



UNSW
SYDNEY

SENG2021 21T1

Problem Statement/Features/Stories/Mockups

Team Half Stack

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Introduction

Our product is Full Body Grin. A health app that does more than just workouts. Full Body Grin is an app for your everyday, helping you track your workouts, sleep and mood ready for review at any time. Don't just throw yourself into a workout, Full Body Grin lets you set goals, then plans workouts for you to help achieve those goals! With all these features in one application, you know no workout is complete, without Full Body Grin.

Problem Statements

Tracking Workouts

1. There is no elegant way to record workouts, such as runs or cycling, if a user wanted to manually input their data.
2. Existing software solutions such as spreadsheet software are not appealing to many, and require a lot of work on the user's part.
3. There is no easy way to calculate calories burnt, or the users running/cycling pace in existing software solutions.

Planning Workouts

1. There is no simple way to see predicted calories burnt or time for a planned workout based on a user's archived workout data.
2. There is no simple way to see statistics for planned workouts that might interest the user such as elevation or terrain.

Goal Setting

1. Apps in the current market don't give specific workout recommendations based on users' goals to help users achieve them.

UI and Usability

1. There is no simple way to see all personal health progress in one clear snapshot.
2. Page formatting is inconsistent and confusing making it hard to read and understand information.
3. There is no simple method to navigate through different pages.
4. There is no information or help to assist the user if an error occurs.

Sleep and Mental Health Tracking (Stretch Goals)

1. Current sleep tracking technology is far too complicated and requires the user to use specialised hardware or keep track of a number of complicated factors.
2. There is no current software tool that allows users to view the relationship between their sleep quality, mental health and physical exercise.

User Stories

In Scope

Tracking Workouts

Requirement 1: Provide an elegant way to record runs or bike rides via manually inputted data

Feature 1: Data from previous workouts can be input and saved

As a fitness enthusiast

I want to record and save my bike rides online

So that I can return to them in the future, and keep track of the different bike paths I've ridden on

Scenario:

Given that I have created an account and am on the main dashboard

When I click on "Log Old Workout"

Then I should be on a workout data entry form

Then I will enter the type of activity I completed

Then I will enter the distance I ran

Then I will enter how long it took me

Then I can save my workout

Feature 2: Future workouts can be planned

As a fitness enthusiast

I want to plan workouts in advance

So that my workout schedule is comprehensive, and so that I am held accountable to my own standards

Scenario:

Given that I have created an account and am on the main dashboard

When I click on "Plan New Workout"

Then I should be on a workout data entry form

Feature 3: Previous workouts are presented in a list with a short summary

As a fitness enthusiast

I want to see my previous workouts all together

So that I can feel good about my progress as I get faster, or run for longer

Scenario:

Given that I logged at least one workout and I am on the dashboard

When I click the 'Show All Workouts' button
 Then I am shown a list of all my previous workouts in brief

Requirement 2: Process manually given data to develop more complicated workout data

Feature 1: Calories burned are generated and recorded with each workout
 As a fitness enthusiast
 I want to see how many calories I've burned
 So that I know how much I should eat to remain in a caloric deficit

Scenario:

Given I am currently logging a workout
 When I have entered my distance and time
 Then I will be shown how many calories were burnt.

Alternatively,

Given I have logged a workout and I am on the list of all previous workouts
 Then I can see how many calories were burnt during each workout

Feature 2: Running/cycling pace is generated and recorded with each workout
 As a fitness enthusiast
 I want to see my running pace in each workout
 So that I am reassured I am practicing properly

Scenario:

Given I am currently logging a workout
 When I have entered my distance and time
 Then I will be shown my pace

Alternatively,

Given I have logged a workout and I am on the list of all previous workouts
 When I click on a specific workout
 Then I am shown my pace during that workout

Planning Workouts

Requirement 1: Help users plan appropriately challenging workouts and understand the health benefits

Feature 1: Calorie and time predictions based on individual user's archived workout data
 As a fitness enthusiast

I want to know how many calories I will burn and how much time I need to spend in a workout

So that I can understand the health benefits of a workout ahead of time

Scenario:

Given I am on the new workout page

When I enter the activity

Then I can see the predicted calories burnt and time needed

Requirement 2: Provide ability to quickly reuse previous workouts.

Feature 1: Previous workouts can be reused for planned workouts with a single button

As a fitness enthusiast

So that I can reuse the workouts which I found most enjoyable or I want to repeat

I want a quick way that doesn't require re-entry of all the manual data

As an elderly user

I want to reuse workouts that I know were suited for my ability level

So that I am comfortable and safe with the workout challenge

Scenario:

Given I am viewing a specific previous workout

When I click the "Re-use this workout" button

Then I am taken to the Plan New Workout page with previous workout already inputted and are only required to fill in the date field

Goal Setting

Requirement 1: Allow the user to add and manage their goals

Feature 1: Add new goals

As a fitness enthusiast

I want to create new goals

So that I can get motivations and achieve the fitness level I desire

Scenario:

Given that I am on the workout log page

When I click on the "Create Goal" button

Then I will be directed to a new page where I can enter details of my goal and the date I want to complete it by

And the goal is set after I fill all the fields and click on the "Save" button

Feature 2: Check status of a goal

As a fitness enthusiast

I want to know if I have completed my goal by the deadline I set

So that I can organize my time wisely

Scenario:

Given that I am on the workout recommendation page

Then I can see goals with different status (completed, need to be completed, uncompleted by their deadlines) are shown in different colors.

Feature 3: Manage existing goals

As a fitness enthusiast

I want to delete existing goals

So that all goals left are realistic, achievable and need to be completed.

Scenario:

Given that I am on the workout recommendation page

When I click the “Delete” button

Then the goal is removed from the workout recommendation page

Requirement 2: Provide a way for users to meet their workout goals

Feature 1: When planning a workout, recommendations are made as per the previously set goal

As a fitness enthusiast

I want to be reminded of my previously set goals

So that I can meet them easily

Scenario:

Given that a goal has been created and I am on the workout log page

When I click the ‘View Recommendation’ button

Then I will directed to a new page showing all goals with recommendations, which I can input into the plan

UI and Usability

Requirement 1: Data is preserved for each individual user

Feature 1: Create an account

As a fitness enthusiast

I want to make an account on this service

So that I can use Full Body Grin to help me achieve the fitness level I want

am shown only data relevant to me, and not others unsolicited
 Scenario:

- Given I am on the Sign in page and I am visiting the site for the first time
- When I click on the "Sign up" hyperlink
- Then I will be directed to a Sign up page
- When I have enter all the fields required and clicks on the 'Submit' button
- Then I will be directed to the Sign in page

Feature 2: User Login with Username/Email Address and Password

- As a fitness enthusiast who has previously signed up
- I want to log into the website
- So that I can access all my information and activities

Scenario:

- Given I am on the Sign in page
- When I enter a valid email address and a valid password and clicks the "Login" button
- Then I am signed into my account and directed to the Dashboard page

Requirement 2: Provide a simple dashboard layout to see all personal progress

Feature 1: All key statistics for the user are displayed on the dashboard

- As a fitness enthusiast
- I want to see all my key statistics on the dashboard
- So that I don't have to look through different pages to see my results

Scenario:

- Given I have created an account
- When I click on "Dashboard"
- Then I will see an overview of my current statistics

Requirement 3: Provide a consistent page design to make the site simple and intuitive to use

Feature 1: The same colour scheme is used across all pages

- As a new user
- I want consistent colour schemes across different pages
- So that I am able to intuitively use the site

Scenario:

- Given that I am signed in on the dashboard
- When I click on the "Workouts" button
- Then the workouts page is the same colour as it is on the dashboard

Feature 2: The same font is used across all pages

As a new user

I want a consistent font across the pages

So that the layout is fluent and easy to use

Scenario:

Given that I have signed in and on the dashboard

When I go to a different page

Then the font is the same as the page before

Requirement 4: Provide easy navigation between different pages**Feature 1:** Have a toolbar to quickly access the Workouts page

As a user

I want to easily move to the workouts page

So that I do not have to always go through the dashboard to reach the page

Scenario:

Given I have created an account and I am on the sleep page

When I click on "Workouts" on the toolbar

Then I will be taken to the workouts page

Feature 2: Have a toolbar to quickly access the Sleep page

As a user

I want to easily move to the sleep page

So that I do not have to always go through the dashboard to reach the page

Scenario:

Given I have created an account and I am on the workouts page

When I click on "Sleep" on the toolbar

Then I will be taken to the sleep page

Feature 3: Have a toolbar to quickly access the Settings page

As a user

I want to easily move to the settings page

So that I can change my settings from anywhere on the site

Scenario:

Given I have created an account and I am on the dashboard page

When I click on "Settings" on the toolbar

Then I will be taken to the settings page

Requirement 5: Provide assistance if an error occurs

Feature 1: Display error message if user sign-up is invalid

- As a new user signing up to the site
- I want to be notified if an error occurs
- So that the issue can be resolved quickly

Scenario:

- Given I am on the Sign in page
- When I enter an invalid email address/password
- Then an error message is displayed notifying me of the issue

Stretch Goals

Incorporating Map Data

Requirement 1: Provide path finding software which selects paths based on the user's terrain preferences rather than just the shortest path

Feature 1: Ability to find a workout between any two start and end points

- As a new user
- So that I can find some workouts
- I want to see some workouts between two point which I want to travel between

Scenario:

- Given that I am creating a new workout
- Then I will be shown a start and end-point entry form
- When I enter my preferred points
- Then I will be shown some paths which I can take

Requirement 2: Provide an easy way to edit a path found by the mapping software

Feature 1: Drag and drop a path to change the route it takes

- As a user looking to input a completed workout
- So that I can accurately record my workout
- I want to be able to change a route given by the map by pulling points off the path to the path I took

Scenario:

- Given that I have completed a workout
- Then while I am inputting the path which I took

When I drag one point of the shortest path to another place best reflect my workout

Then a new shortest path including that point should be found

Sleep and Mental Health Tracking

Requirement 1: Provide sleep tracking technology that is not too complicated and does not require the user to use specialised hardware or keep track of a number of complicated factors

Feature 1: Ability to track sleep quality from minimum input

As a mindful user

So that I can easily record my sleep over several nights

I want to be able to track my sleep quality online

Scenario:

Given that I am on the dashboard page

When I click on the “add new sleep” button

Then I am presented with a quick and easy method to enter information about sleep

Feature 2: Accurately present sleep information based on user input

As a mindful user

So that I can improve my overall wellbeing

I want to be shown accurate information regarding my sleep without me having to manually record excessive amounts of data each day

Scenario:

Given I have entered my sleep data

When I submit my response

Then I am able to see useful graphical information about my sleep patterns

Feature 3: Sleep tracking does not require specialised hardware

As a busy user

So that I can benefit from sleep tracking

I want a simple method that does not require me to set up complicated devices in my home

Scenario:

Given I wake up from my sleep

When I go to the website on my computer or phone

Then I am able to easily enter my sleep data

Requirement 2: Provide a software tool that allows users to view how their sleep quality impacts their workouts and exercise

Feature 1: Sleep data is viewed alongside daily exercise

As a fitness enthusiast

So that I can understand how to improve my overall health

I want to understand how my sleep impacts my exercise

Scenario:

Given I have logged a workout on the website

When I review information about that workout

Then I am able to see the corresponding sleep data for that day

Feature 2: Simplified exercise data is viewed alongside sleep information

As a mindful user

So that I can get a better night's sleep

I want to understand how my daily exercise impacts my sleep

Scenario:

Given I have entered sleep data

When I review information about that night

Then I am able to see the previous day's workout information

Requirement 3: Provide an application that incorporates both mental and physical health together

Feature 1: Allow the user to give a qualitative description of their mental health each day

As a mindful user

So that I can track my long term mental health

I want to be able to log how I am feeling day by day

Scenario:

Given I have logged into the website

When I navigate to the home page

Then I am able to describe my mental health based on a few simple qualitative questions

Feature 2: Display a history of previous mental health responses

As a fitness enthusiast

So that I can view my mental health over time

I want to be able to view a visual representation of my progress

Scenario:

Given I have entered mental health data
When I view the dashboard page
Then I can see a visual representation of my past mental health

Feature 3: Display mental health and physical health together

As a mindful user
So that I can see how my mental health affects my exercise and vice versa
I want to be shown mental and physical health in the one convenient location

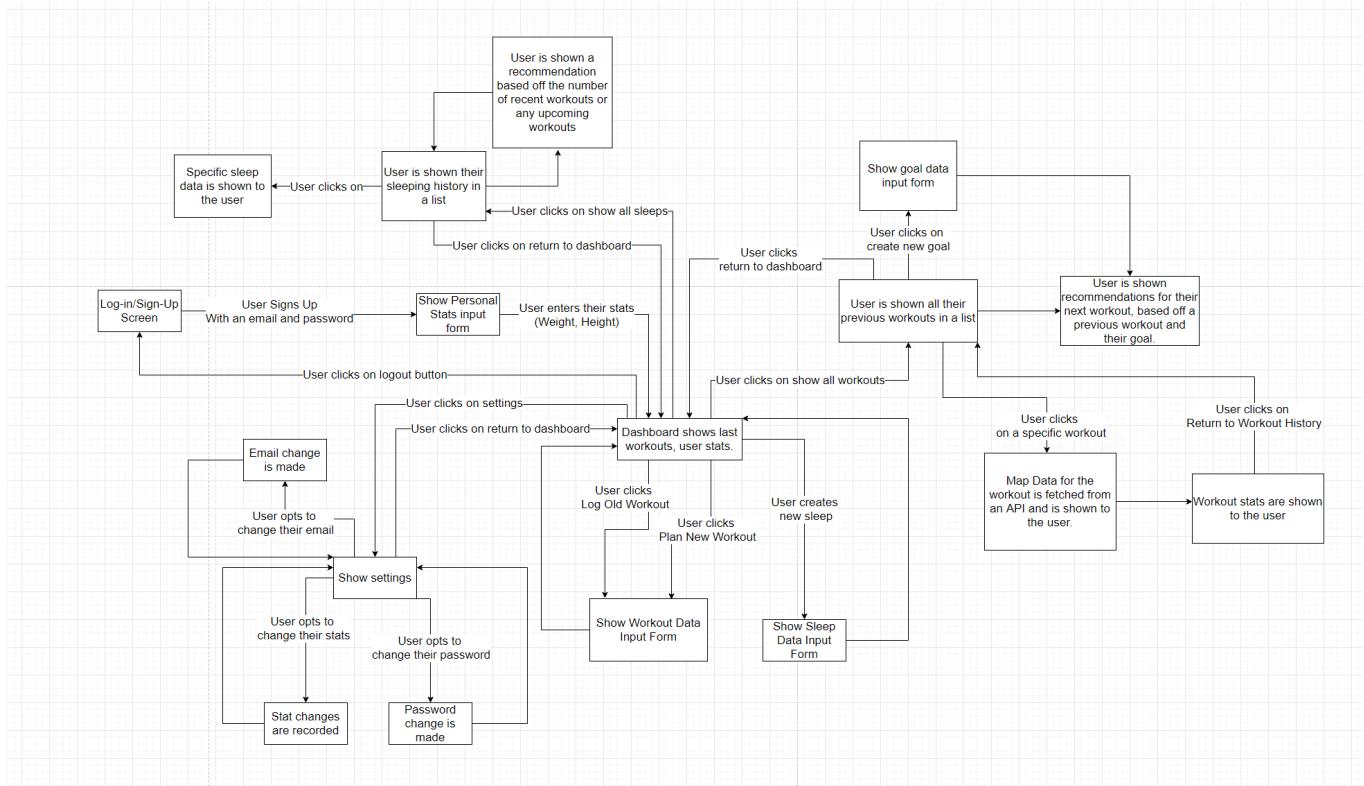
Scenario:

Given I am viewing previous workout information
When I show details about a specific workout
Then I can see my corresponding mental health rating at the time

Low-Fidelity Prototype

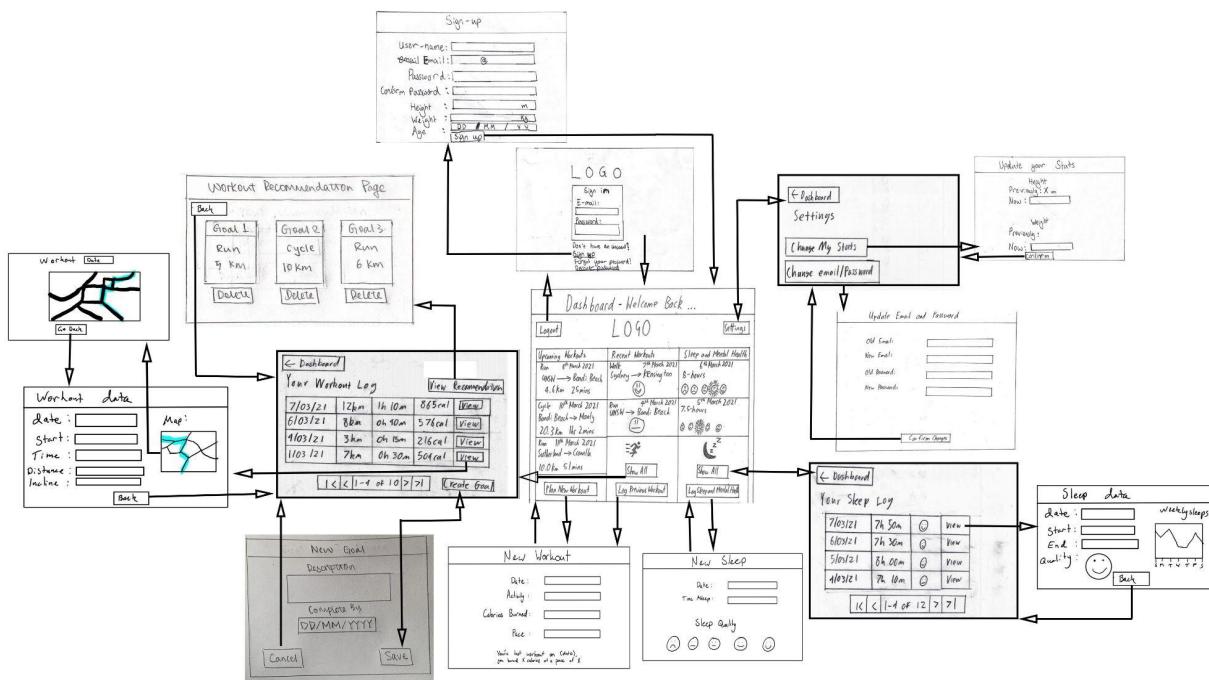
Initial storyboard layout

See <https://i.imgur.com/3xG5ZkX.png> for higher resolution.



Storyboard with component sketches

See <https://i.imgur.com/r67oSM6.jpg> for higher resolution.



High-Fidelity Prototype

Dashboard



Dashboard - Welcome Back John Smith!

Logout Settings

Plan Workouts!

Upcoming Workouts

- Run 8th March 2021
UNSW to Bondi Beach
4.6km - 25mins
- Cycle 10th March 2021
Bondi Beach to Manly
20.3km 1hr 2mins

Show All Plan New Workout

Recent Workouts

- Walk 7th March 2021
Sydney to Kensington
- Run 4th March 2021
UNSW to Bondi Beach

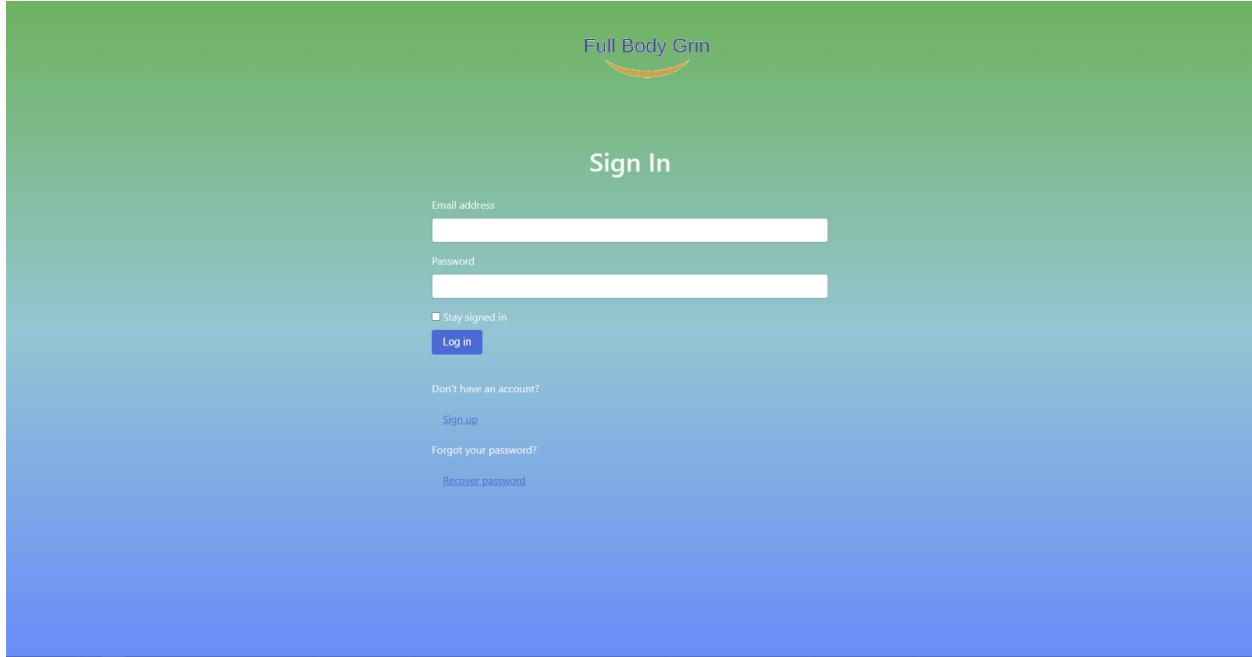
Show All Log Previous Workout

Sleep and Mental Health

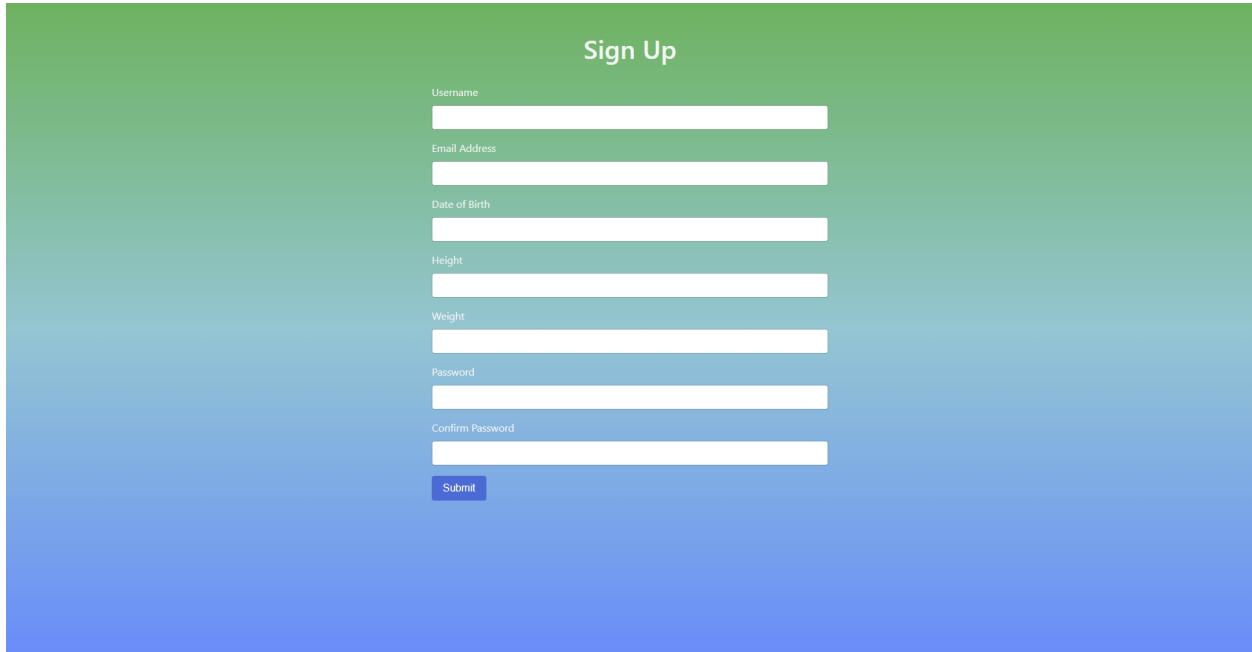
- 6th March 2021
8-hours Sleep
- 5th March 2021
7.5-hours Sleep

Show All Log Sleep and Mental Health

Sign in



Sign up



Settings



Update email/password

A screenshot of a form titled "Update Email and Password". The form has four input fields: "Old Email Address", "New Email Address", "Old Password", and "New Password", each with a corresponding text input field below it. At the bottom is a blue "Submit" button. The background of the form is a blue gradient.

Update personal stats

The screenshot shows a 'Change Your Stats' form. At the top left, there's a breadcrumb navigation: 'Dashboard / Settings / Update Your Stats'. The main title 'Change Your Stats' is centered at the top. Below it, there are two sections: 'Height' and 'Weight'. Each section has a previous value, a current input field, and a 'Now:' label. A 'Submit Changes' button is located at the bottom of the form.

Attribute	Previously	Now
Height	1.87 m	<input type="text"/>
Weight	92 kg	<input type="text"/>

[Submit Changes](#)

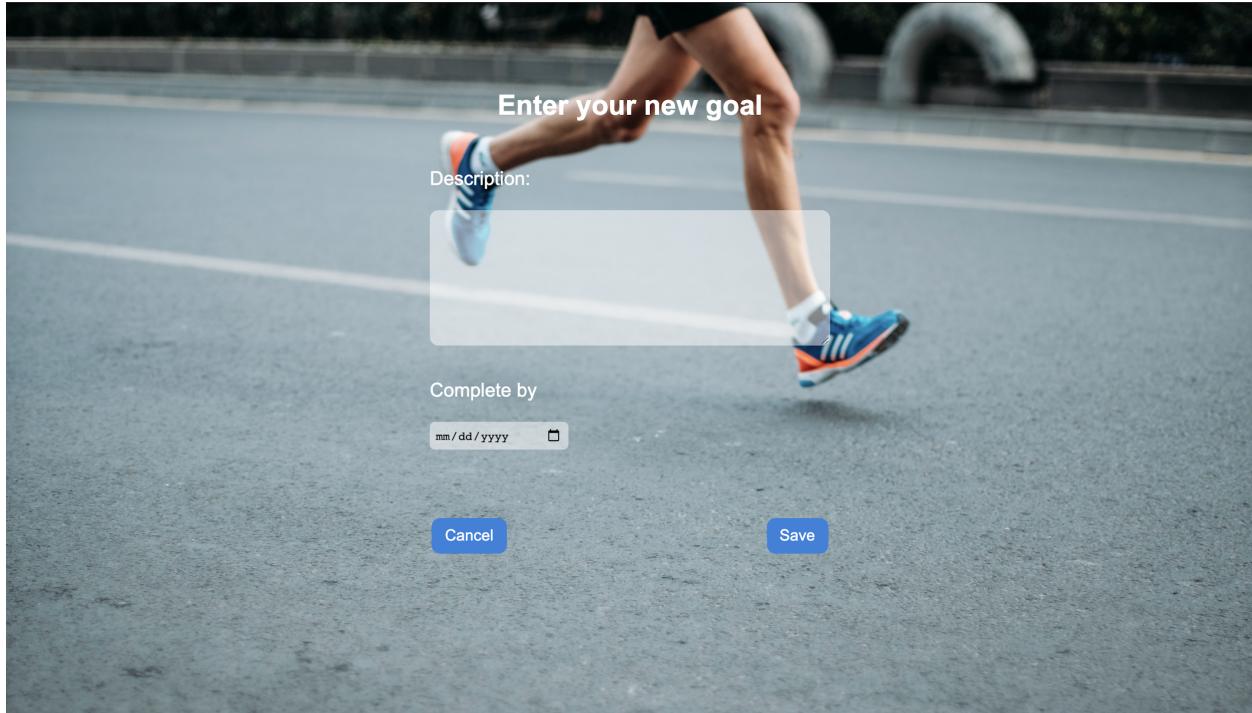
Workout log

The screenshot shows a 'Your Workout Log' page. At the top left, there's a 'Dashboard' button. To the right, there are two blue buttons: 'View Recommendation' and 'Create Goal'. The main title 'Your Workout Log' is centered above a table. The table has four columns: 'Date', 'Distance', 'Time Taken', and 'Calories'. Each row contains a 'View' button in the last column. At the bottom of the table, there are navigation links for 'Previous' and 'Next' pages, along with page numbers 1 through 5.

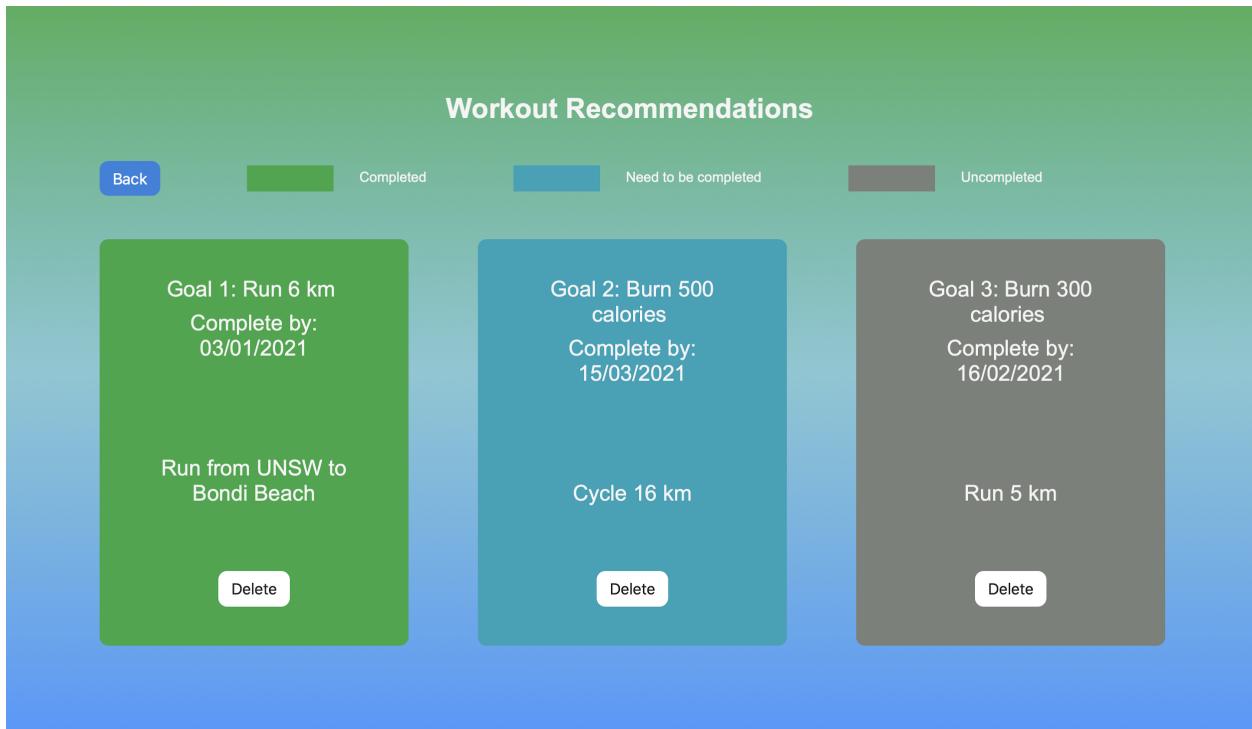
Date	Distance	Time Taken	Calories	
7/03/21	12km	1h 10m	865	View
6/03/21	8km	0h 40m	576	View
4/03/21	3km	0h 15m	216	View
1/03/21	7km	0h 30m	504	View
28/02/21	8km	0h 40m	576	View

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Create new goal



Workout recommendation



A mobile application interface titled "Workout Recommendations". It includes a navigation bar with "Back", "Completed" (green), "Need to be completed" (blue), and "Uncompleted" (grey) buttons. Below is a list of three recommendations:

- Goal 1: Run 6 km**
Complete by: 03/01/2021
Run from UNSW to Bondi Beach
[Delete](#)
- Goal 2: Burn 500 calories**
Complete by: 15/03/2021
Cycle 16 km
[Delete](#)
- Goal 3: Burn 300 calories**
Complete by: 16/02/2021
Run 5 km
[Delete](#)

New Workout

New Workout

Date

Activity

Calories Burned

Pace

Your last workout on March 12th 2021, you burned 324 calories at a pace of 15 calories/min

New Sleep

New Sleep

Date

Time Asleep

Sleep Quality

• • • • •

Sleep log (Stretch Goal)

[Dashboard](#)

Your Sleep Log

Date	Time In Bed	Sleep Quality	
7/03/21	7h 50m	😊	View
6/03/21	7h 30m	😊	View
4/03/21	8h 00m	😊	View
1/03/21	7h 10m	😊	View
28/02/21	8h 10m	😊	View

[Previous](#) | [1](#) | [2](#) | [3](#) | [4](#) | [5](#) | [Next](#)

Individual Sleep

Sleep Data

Date: 08/03/2021

Start: 11:30 pm

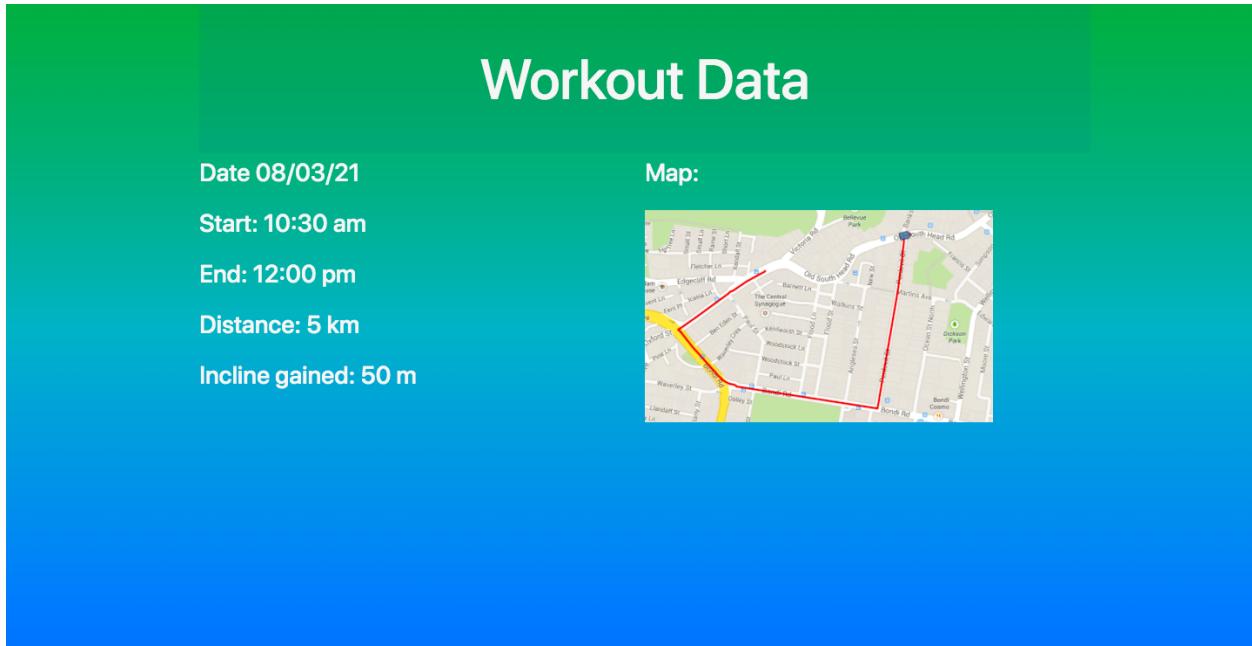
End: 7:00 am

Quality: 😊

Weekly Sleeps:

Day	Sleep Duration
Sun	8 hours
Mon	6 hours
Tue	7 hours
Wed	5.5 hours
Thu	6 hours
Fri	5.5 hours
Sat	8 hours

Individual Run



Map of Individual Run

