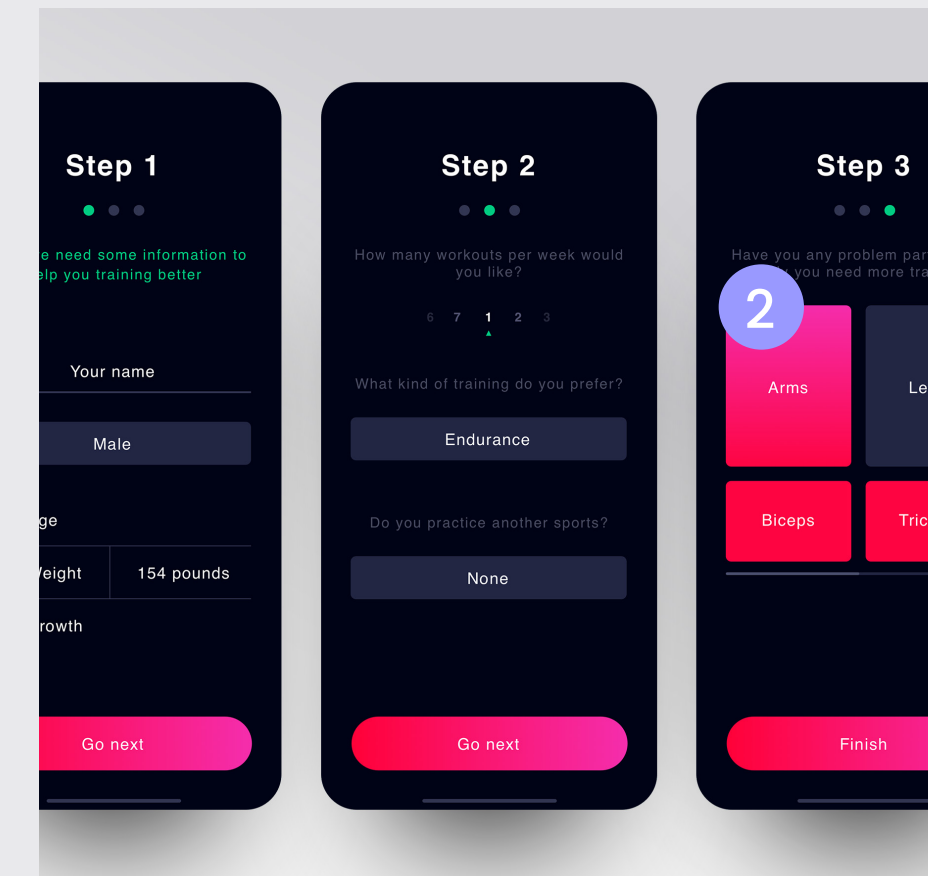
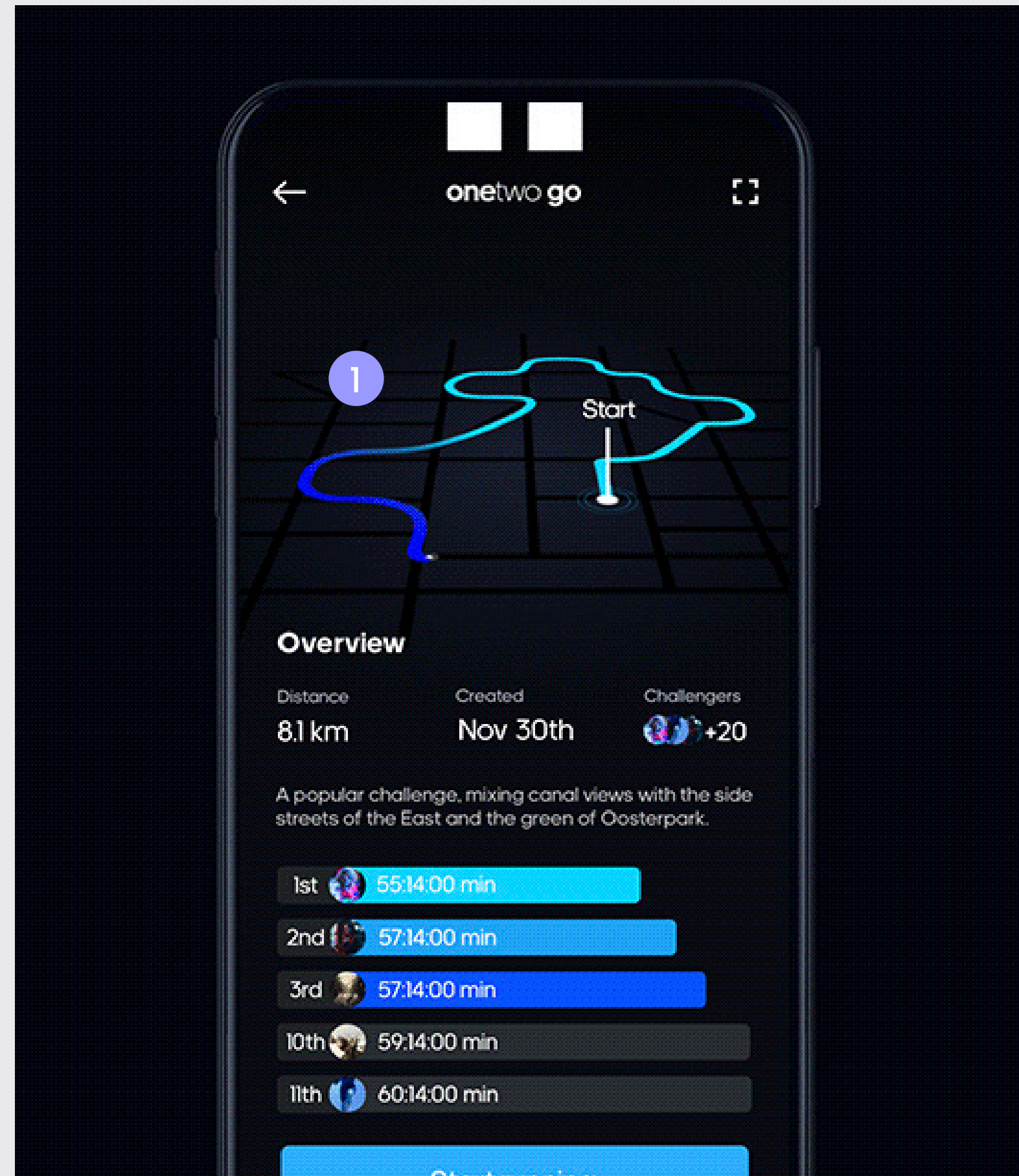


INSPIRATION BOARD

Evening Meditation

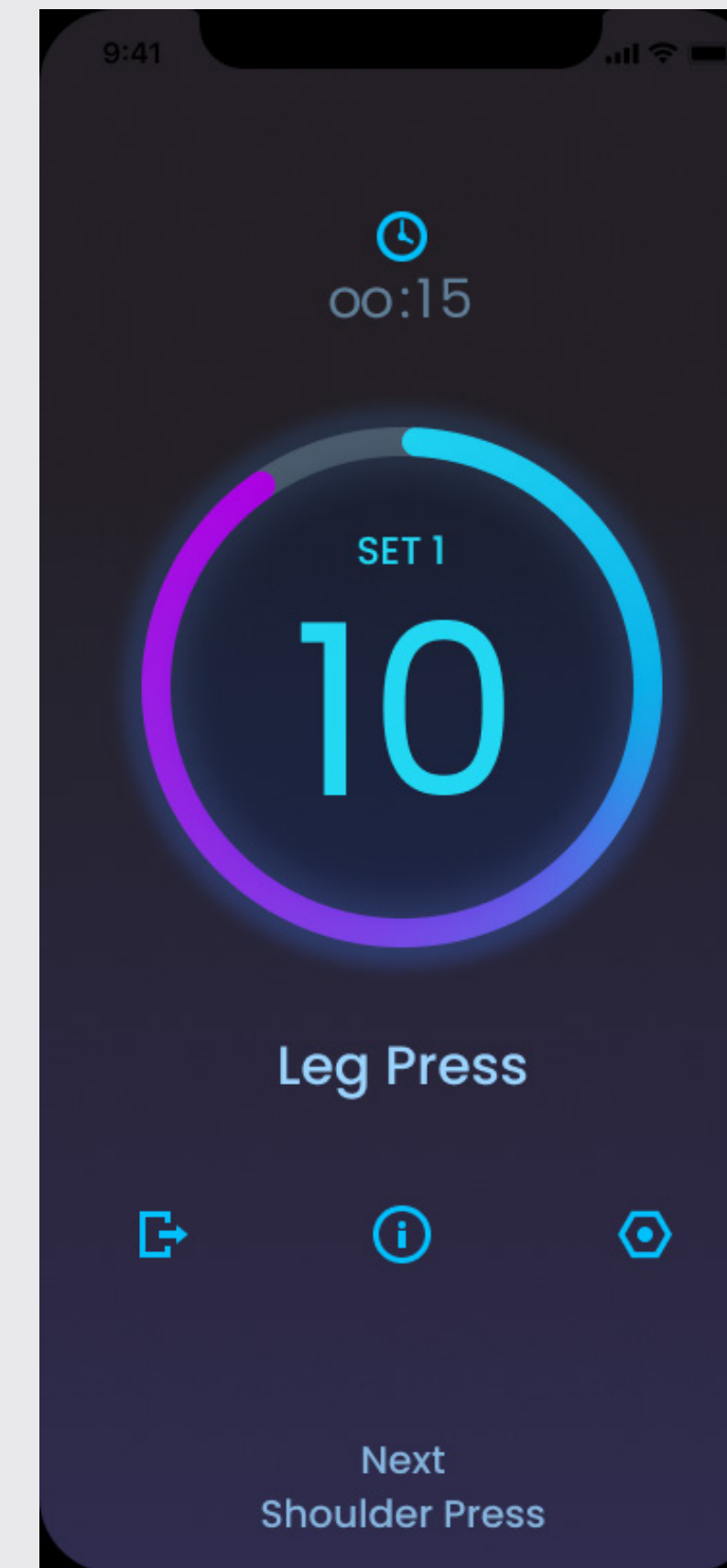
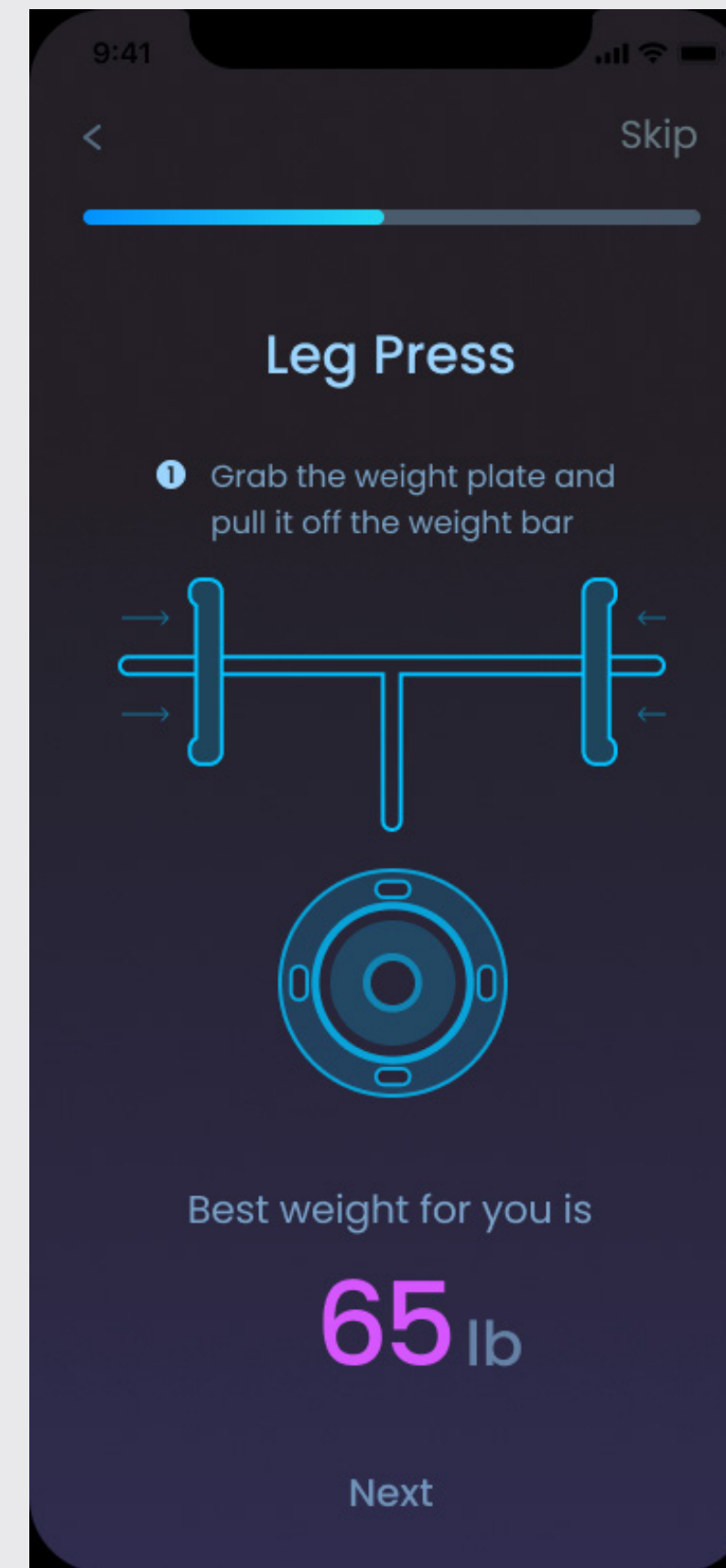
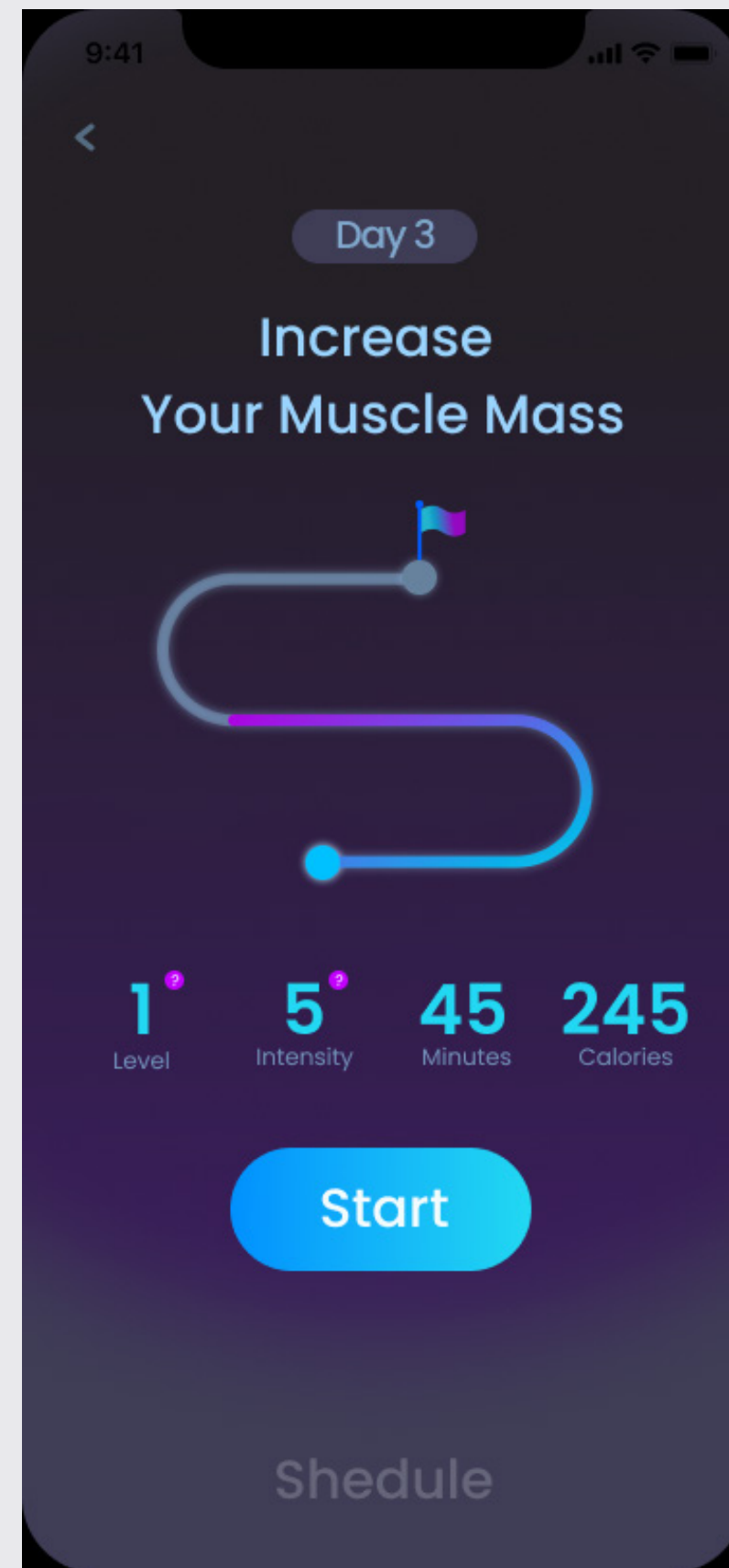
I was inspired by vivid cool tone gradation on the dark background. This will make users concentrate the process better and give visual interests.

- 1 Progress
- 2 Point color
- 3 Gradation color
- 4 Information hierarchy
- 5 Icon style



STYLE BOARD

Evening Meditation



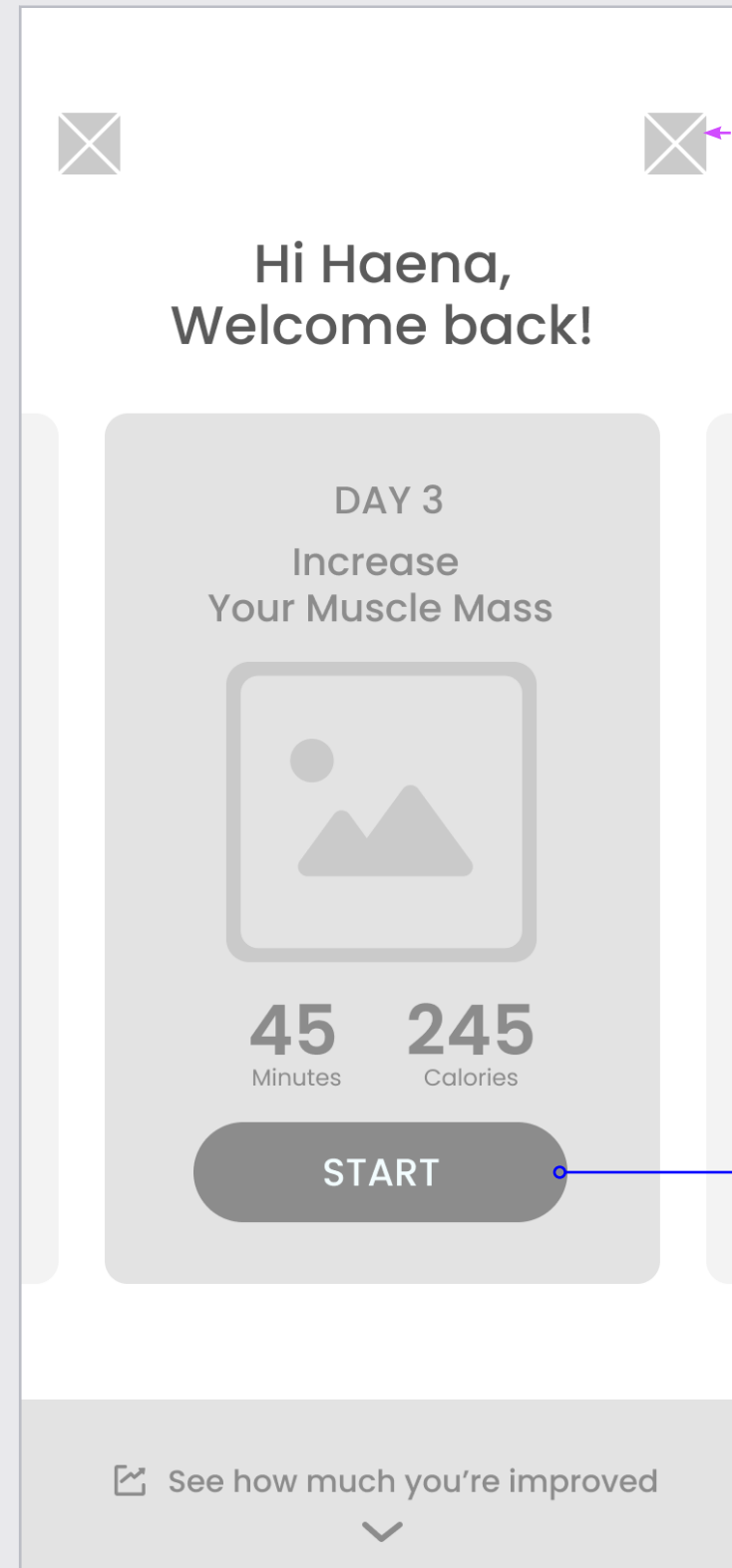
Final Design

Final Wireframes

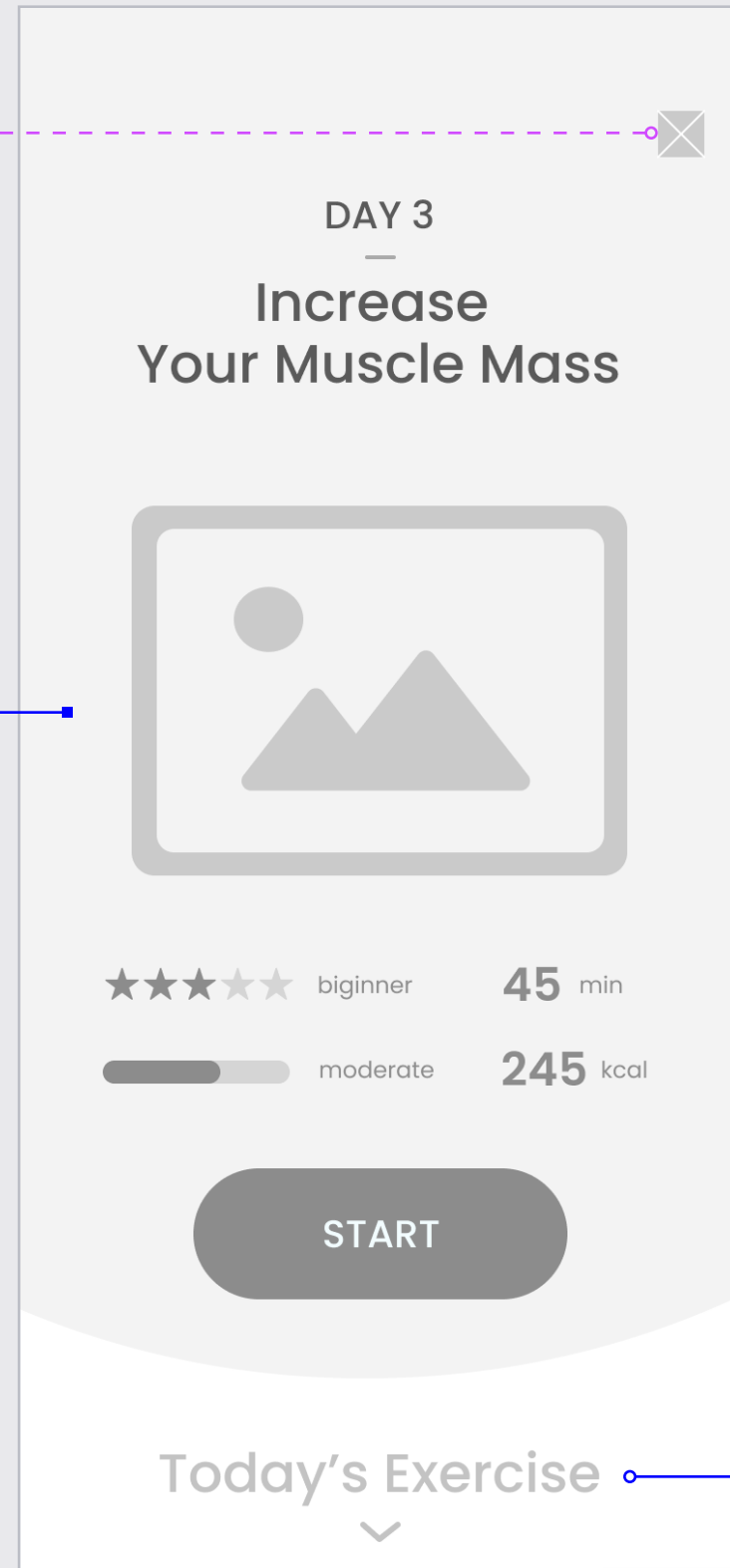
Style Guide

Prototypes

Wireframe Flow

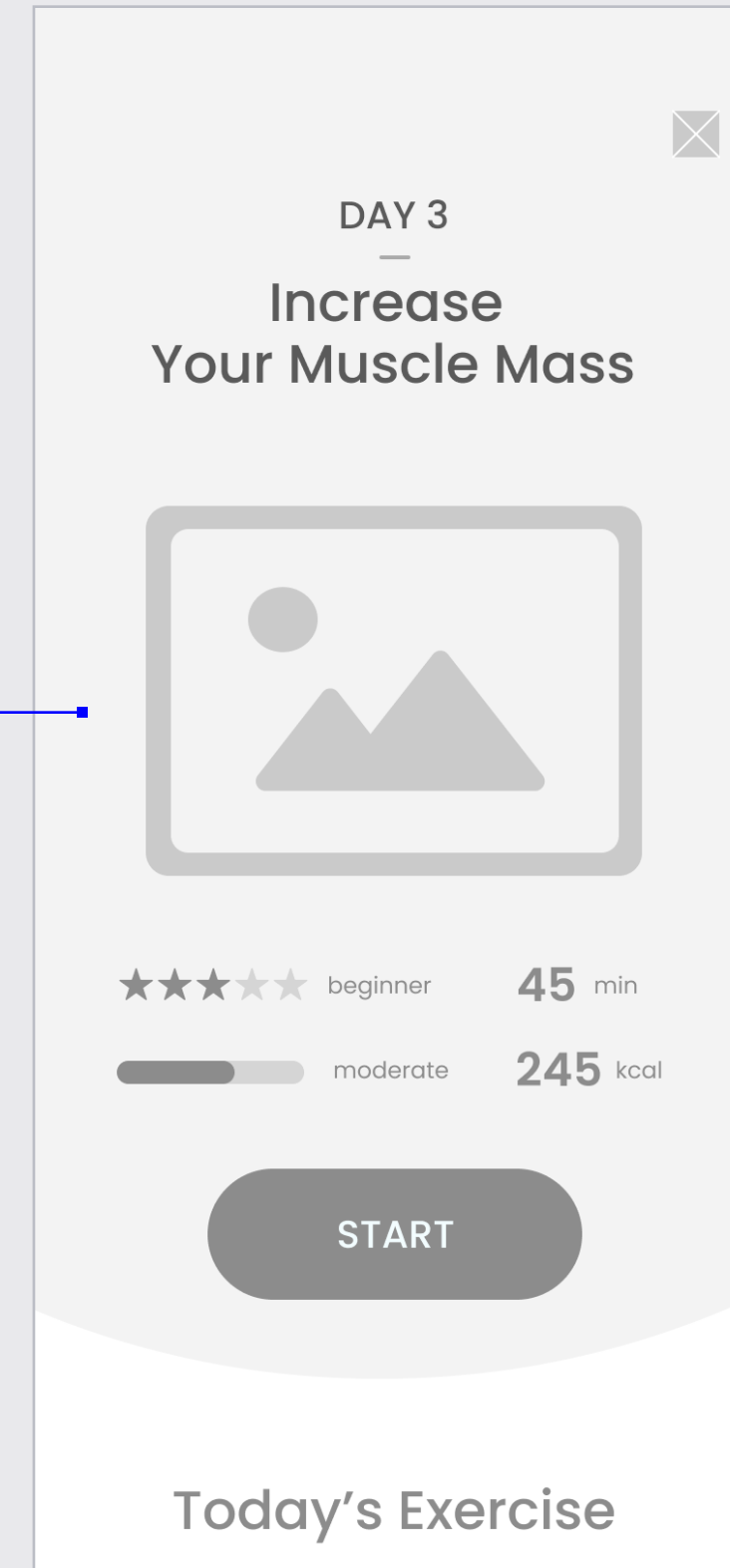


Main Screen

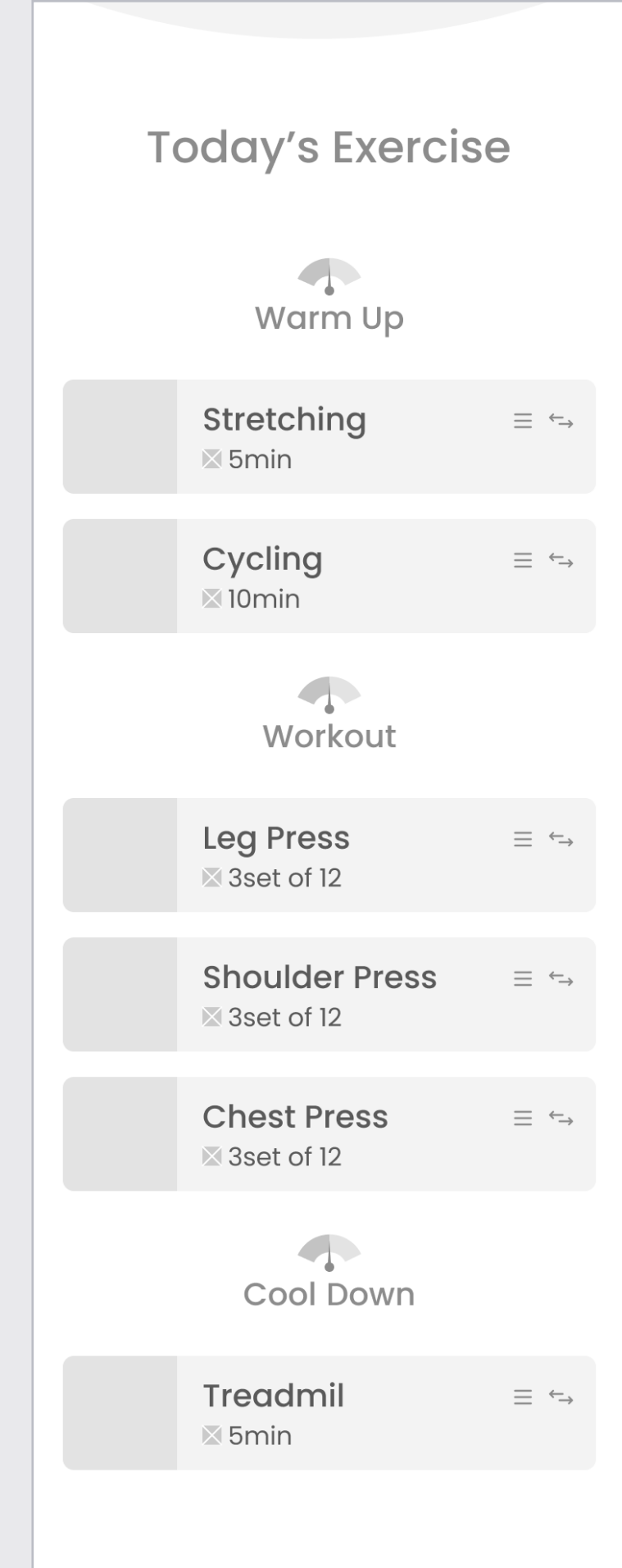


Today's goal

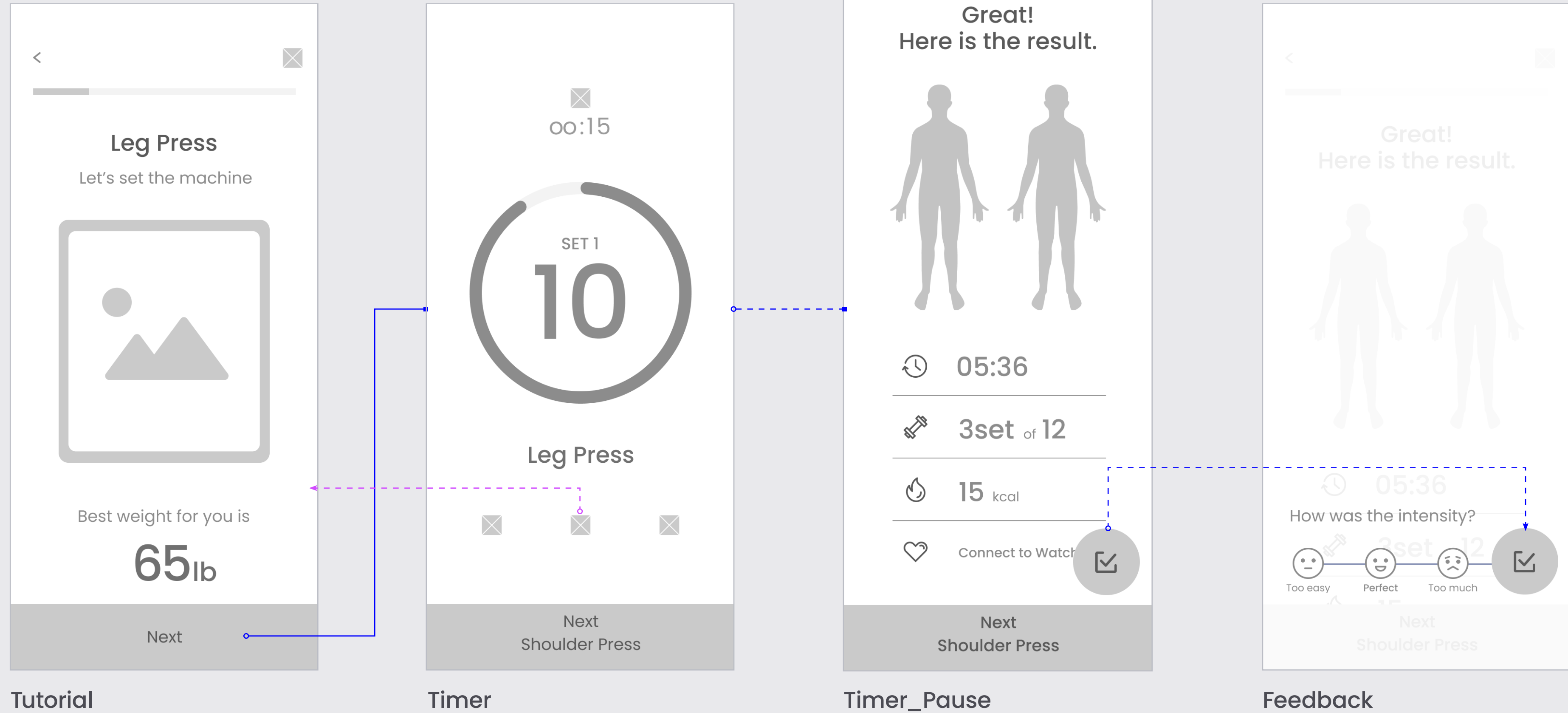
Today's goal_Scroll view



Today's Exercise

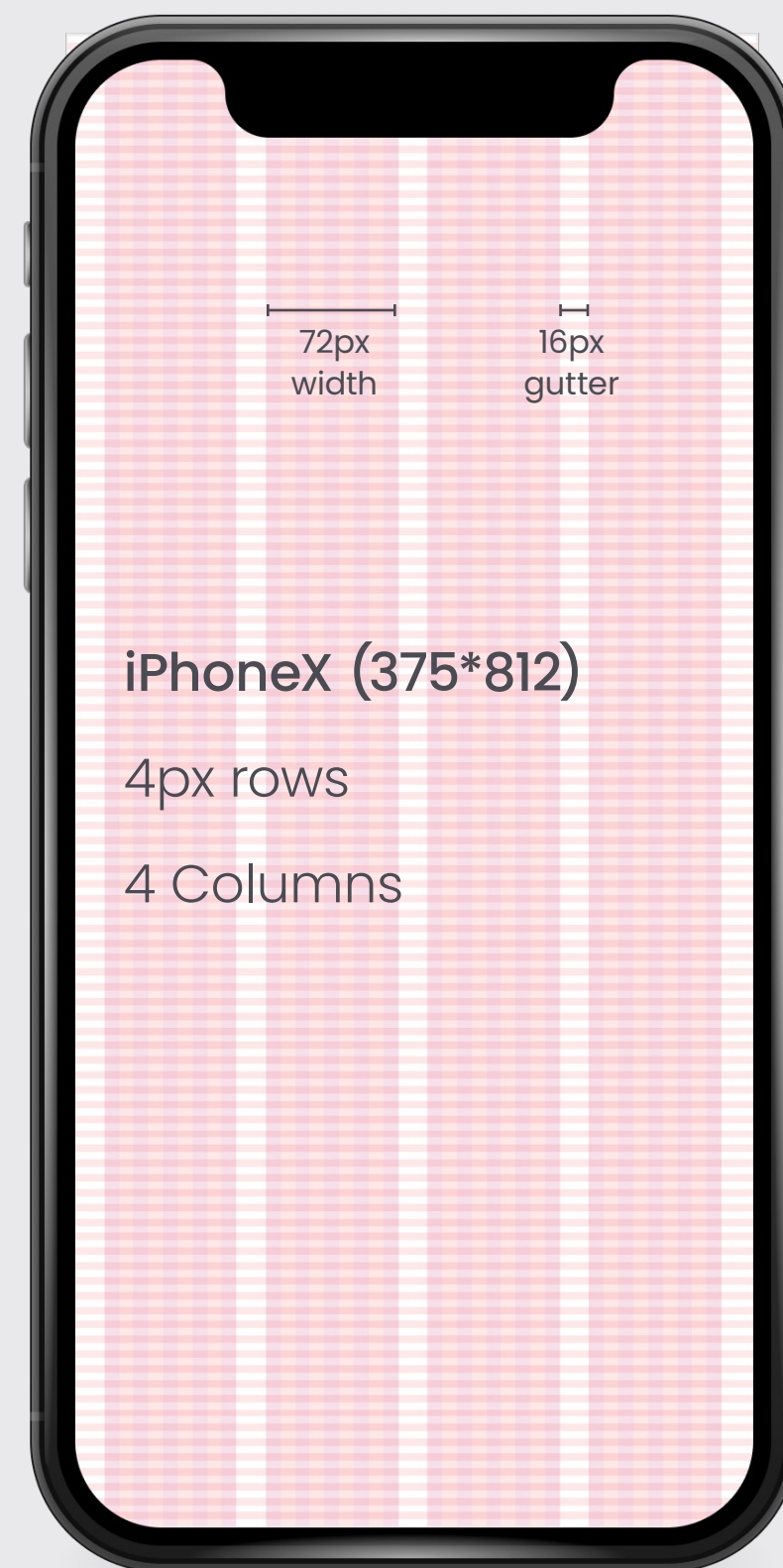


Wireframe Flow



Style Direction

Grid System



Typography

H1 - Poppins Medium 28/32

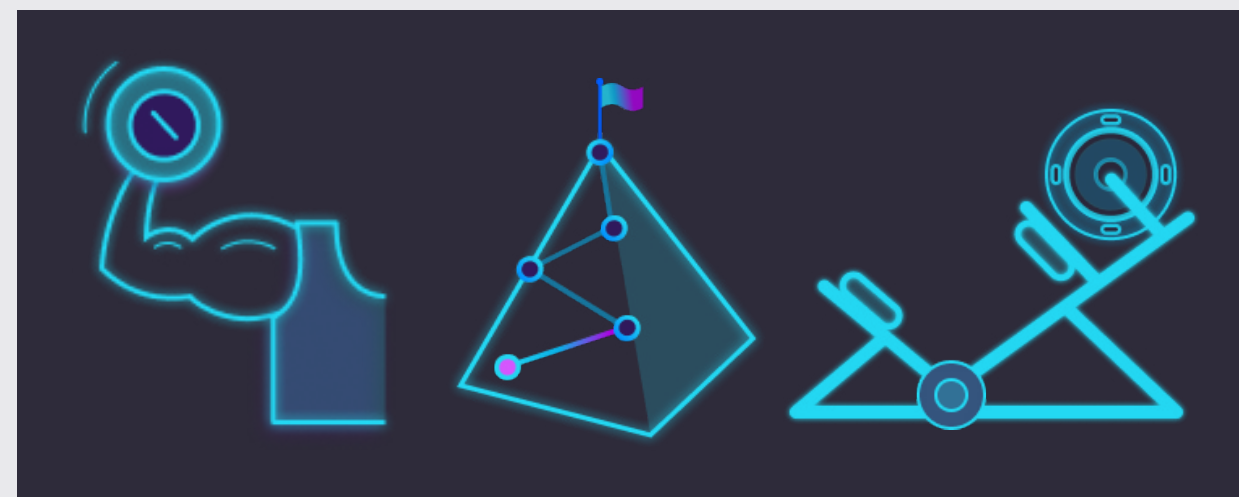
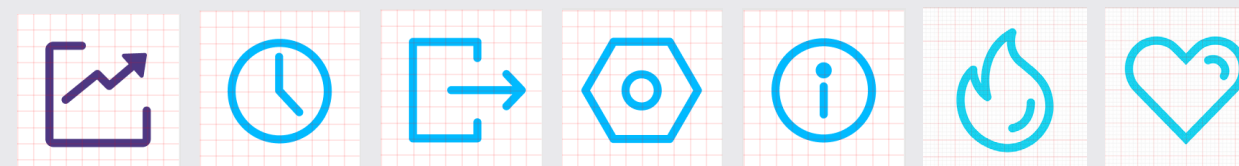
H2 - Poppins Medium 20/24

Subtitle - Poppins Regular 20/24

Body - Poppins Regular 16/20

Caption - Poppins Regular 12/16

Icon & Illustration Style



Color



Background	Text Type	Color	Opacity
#0e062e	White Text	White	min 34% opacity
	Black Text	Black	NOT LEGIBLE ⚠
	Custom Text	Custom	min 52% opacity
#352f57	White Text	White	min 37% opacity
	Black Text	Black	NOT LEGIBLE ⚠
	Custom Text	Custom	min 62% opacity
#000006	White Text	White	min 35% opacity
	Black Text	Black	NOT LEGIBLE ⚠
	Custom Text	Custom	min 52% opacity

Color Accessibility Test

PROTOTYPE

Home Screen

The screen shows today's goal briefly with card view and user's change when users scroll down.

Users can see their weekly schedule by swiping cards.



Users can check their record when they scroll down.

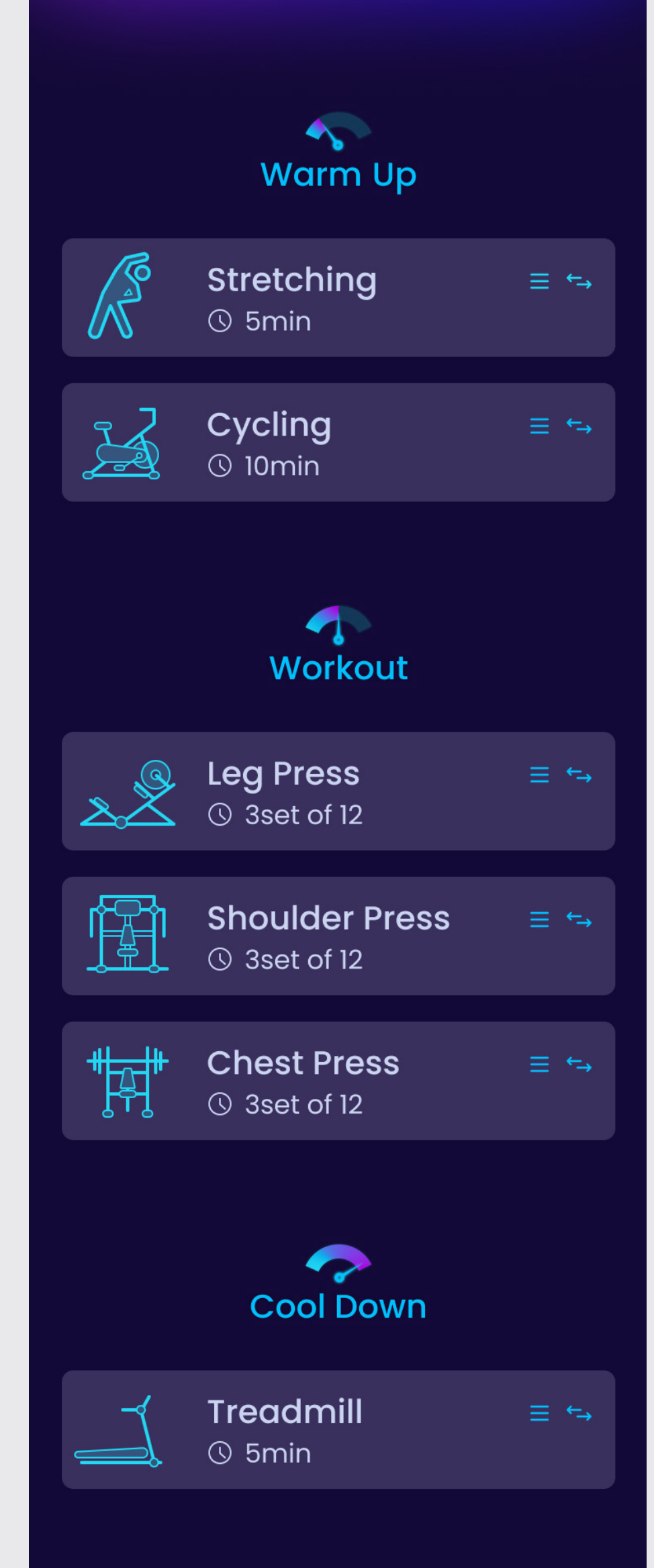
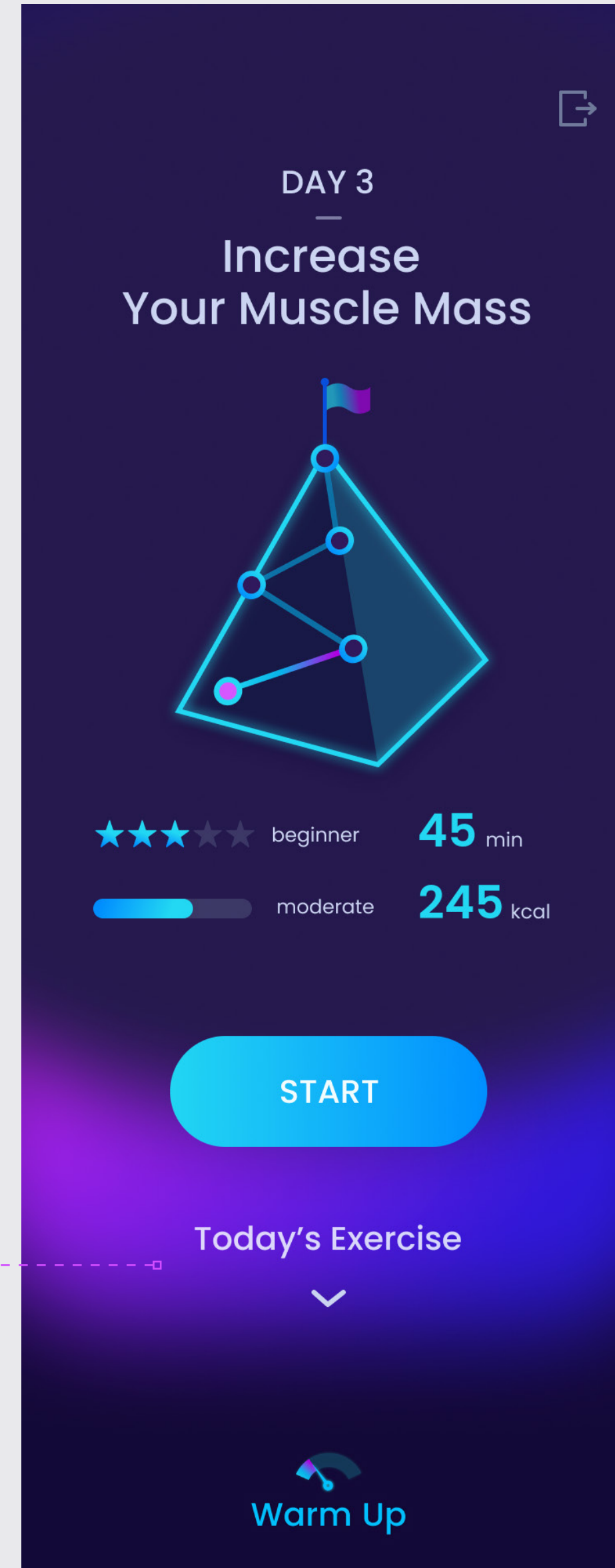
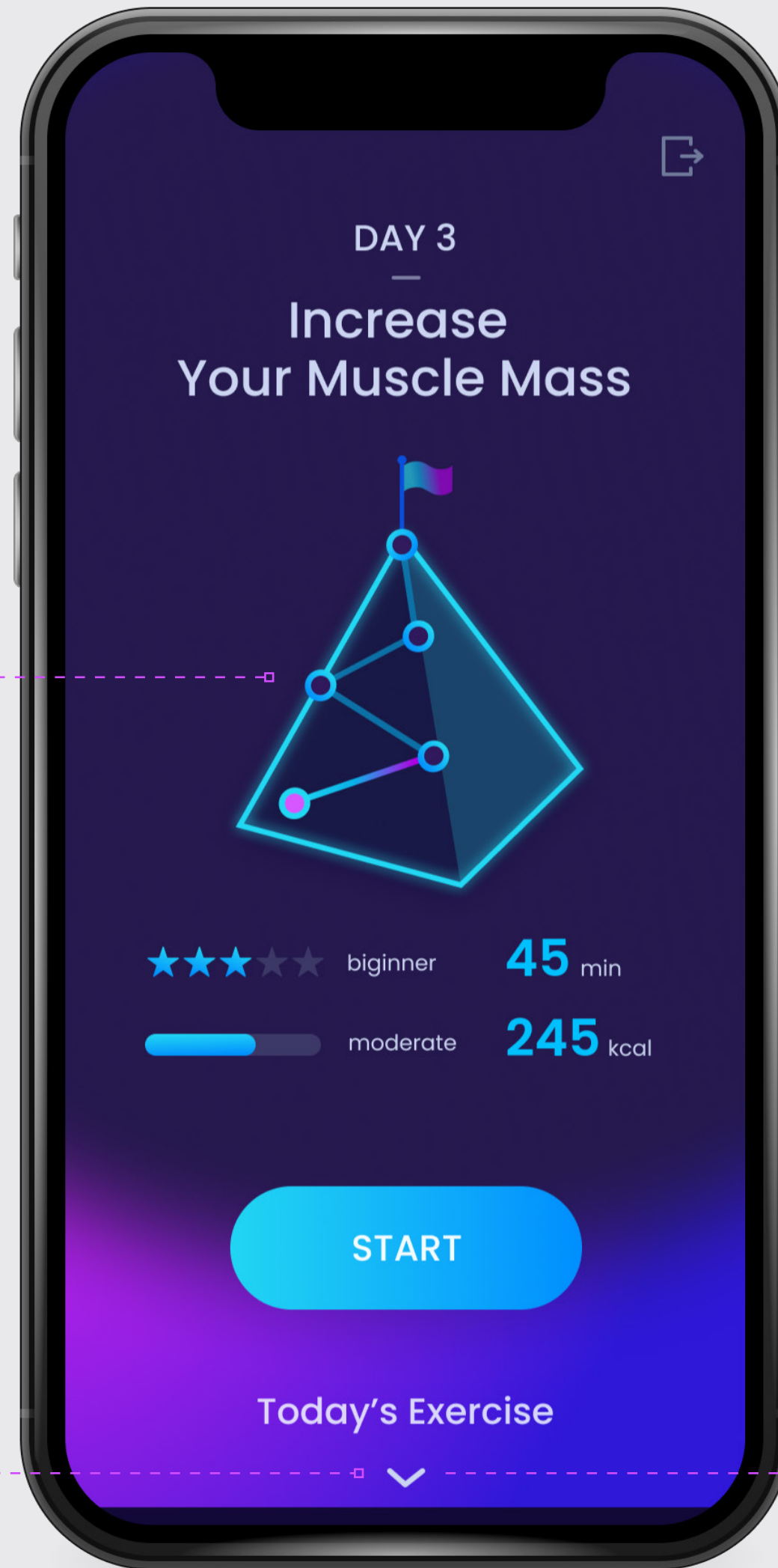
PROTOTYPE

Today's goal

Users can understand detailed plan when you scroll. Users can replace and delete exercises.

The illustration shows user's overall achievement.

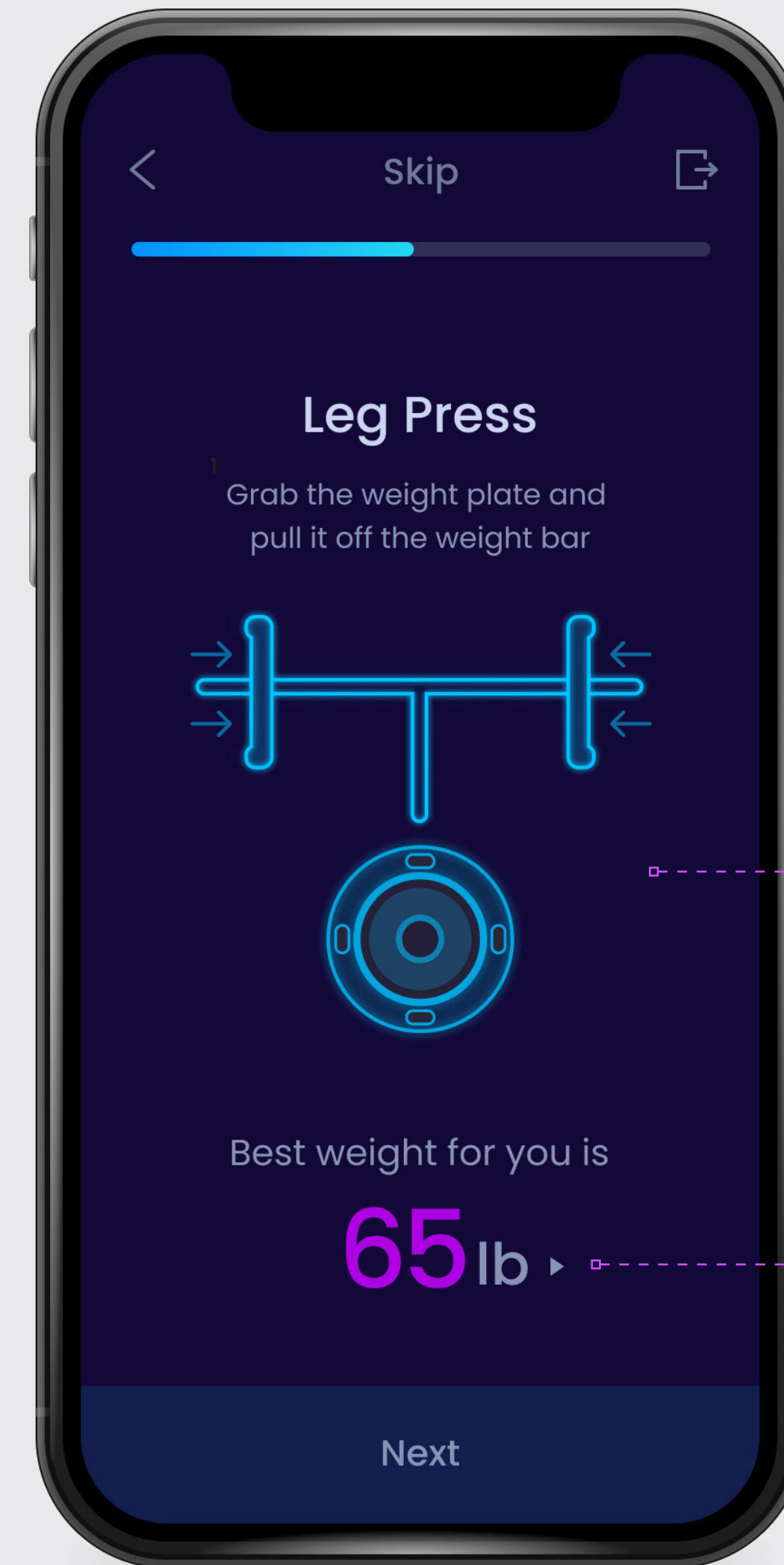
Users can check the exercise list when they scroll down.



PROTOTYPE

Tutorial

The screen teaches how to exercise and use the machine properly. User can skip it if they want.



Timer starts when tutorial finish.

Users can check other weight option by clicking the arrow.

PROTOTYPE

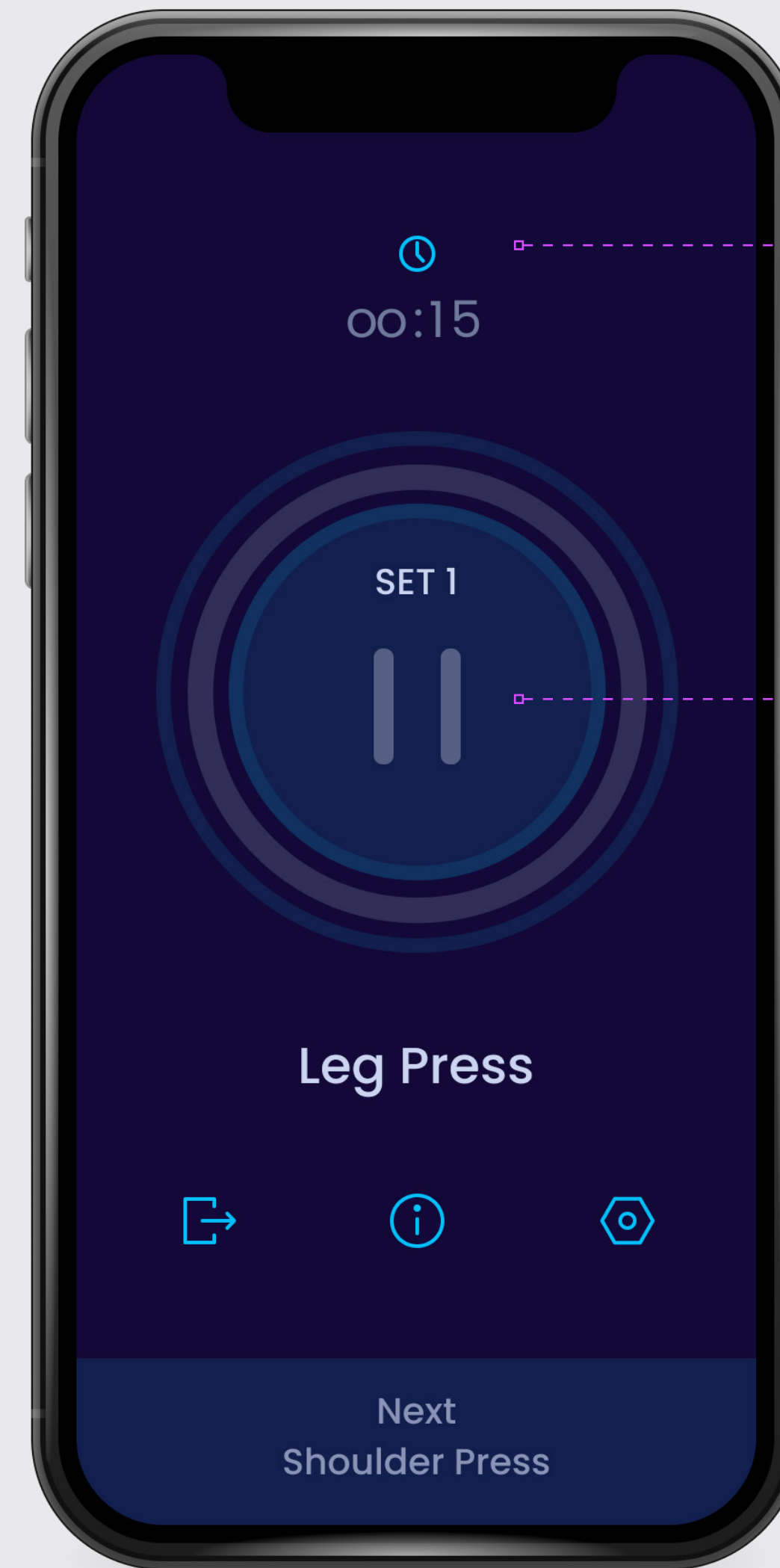
Timer

Timer appears when exercise starts. Users can pause it when they touch timer. They can also watch tutorial again when they click info icon.



Users can watch the tutorial again if they want.

Timer



Overall exercise time.

Users can pause exercise by touching the timer.

Timer_Pause

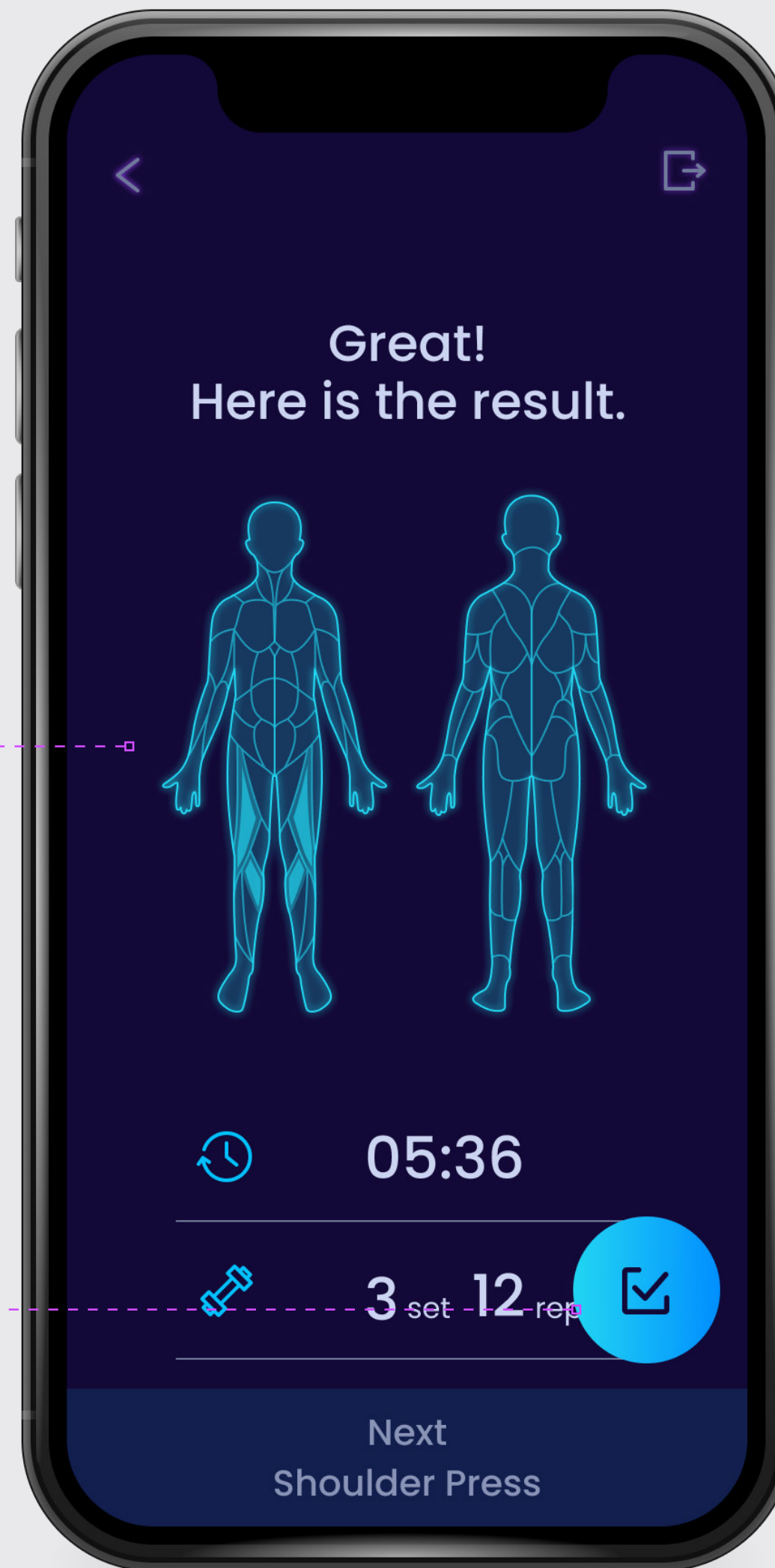
PROTOTYPE

Workout Summary

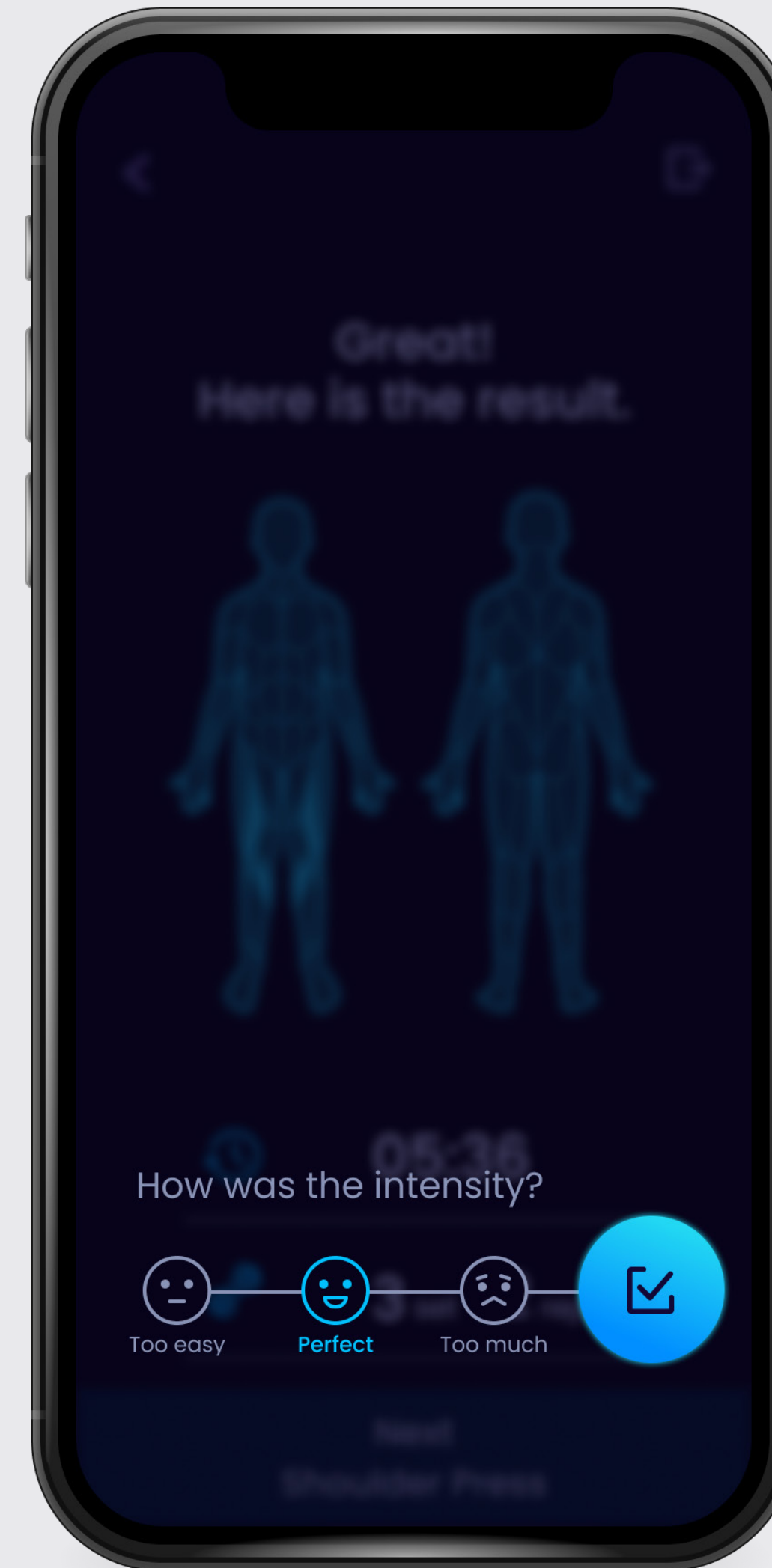
The screen shows the result when users finish one exercise. They can give intensity feedback so that the app use this as a reference.

Screen shows a brief result of each exercise in order to encourage users.

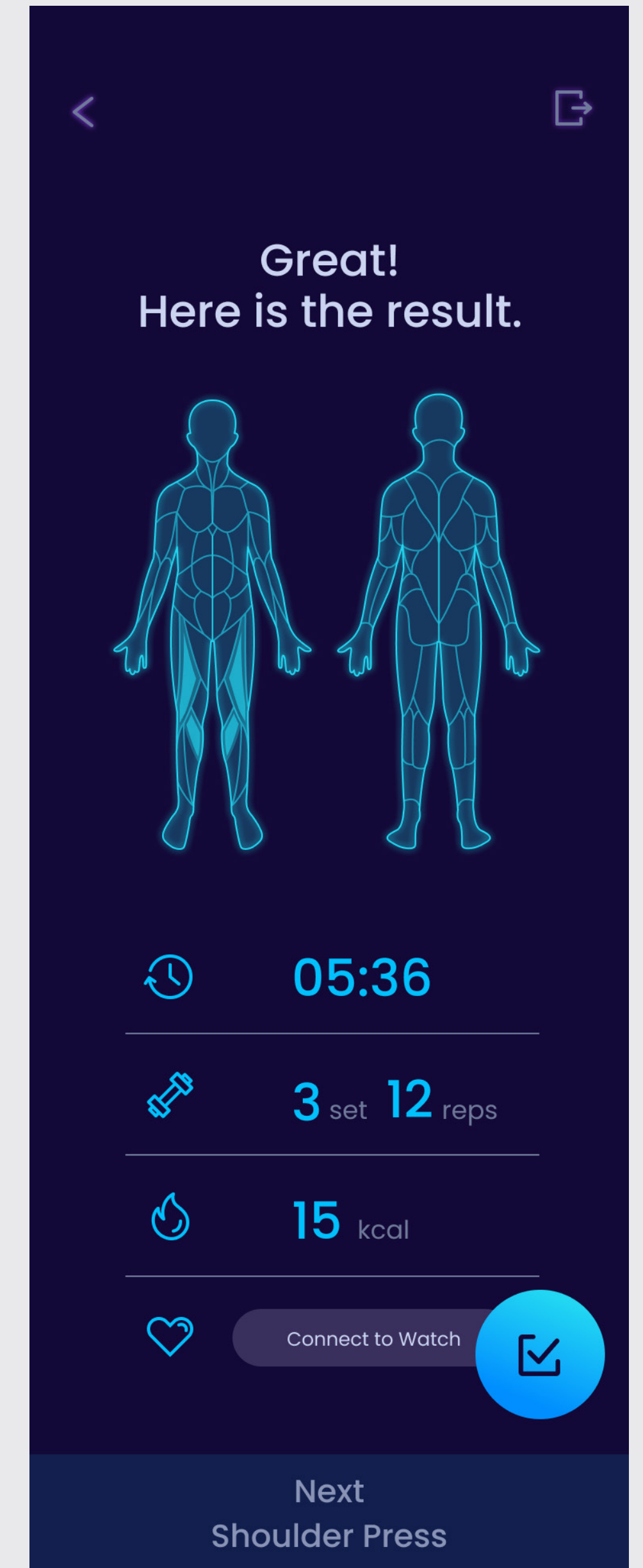
User can give intensity feedback for app's next better decision.



Workout Summary



Feedback



TV & Watch

TV

User's flow

Sketches

Wireframes

Prototypes

Watch

User's flow

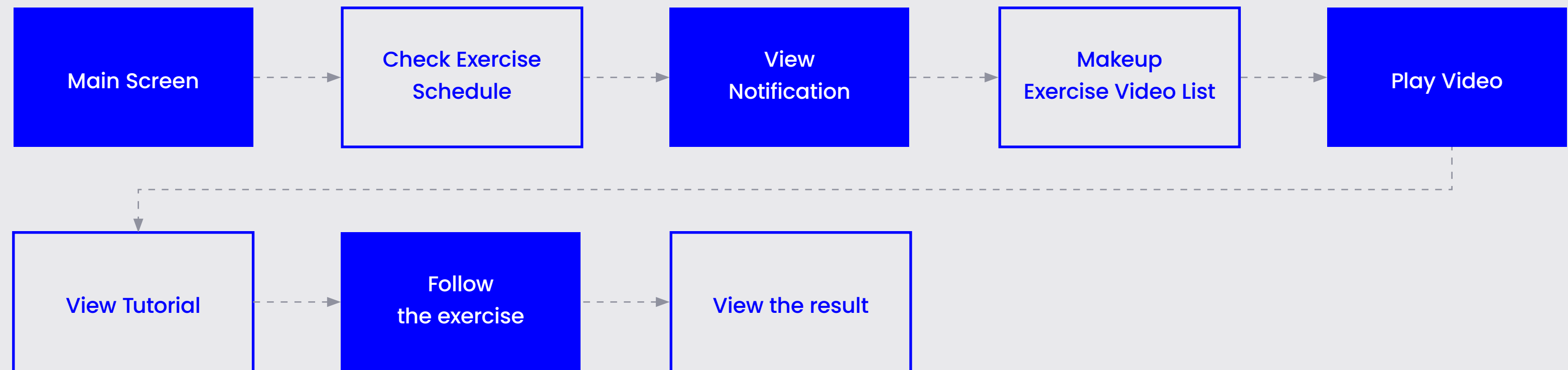
Sketches

Wireframes

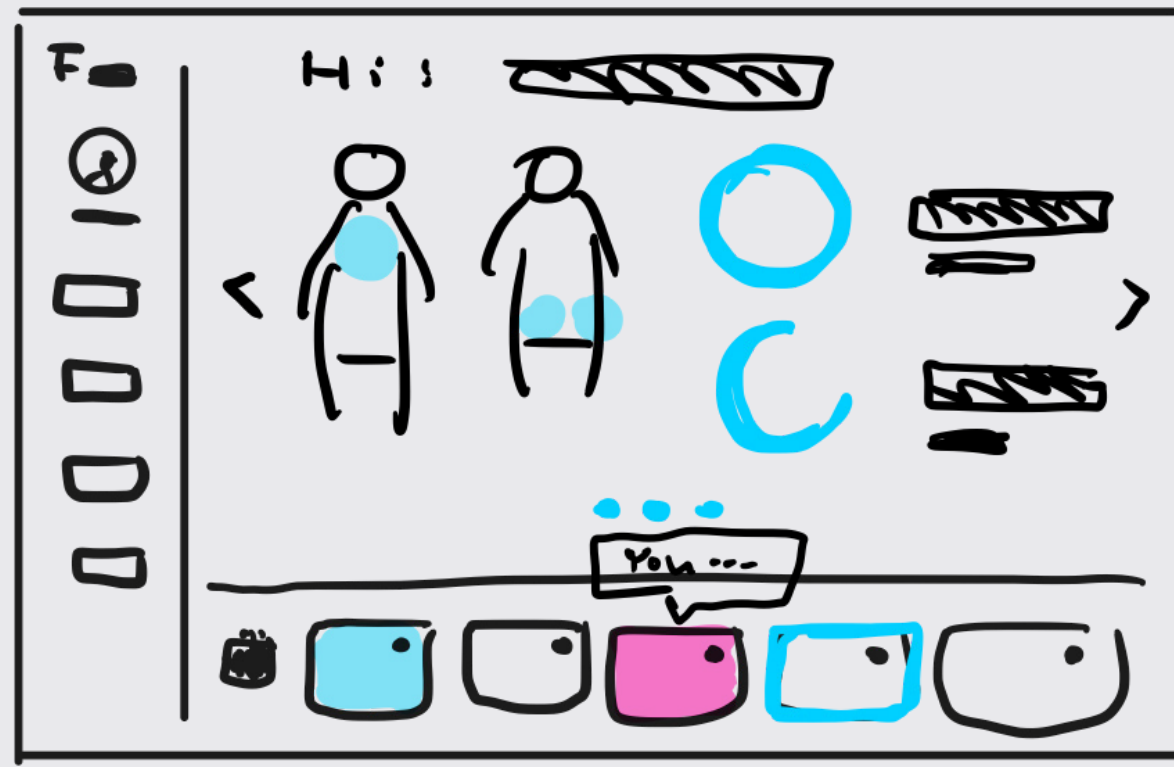
Prototypes

Inactive User's Flow

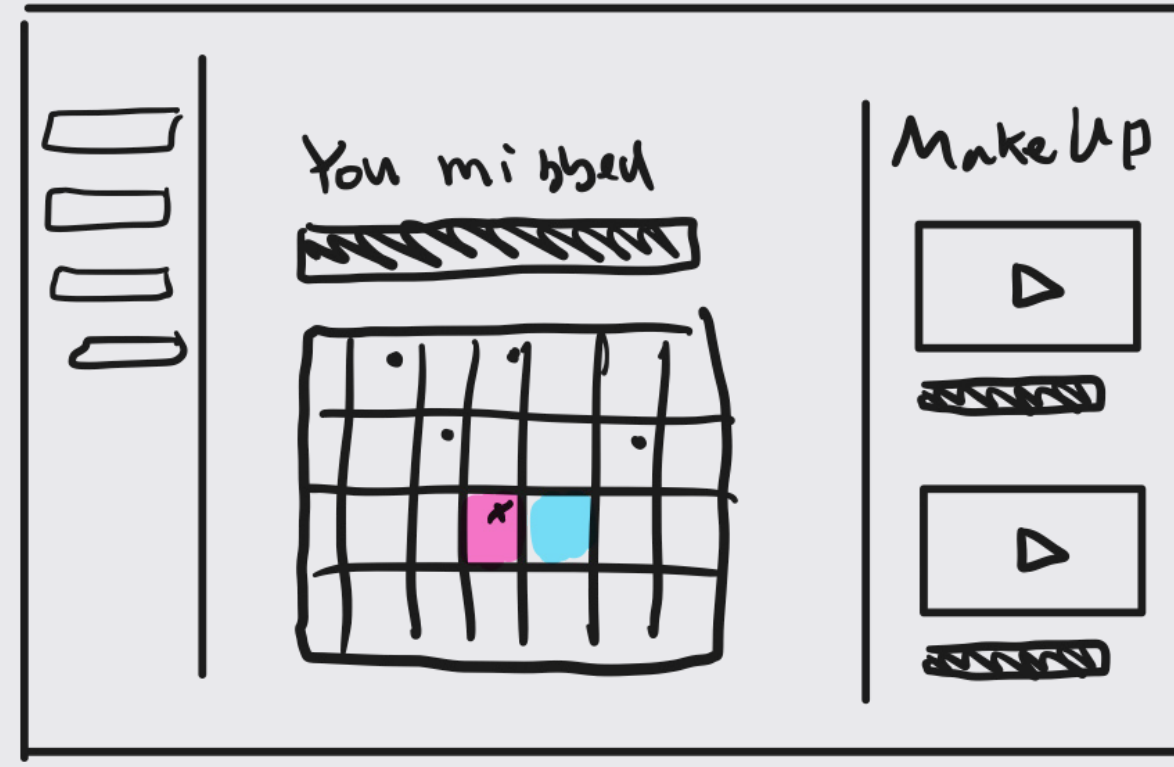
Inactive Users in day 10 prefer staying home to going to the gym so they frequently miss the gym schedule they planned to. However, because they know they need to exercise regularly for their health. **They want to do makeup exercise at home and get motivation** by watching their improvement and tips for health.



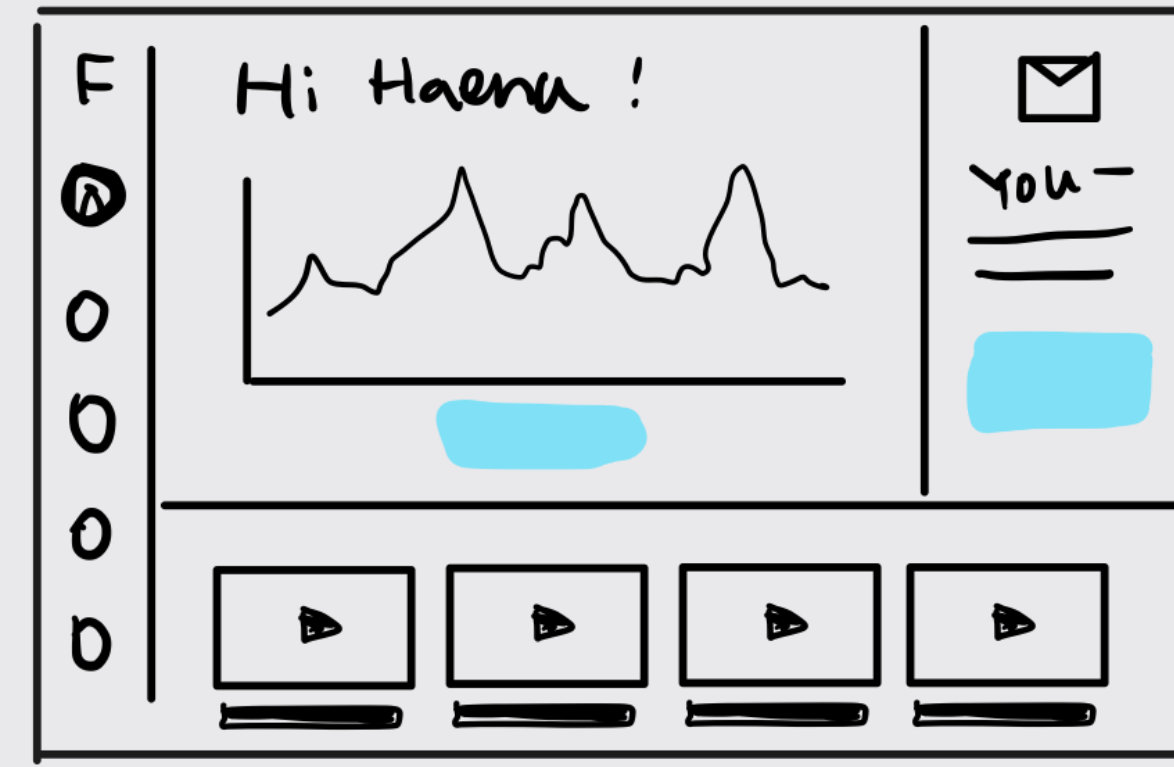
Sketches



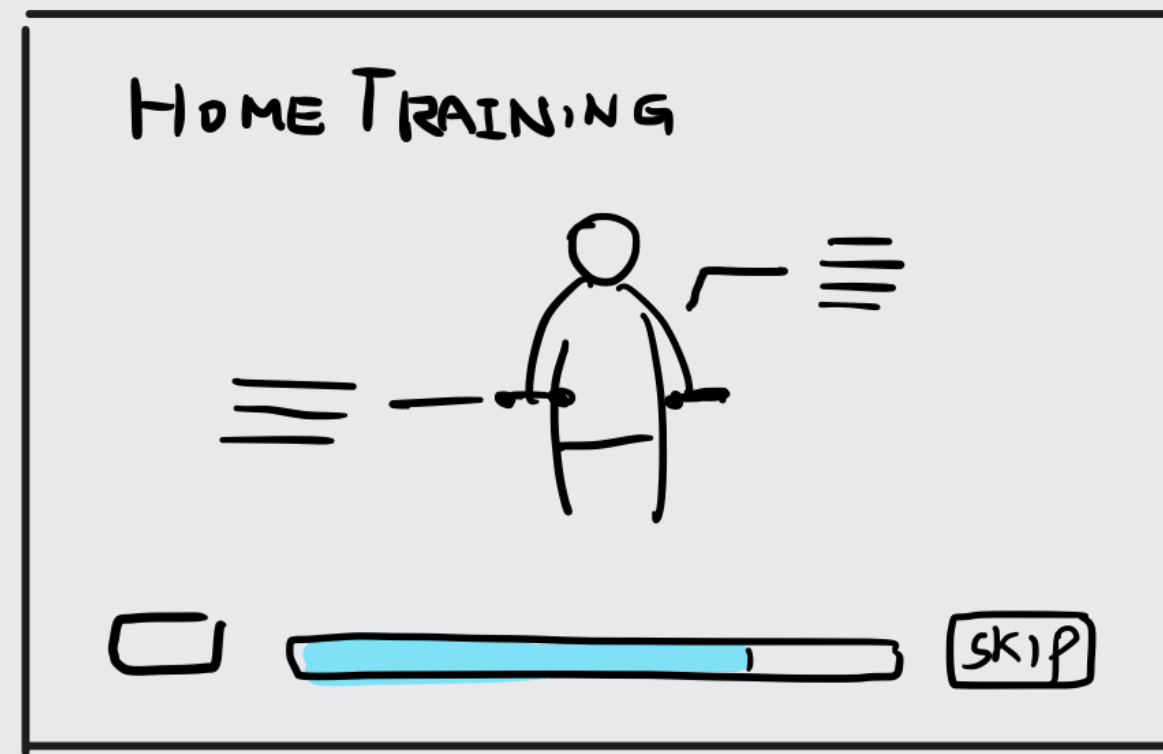
Main



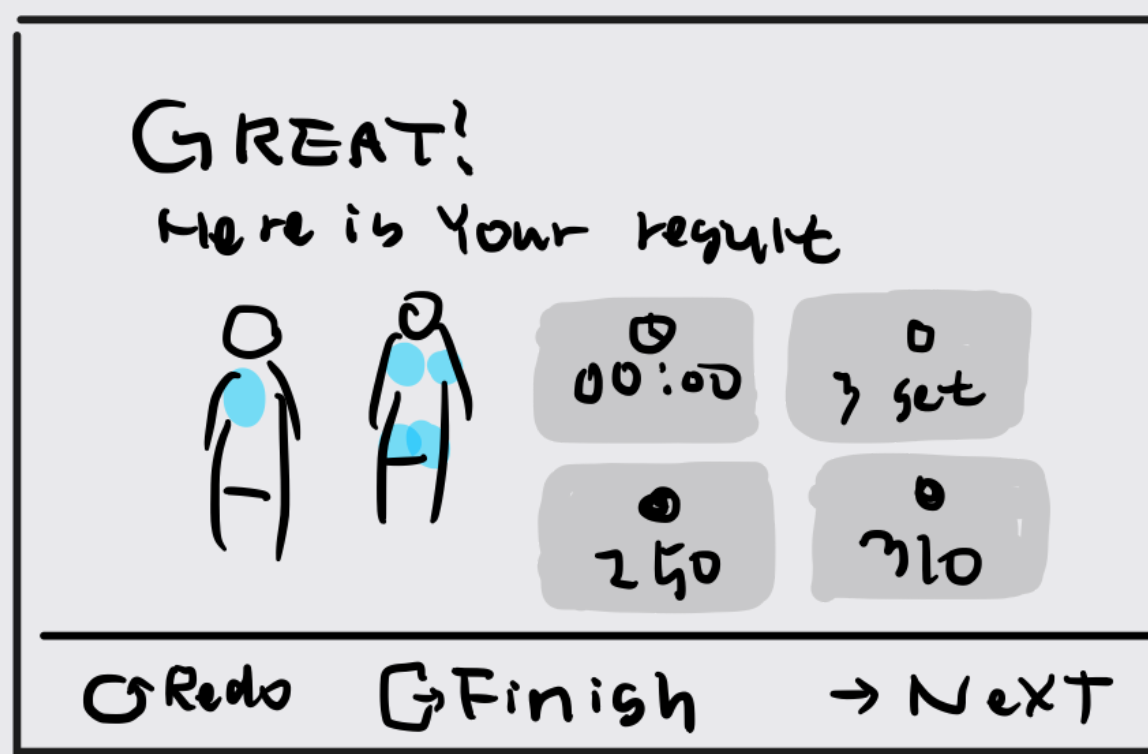
Main



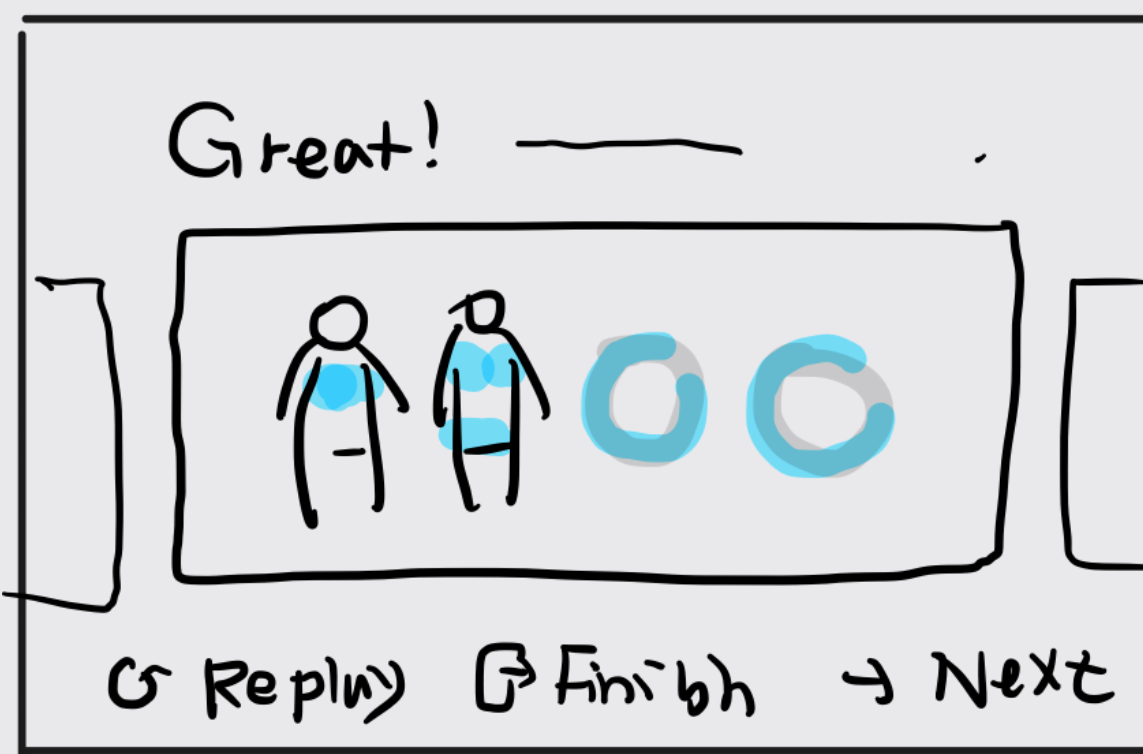
Main



Video



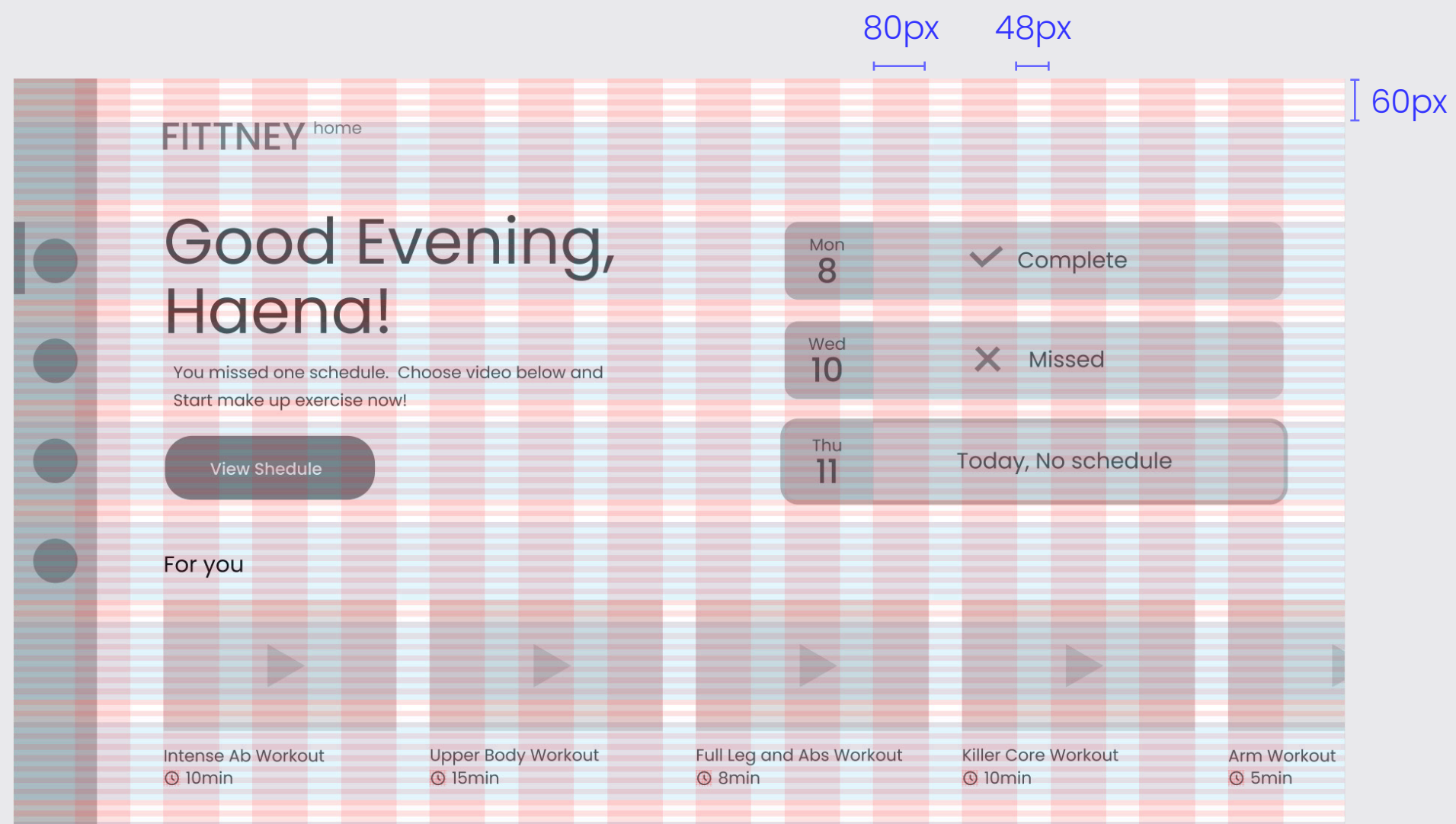
Result



Result

APPLE TV

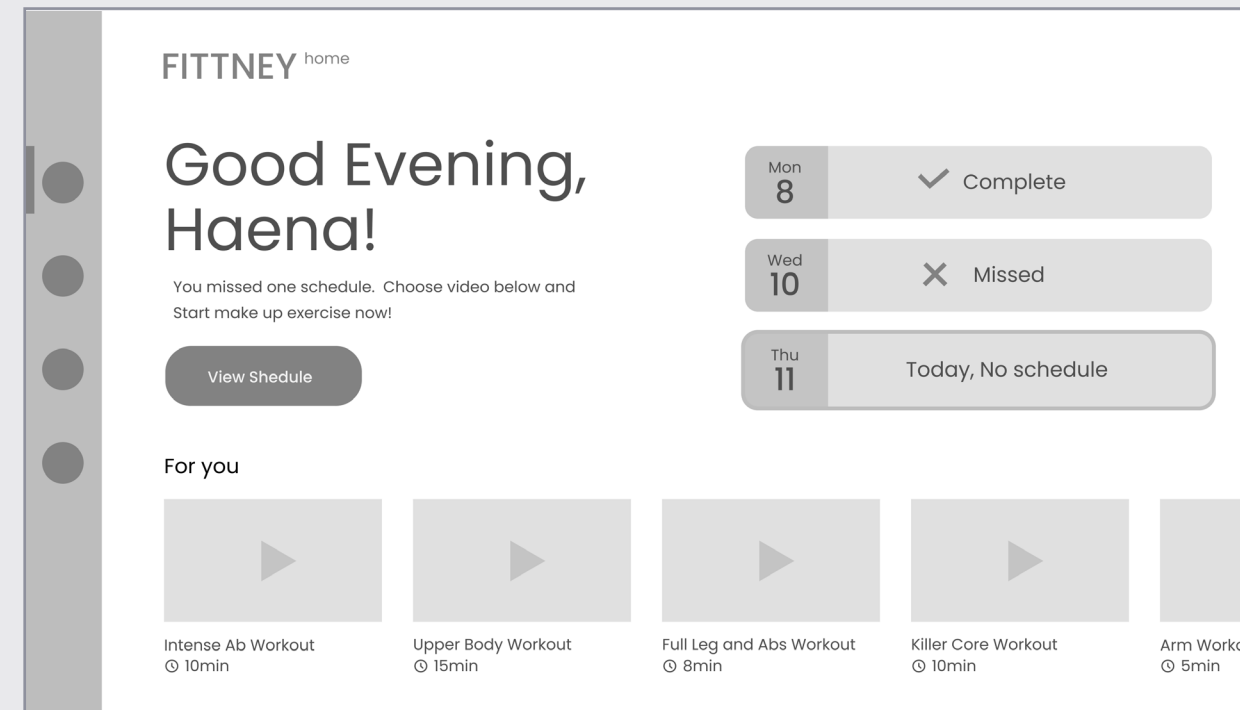
Wireframe



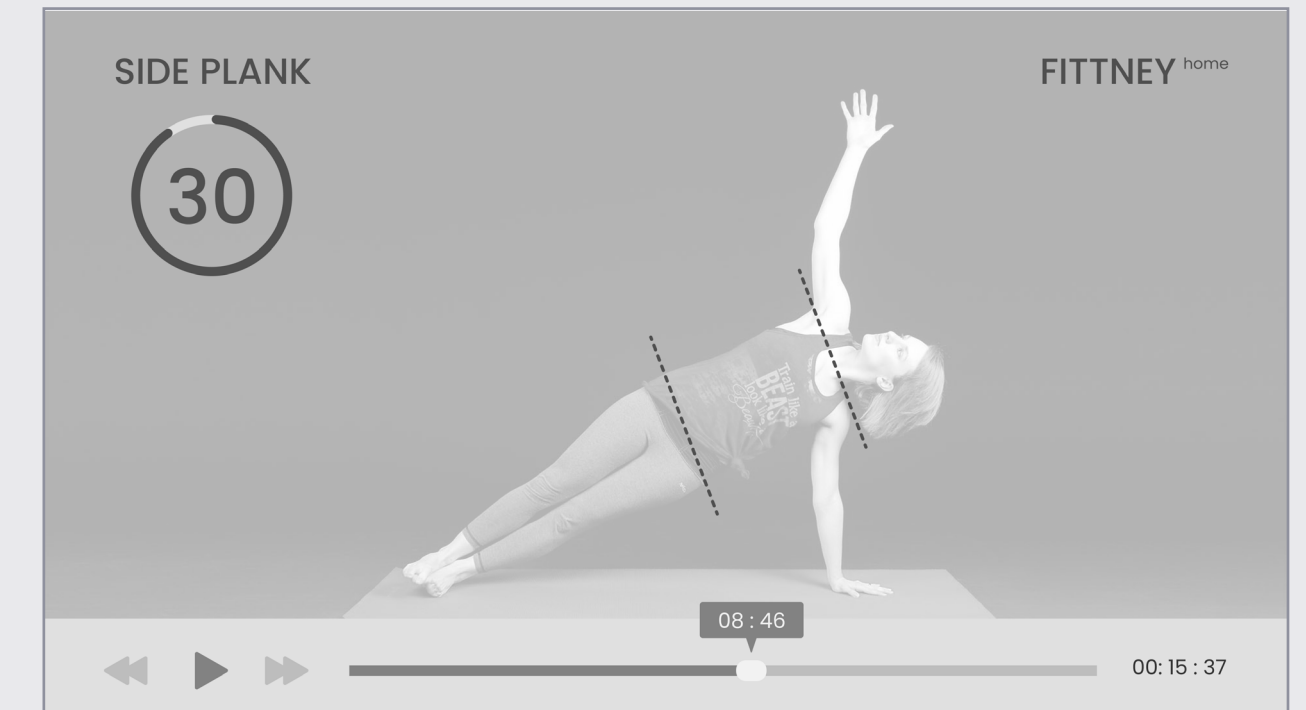
Apple TV (1920*1080)

8px rows

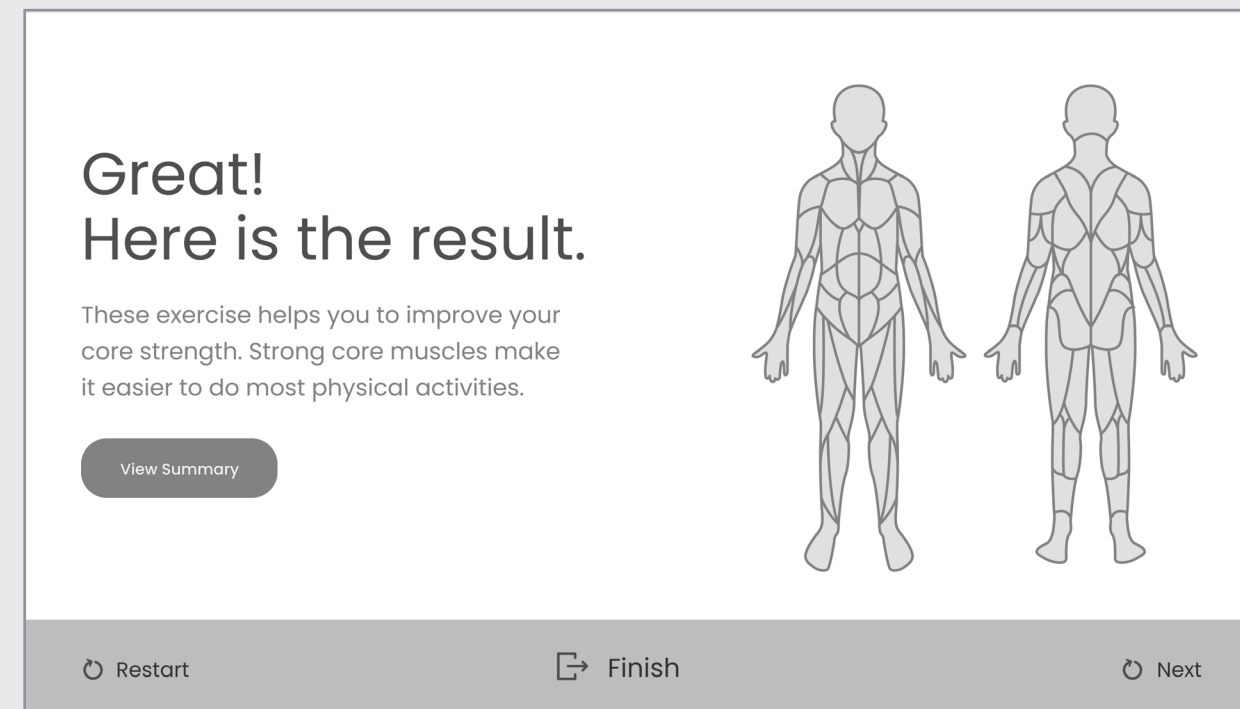
14 Columns (80px)



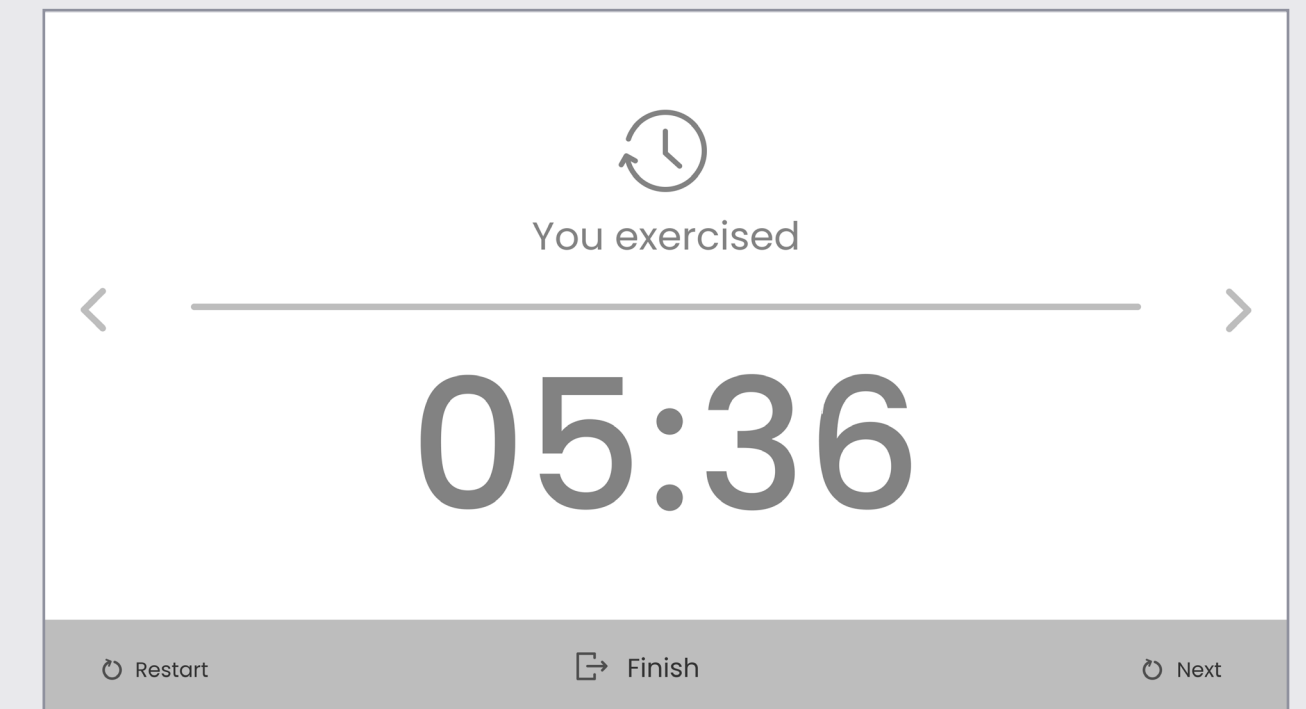
Main



Video



Workout Summary

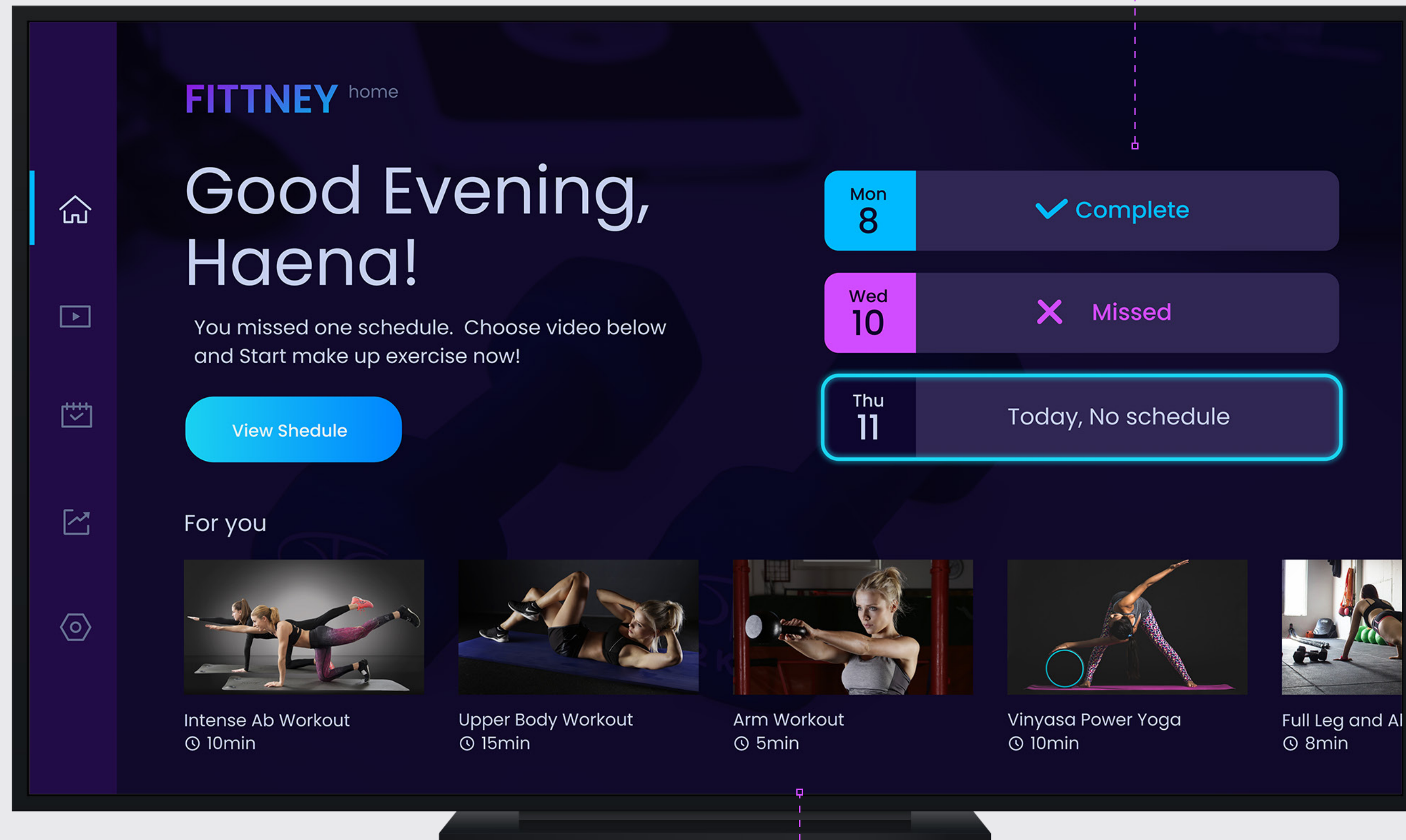


Workout Summary_Detail

APPLE TV

Prototype

The screen shows weekly schedule summary



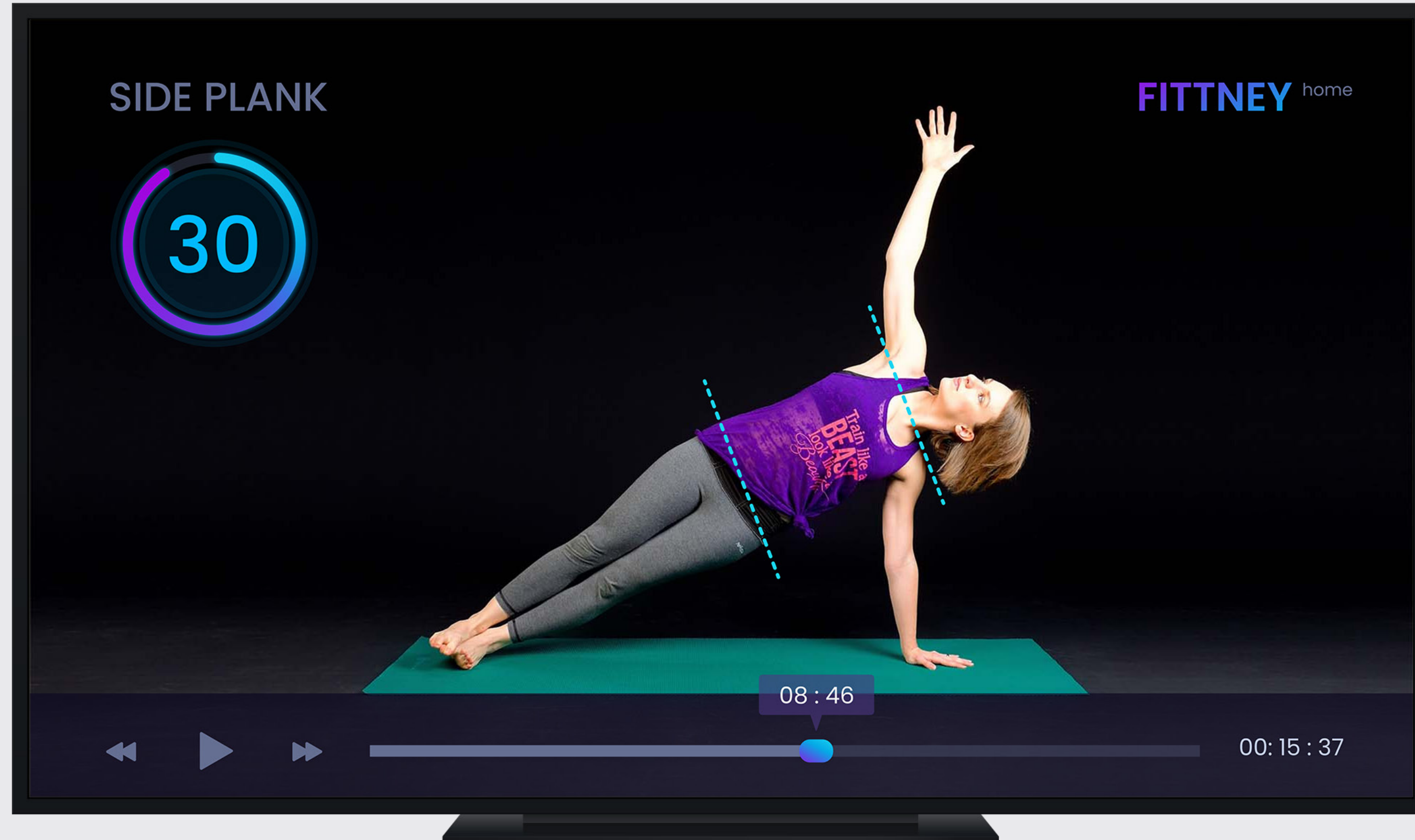
Main Screen

The screen shows the weekly schedule briefly. If users have a missed schedule, this screen notices it and recommends makeup exercise videos below. If users didn't miss schedule, the bottom section shows health tips.

This section provide make up exercise or health tips video.

APPLE TV

Prototype

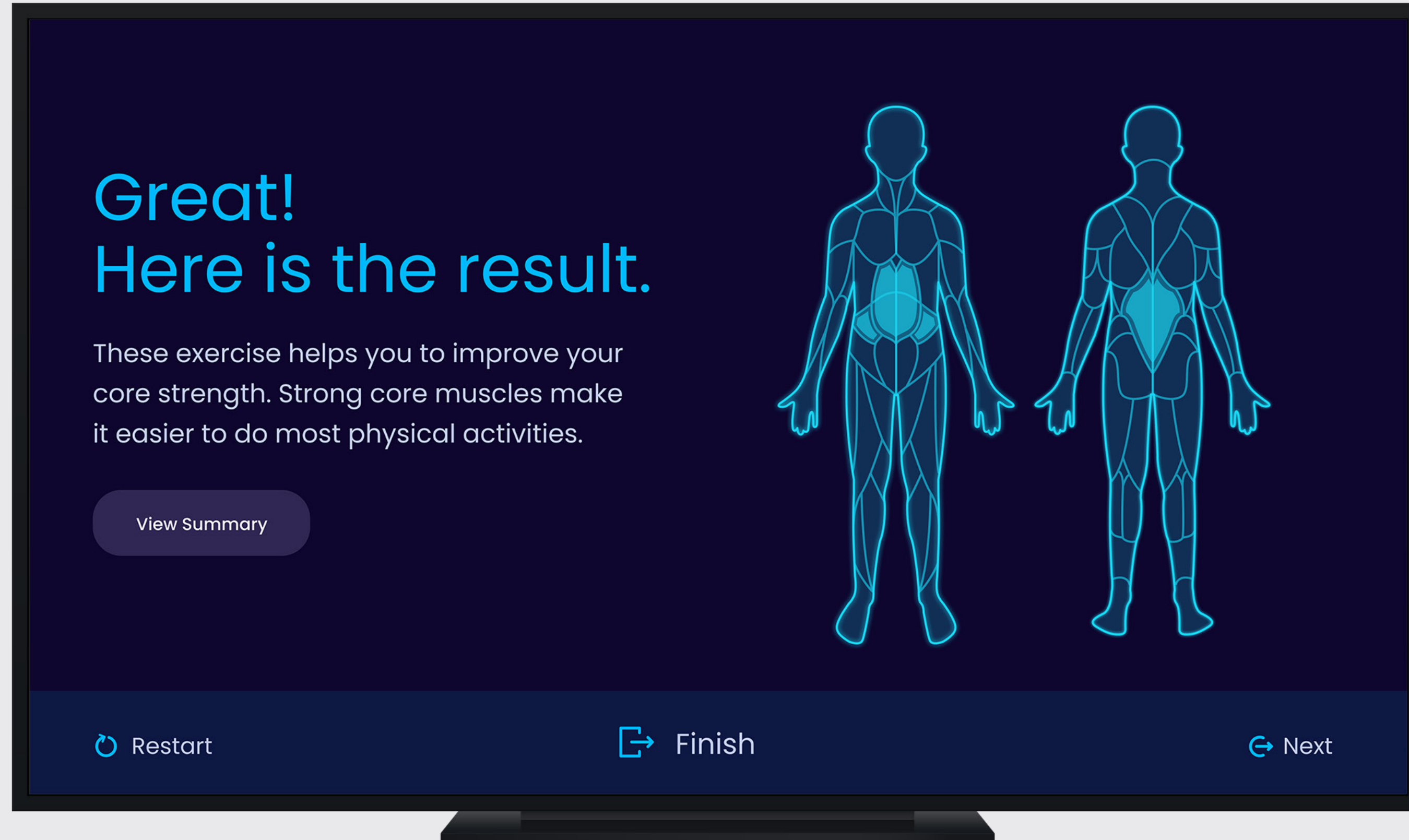


Workout Video

The video screen shows the timer on the upper left screen to each exercise. Exercise tips and directions appear during the exercise to offer useful information.

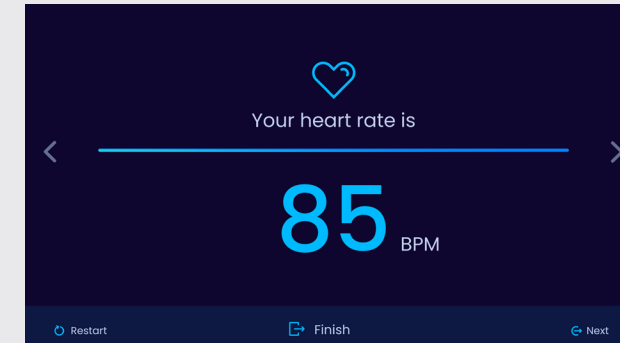
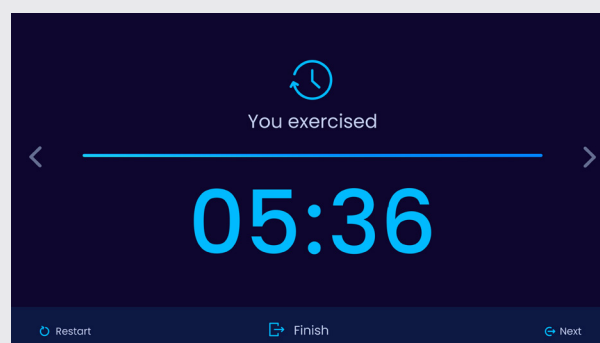
APPLE TV

Prototype



Workout Video

Users can see the brief result of the exercise. By simply tapping the touch panel on the remote, users can check duration, set, burned calorie and heart rate if users are wearing a smartwatch.



Enthusiastic User's Flow

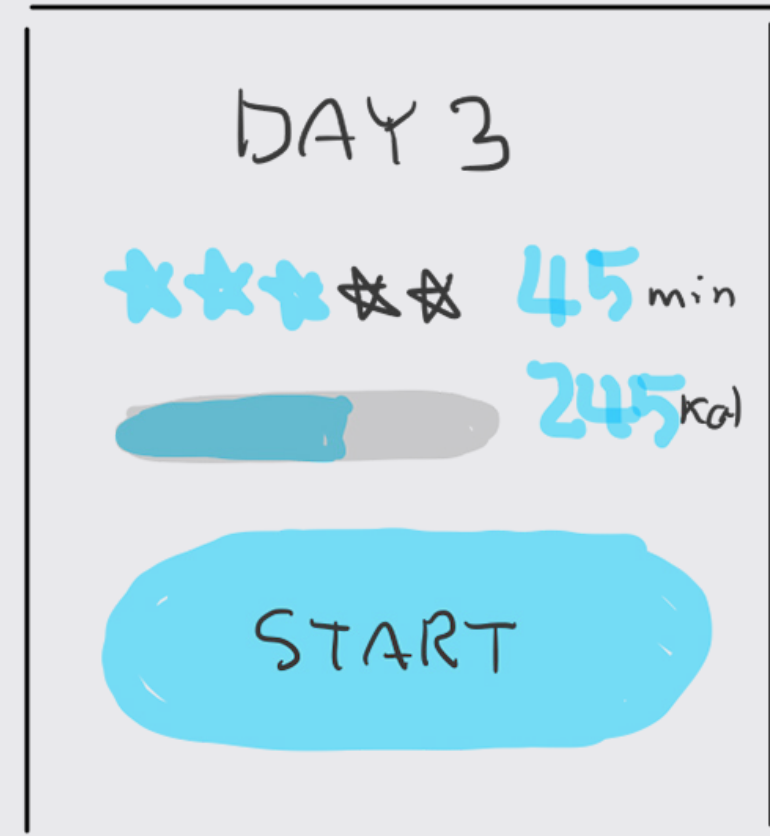
Enthusiastic users in day 15 are really passionate to exercise and already know how to use the gym well. They don't want to use a smartphone during the exercise because they don't want to be distracted. They use a smartwatch to **support their effective exercise and get a useful record** at the gym.



Sketches



Notification



Goal



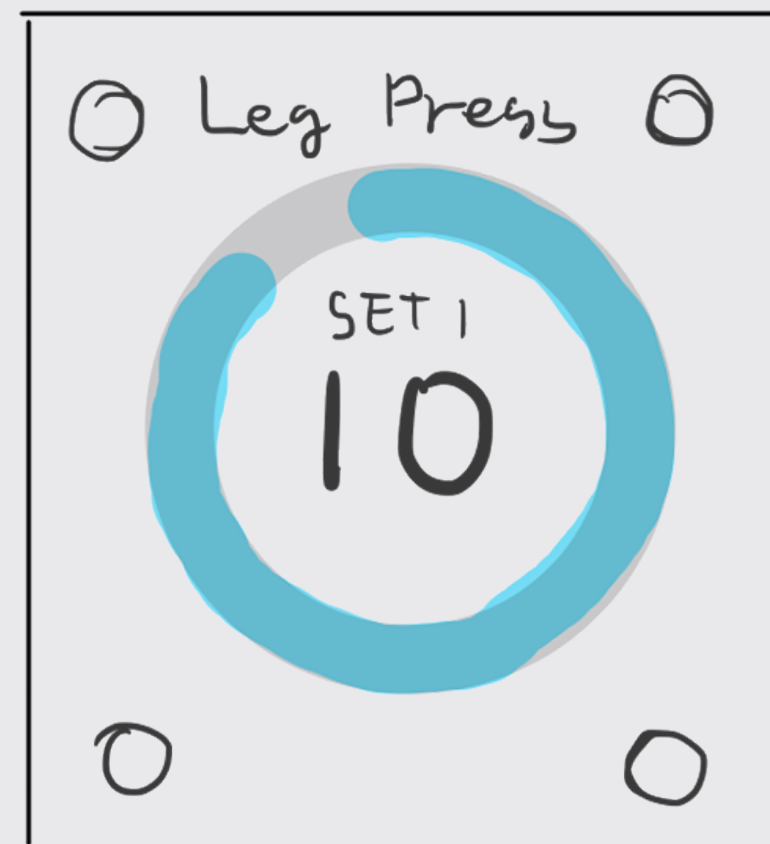
Goal



Goal



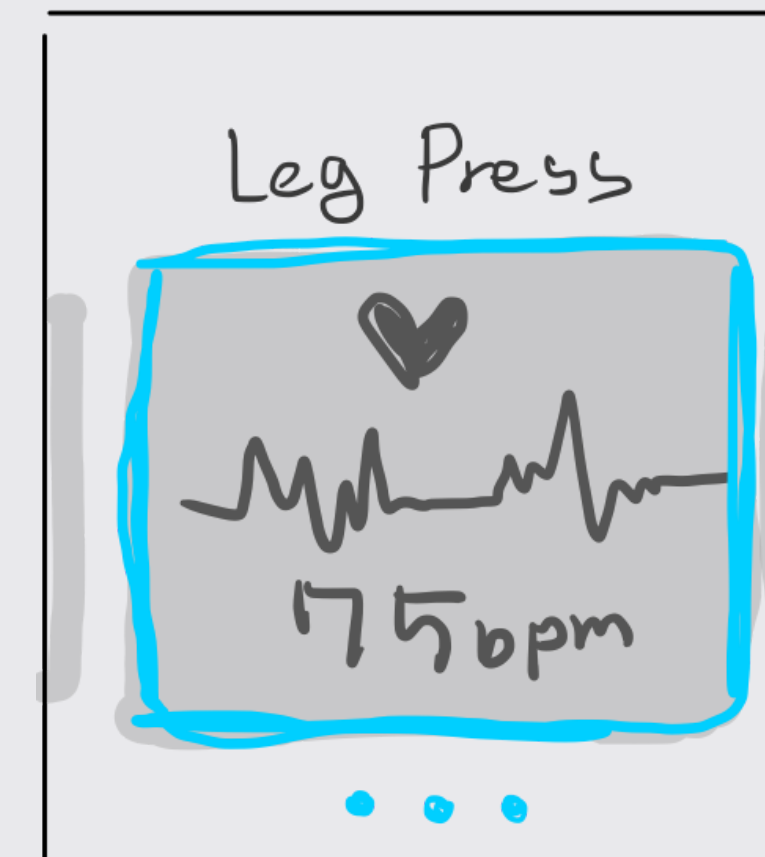
Timer



Timer

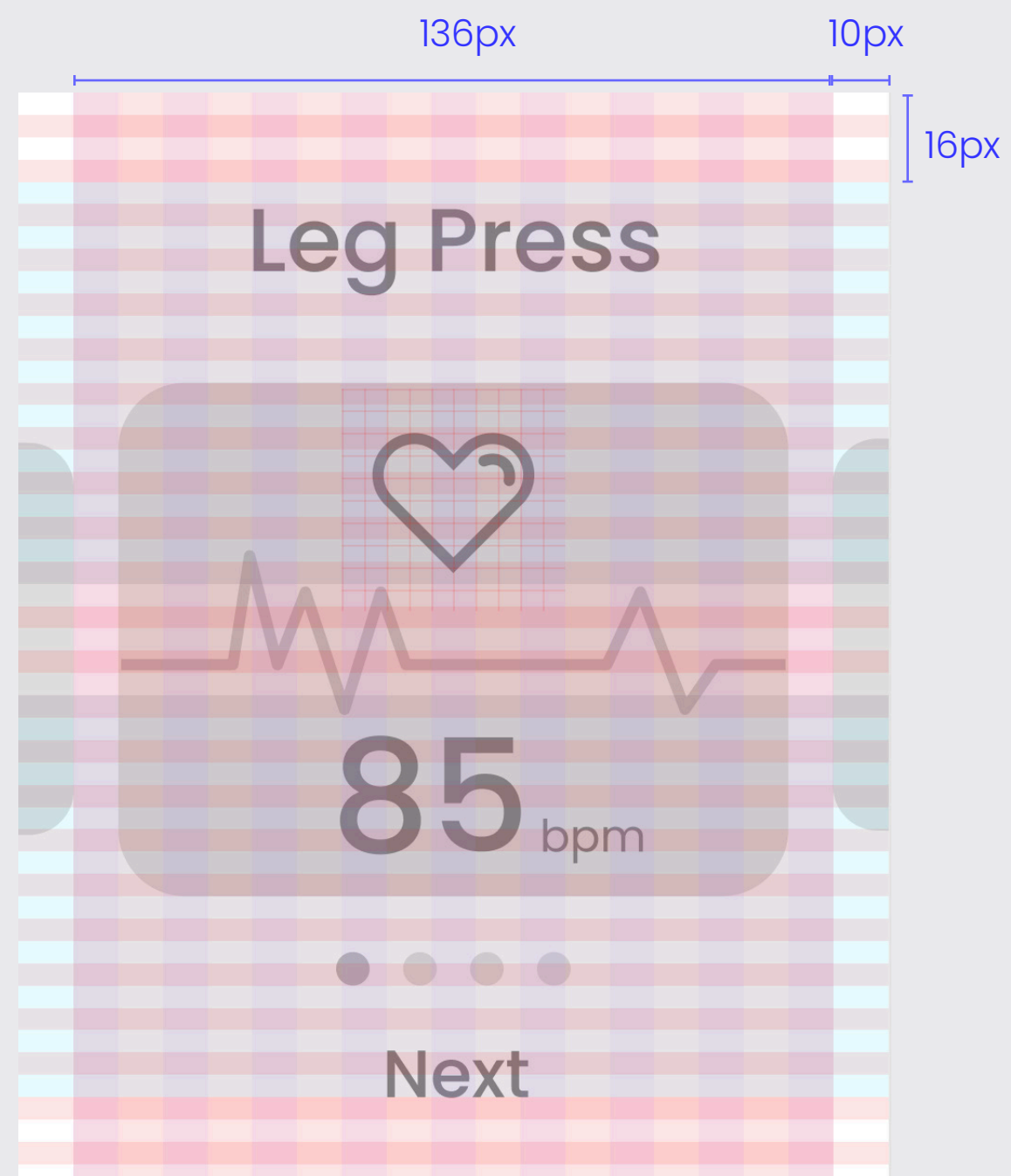


Result



Result

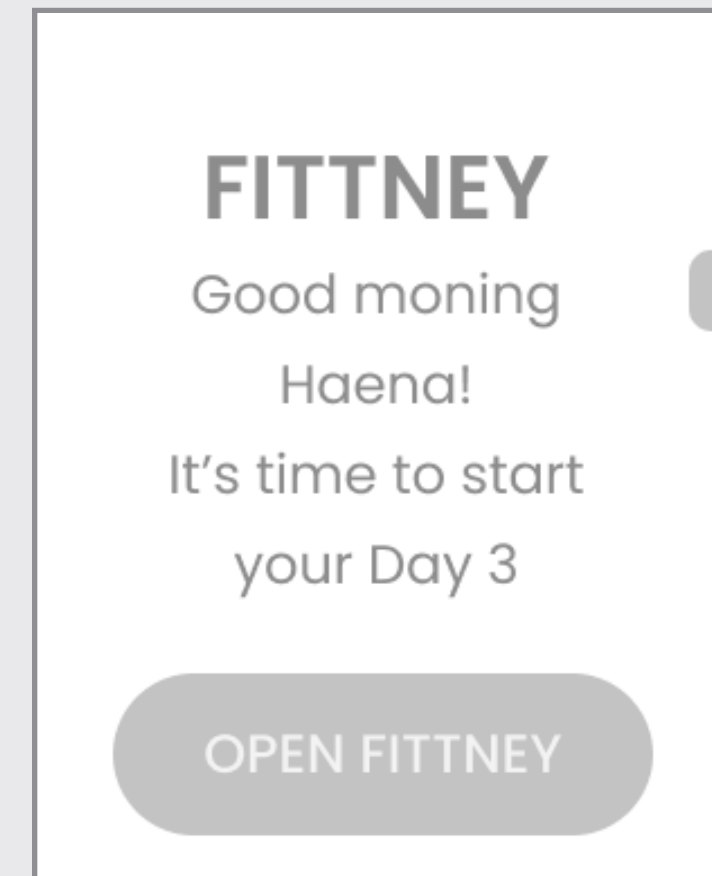
APPLE WATCH
Wireframe



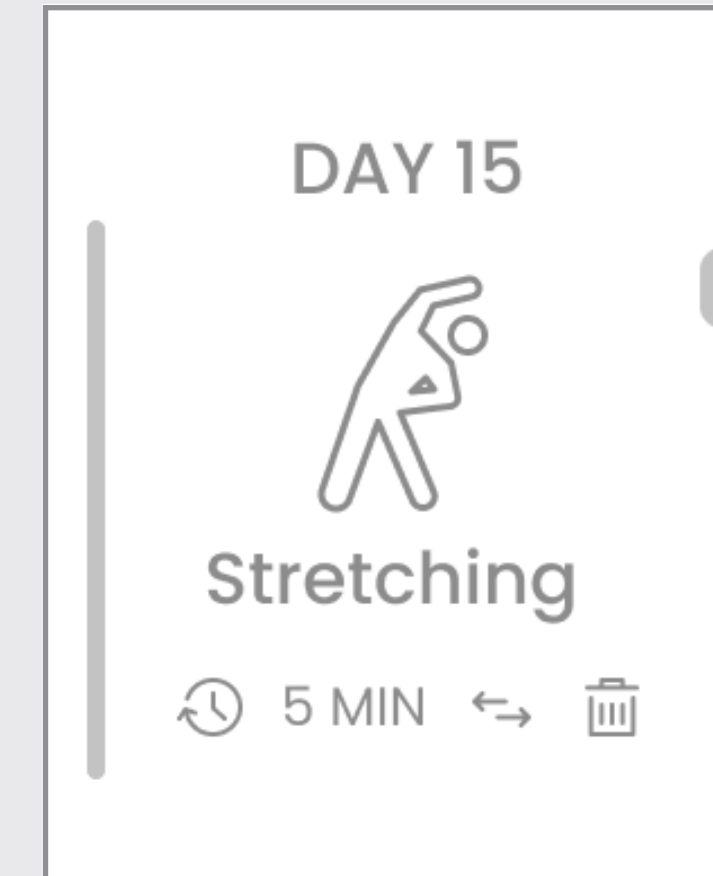
Apple Watch 42mm(156*195)

4px rows

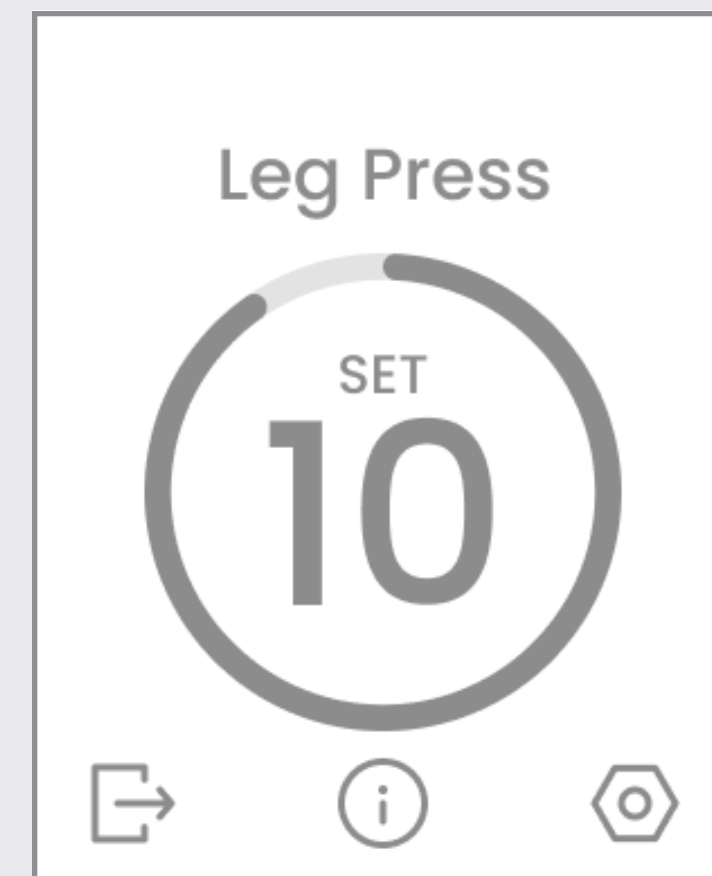
1 Columns (136px)



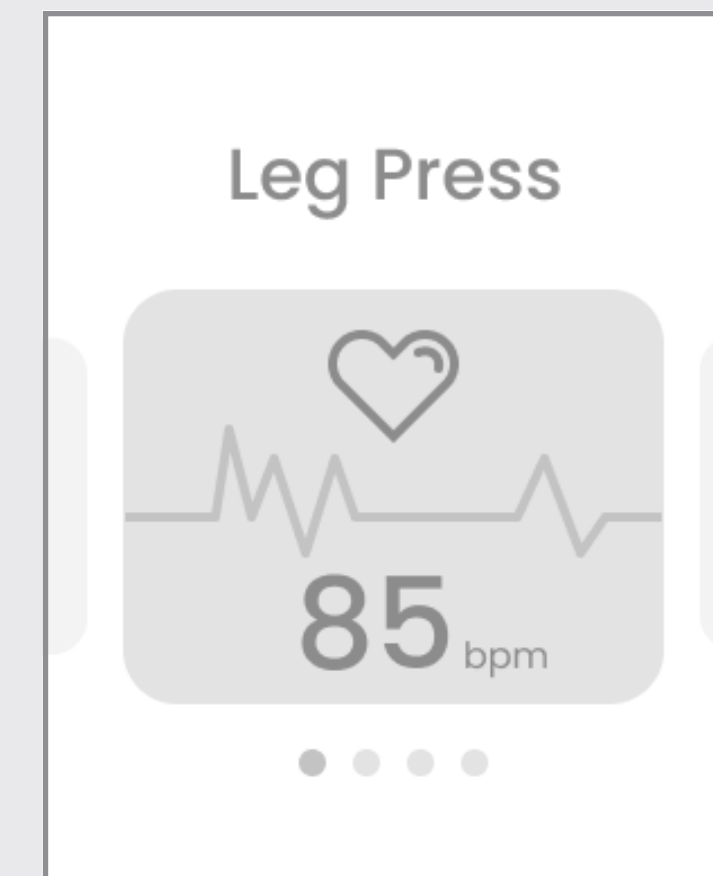
Notification



Exercise List



Timer



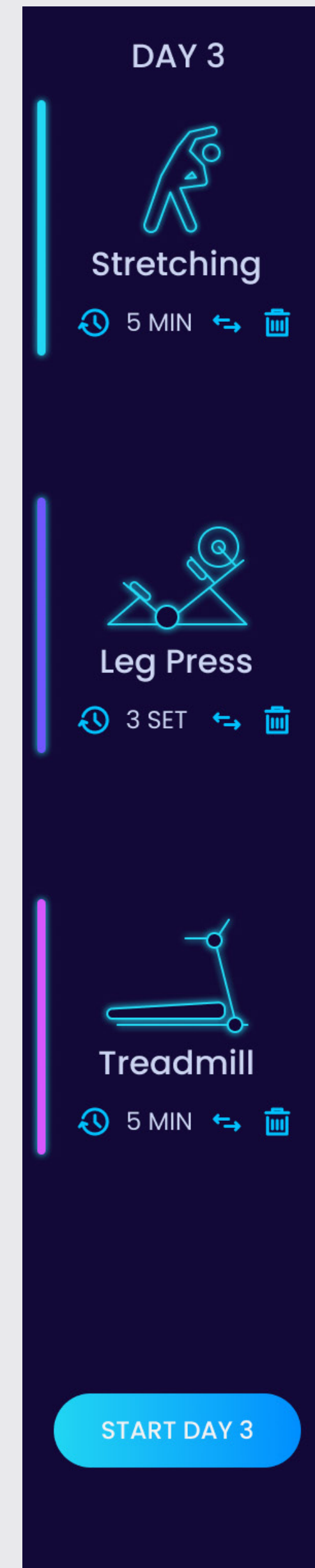
Workout Summary

APPLE WATCH
Prototype



Notification

The app sends a notification before schedule time. Users also set the app to send motivation and tips.



Exercise List

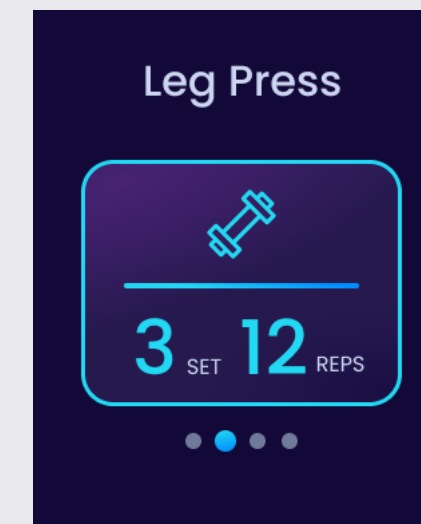
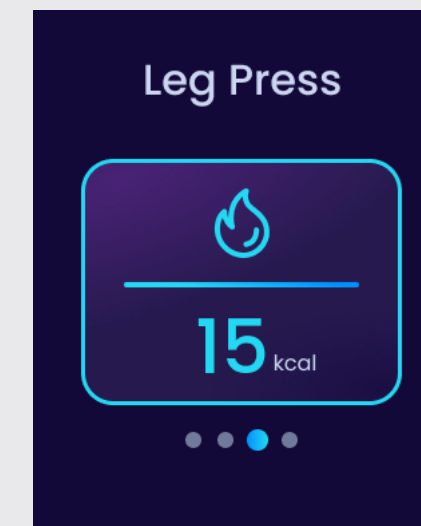
The screen shows today's exercise list. Users can replace and delete the exercise they don't want.

APPLE WATCH
Prototype



Timer

Users can easily pause and start the timer by tapping number.



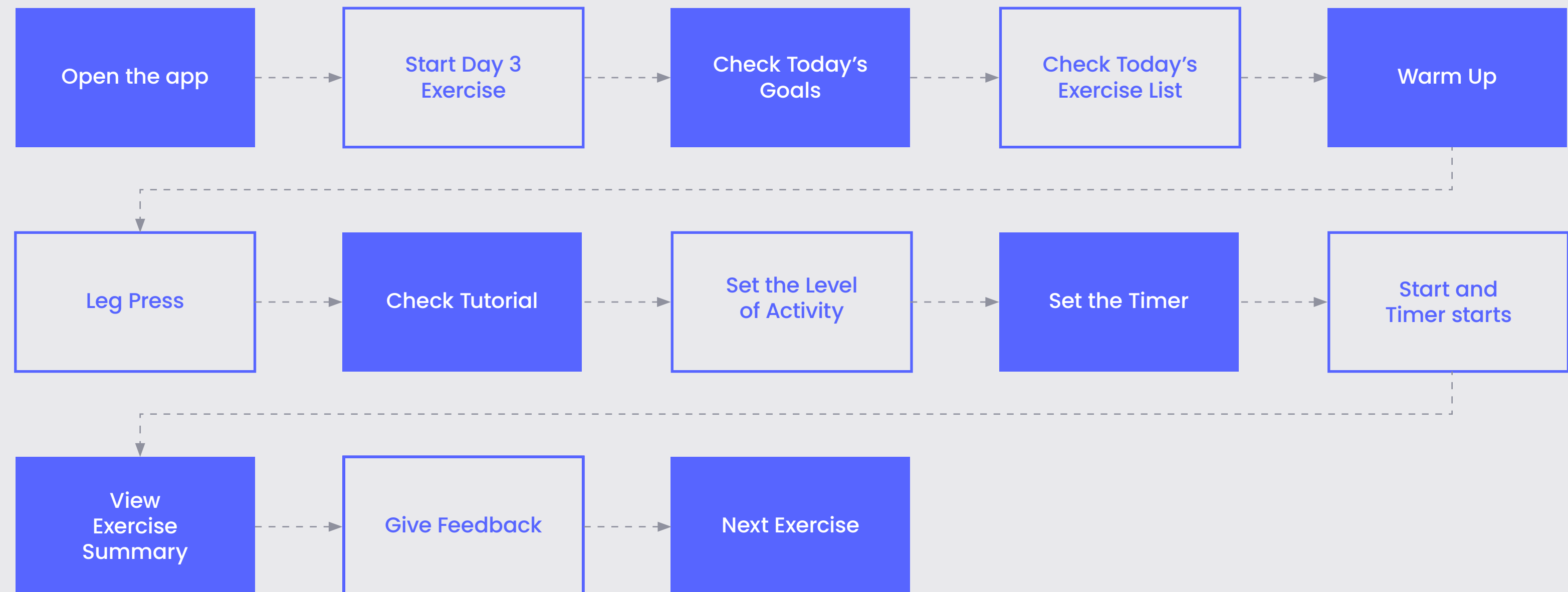
Intermediate Result

Users can check the intermediate result by simply swiping the card. Watch provide a heart rate check.

Shy User's Flow

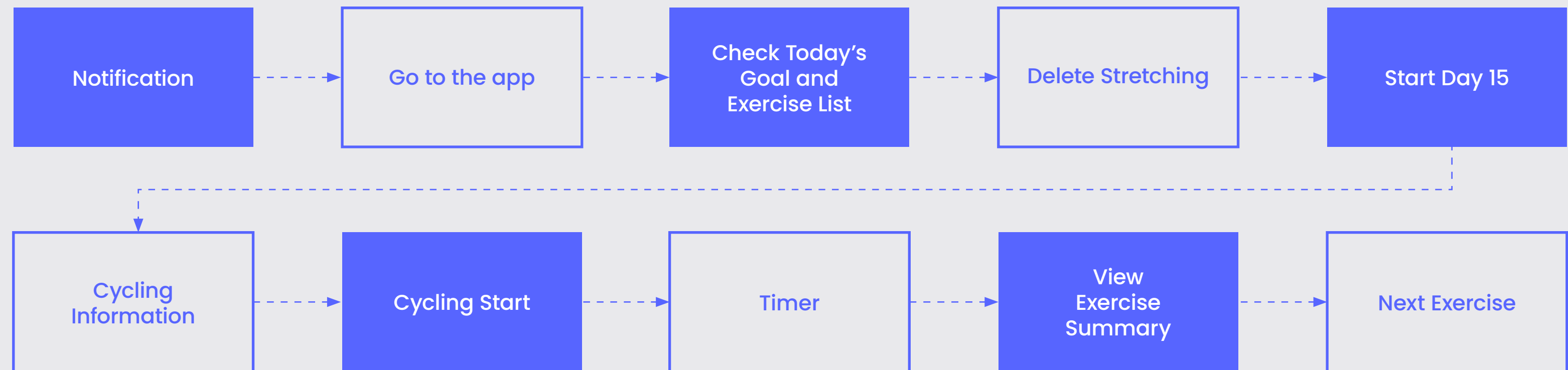
Shy users on day 3 still feel overwhelmed at the gym and not familiar to use the gym yet. The biggest situation they want to avoid is roaming around the gym because they don't know what to do next and hesitate to ask someone to help.

After they enter the gym, they put earphones on, opens the app, and then just press the start button and follow the step. This will help shy users feel comfortable and boost their confidence until they get used to the gym.



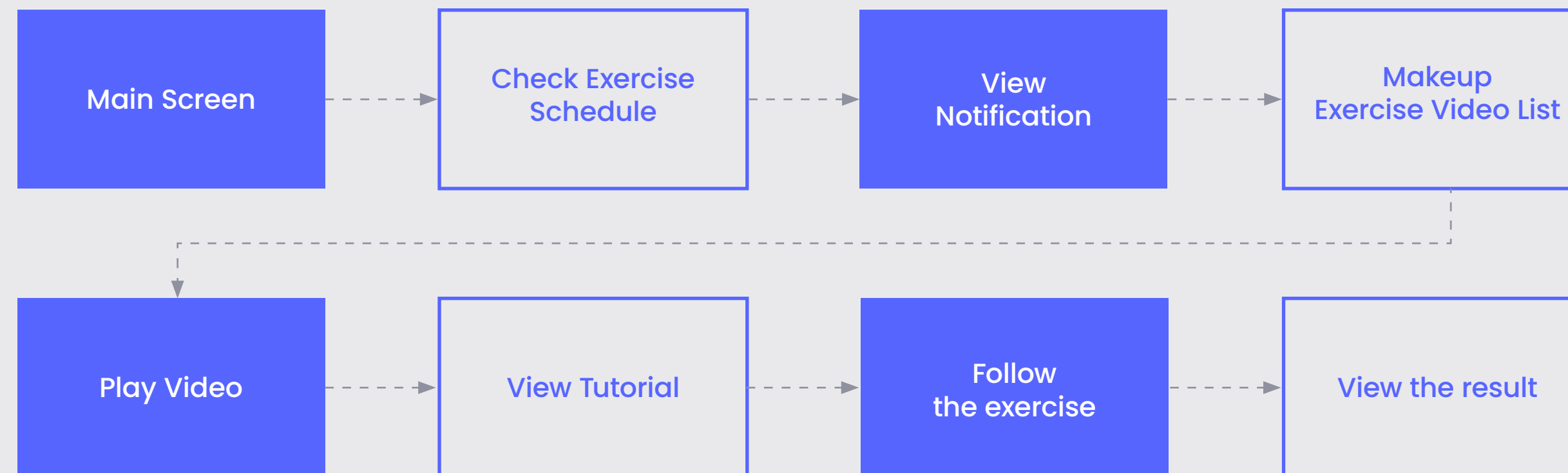
Enthusiastic User's Flow

Enthusiastic users in day 15 are really passionate to exercise and already know how to use the gym well. They don't want to use a smartphone during the exercise because they don't want to be distracted. They use a smartwatch to **support their effective exercise and get a useful record** at the gym.

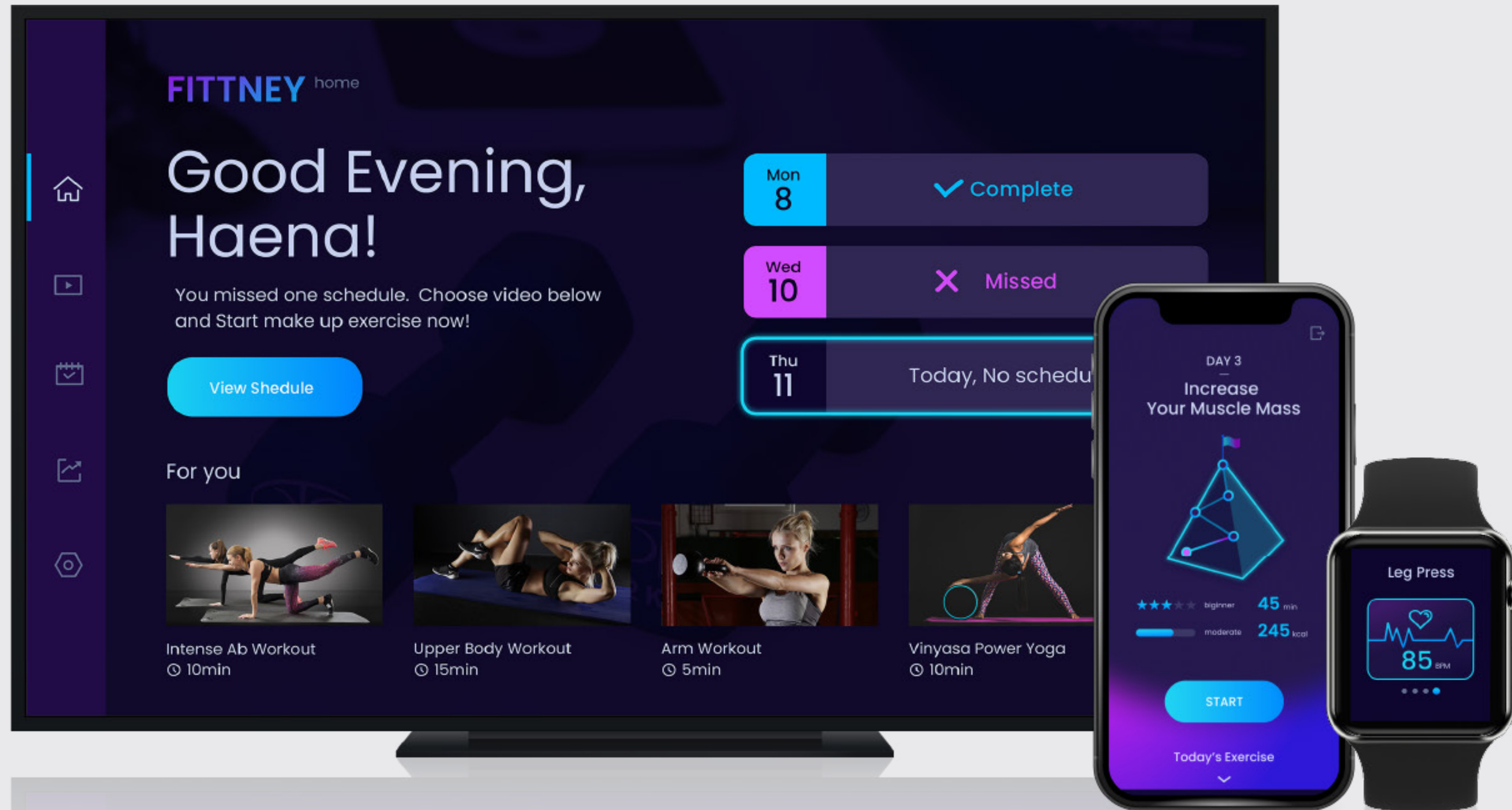


Inactive User's Flow

Inactive Users in day 10 prefer staying home to going to the gym so they frequently miss the gym schedule they planned to. However, because they know they need to exercise regularly for their health. **They want to do makeup exercise at home and get motivation** by watching their improvement and tips for health.



Conclusion



Source

Images

<https://www.pixabay.com>

<https://unsplash.com>

Inspiration

<http://pinterest.com>

<https://dribbble.com/shots/5714081-Fund-App>

<https://dribbble.com/shots/3066746-Turbulence-of-Love>

<https://dribbble.com/shots/4711003-Badminton-App-Dashboard>

<https://dribbble.com/shots/5666960-App-Icons>

Mock up

<https://dribbble.com/shots/2866587-FREE-Apple-TV-Mockups>

<https://dribbble.com/shots/1966854-Free-Apple-Watch-Wireframe-Template-Printable>

Color Accessibility Test

<https://material.io/resources/color/#!/?view.left=1&view.right=0>