

The background features several abstract geometric shapes. In the top right corner, there is a cluster of overlapping circles in yellow, green, and brown. Scattered throughout the slide are various curved lines and arcs in shades of yellow, green, and brown, creating a modern, minimalist aesthetic.

# Health Metrics Visualization

# The Members

Aditi Kisara

- User Interface & Calories Tab

Alejandro Sanchez

- Back-end and Data management

William Yang

- User Interface & Profile Tab

Nu-Chong Lee

- User Interface & Weight Tab

Cesar Garcia

- User Interface & Workout Tab

# What We Are



## A mobile app that:

Records daily, weekly, and monthly fitness activities and wellness attributes such as

- Hydration
- Calorie intake
- Workout hours
- Weight

Provides an interactive breakdown of user fitness data

- Users can tap on these interactive panels to acquire more information to help them reach their fitness goals



## Tools we used:

Google Fit API

Android Studio

Visual Studio Code

SQLite for Android for database management

# Use Case

- **When can you use the app?**
  - Users can track their calories, workout hours, and more, on a daily-, weekly-, and monthly-basis
- **Where can you use the app?**
  - Can be used anywhere with an android smartphone
    - At home, at the gym, or anywhere the user wants to be active
- **Who can use the app?**
  - Beginner-friendly and includes easy-to-learn controls
    - Gives the user insight of their own fitness routine
  - Experienced users are welcome to use our app

# Interaction Design

The app should be customizable

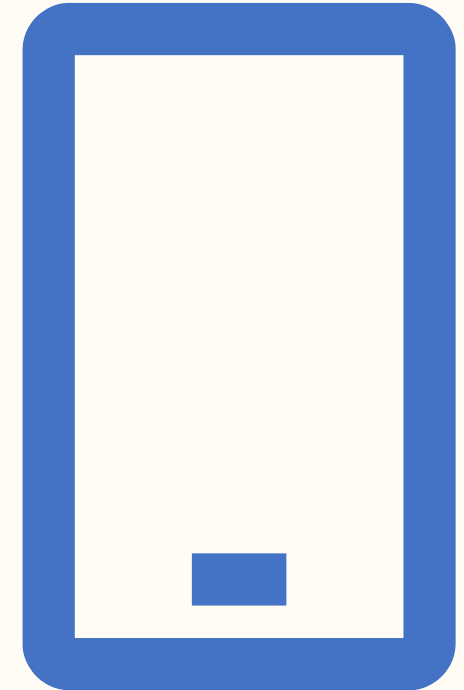
- The user should be able to set their goals
- The app should track how much progress they have made based on their goals

The app should feel welcoming

- Set up a color scheme that would feel calm, but also encouraging
- Because there is no important information being represented through color, we do not need to account for people with colorblindness

The app should be easy to use

- The user should be able to navigate around the app with ease
- All options are visible upon opening the app
- Any input from the user should update the corresponding logs
- The user can click on a point on the graph to show more information



# Interaction Design

## User Registration

- We wanted the user to save their personal information and fitness goals to tailor to the user's needs.
  - Ex. The user can set a calorie-intake goal

## Overall Design

- Used tabs so that the user always knows what options are available as soon as they open the app
  - Can swipe or tap between tabs
- The user profile is at the top corner of the page
- Graphs help visualize the user's progress
  - Users can gain more insight of their fitness patterns by tapping on graphs
- All the user data is stored locally on the mobile device (i.e., no cloud storage is available)

The image shows a mobile app registration screen. At the top, it says 'Welcome to <Health Metrics Visualization>!' followed by a motivational message: 'Get ready to level up your workout routine with <Health Metrics Visualization>.' Below this is a form titled 'Please fill out the following fields'. The form is divided into two sections: 'Profile Information' and 'Daily Goals'. The 'Profile Information' section includes fields for Name (John Doe), Age (25), Weight (200 lbs), and Height (5 feet 6 inches). The 'Daily Goals' section includes fields for Weight (180 lbs), Calories (2000 cal(s)), Time Working Out (2 hours 15 min(s)), and Water (4 cups). A green 'Continue >' button is at the bottom right of the form.

**Welcome to <Health Metrics Visualization>!**

Get ready to level up your workout routine with <Health Metrics Visualization>.

**Please fill out the following fields**

Profile Information

Name  
John Doe

Age  
25

Weight  
200 lbs

Height  
5 feet 6 inches

Daily Goals

Weight  
180 lbs

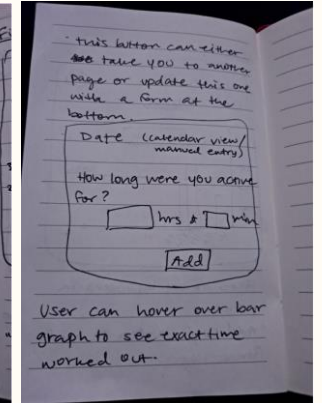
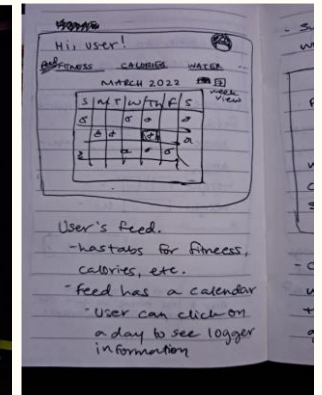
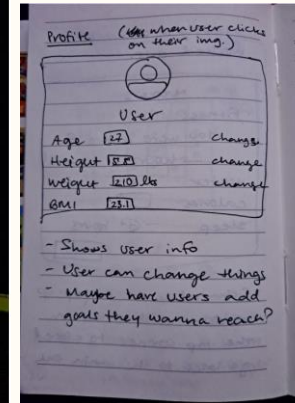
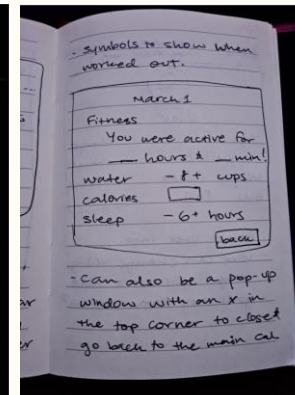
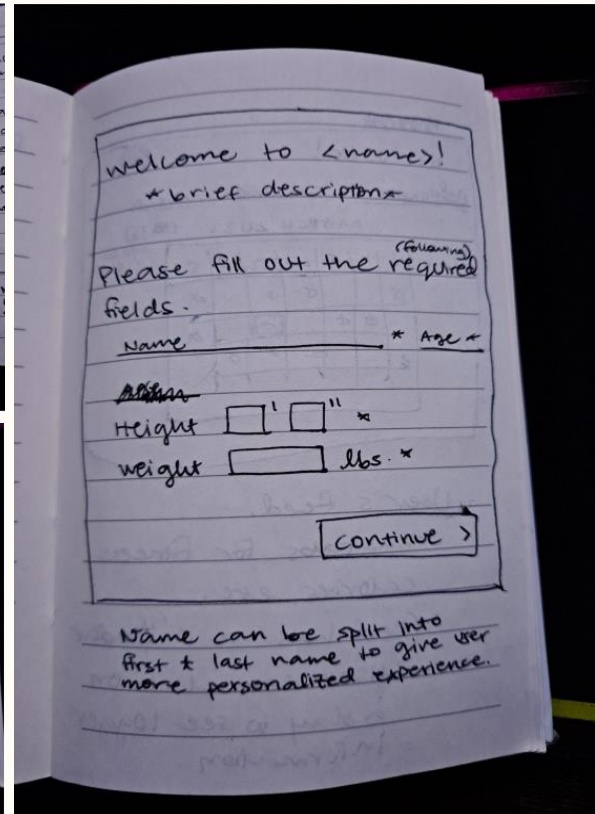
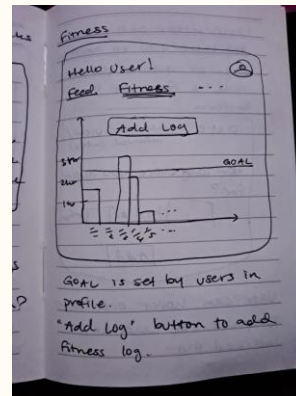
Calories  
2000 cal(s)

Time Working Out  
2 hours 15 min(s)

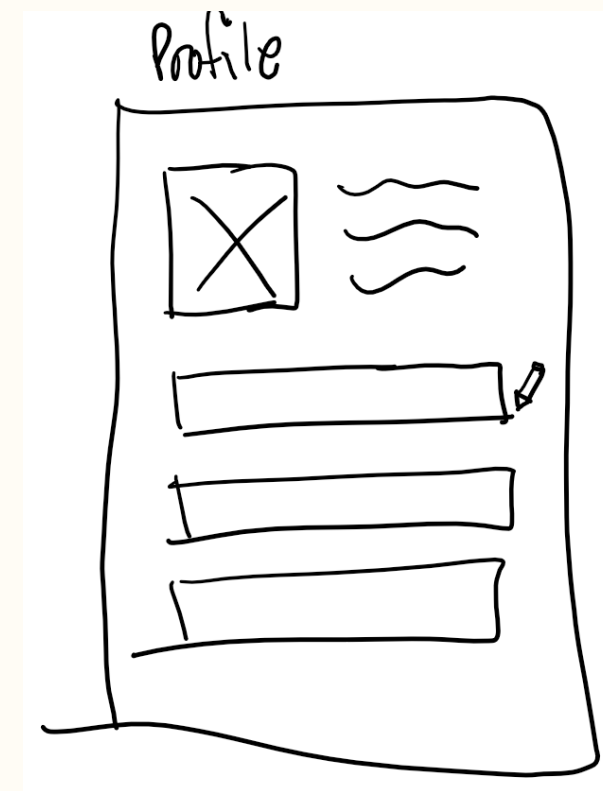
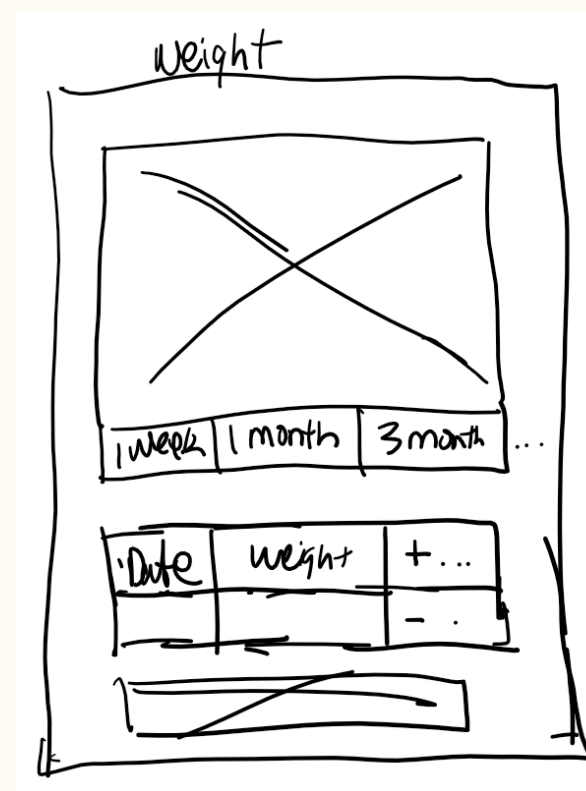
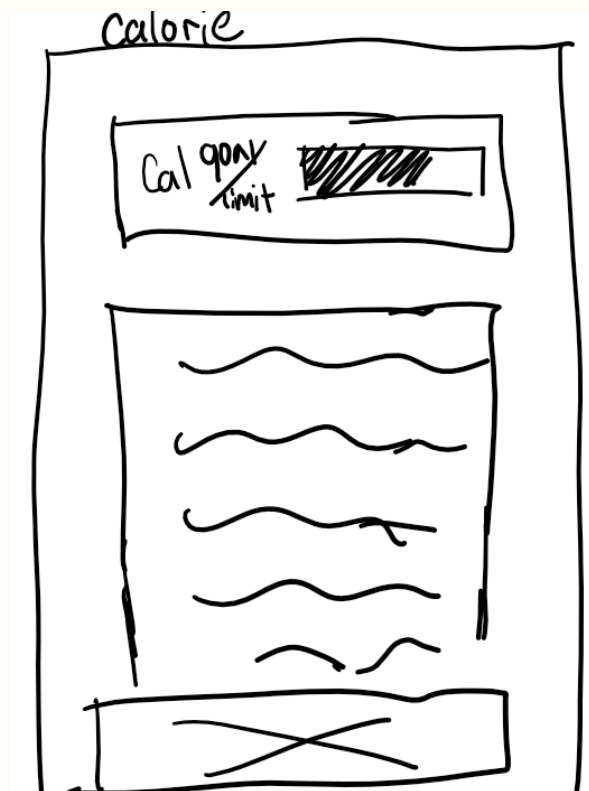
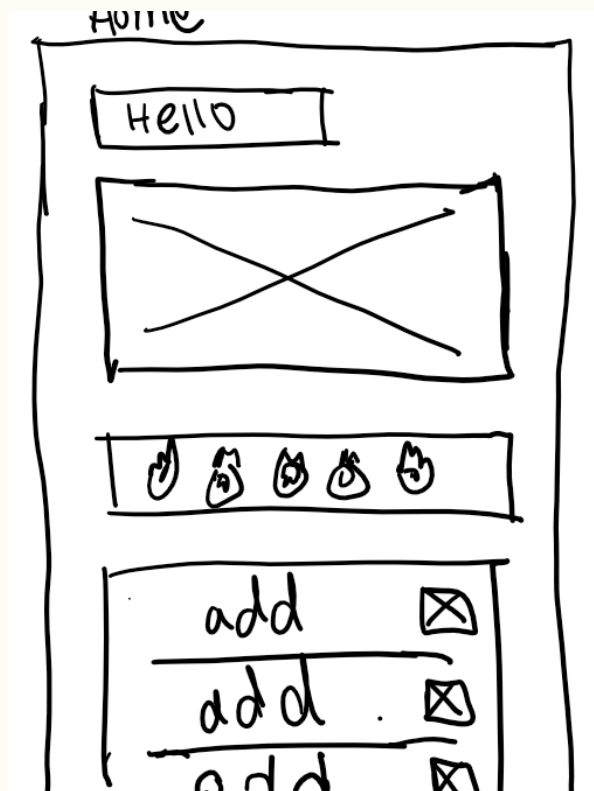
Water  
4 cups

**Continue >**

# Low-fi Designs



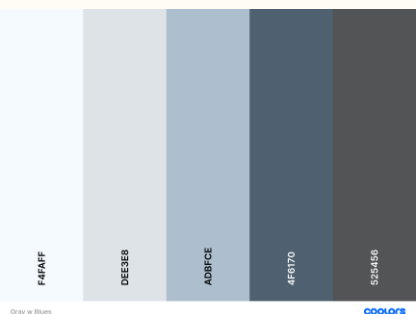
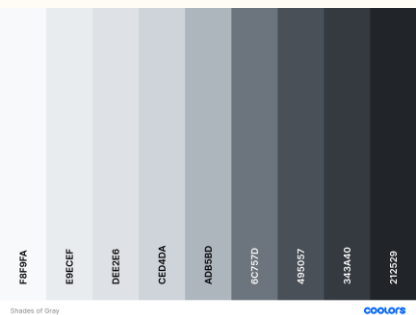
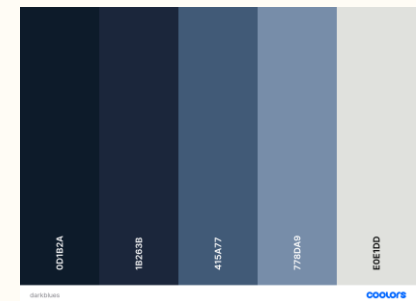
# Interface Design





# Theme Ideas

## Dark



## Sporty



## Energetic



## Outdoors



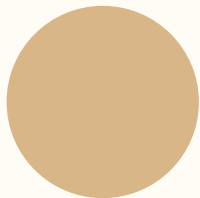
# Color Scheme

Image for Inspiration

Background

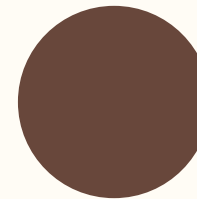


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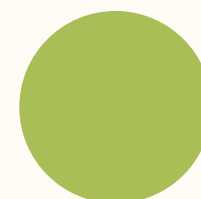


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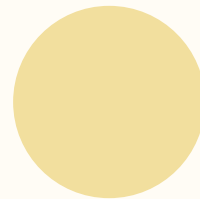
Accent



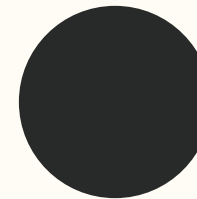
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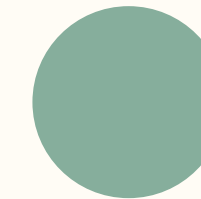
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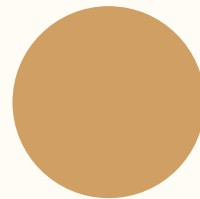
#F2DF9E



#282A29



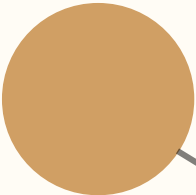
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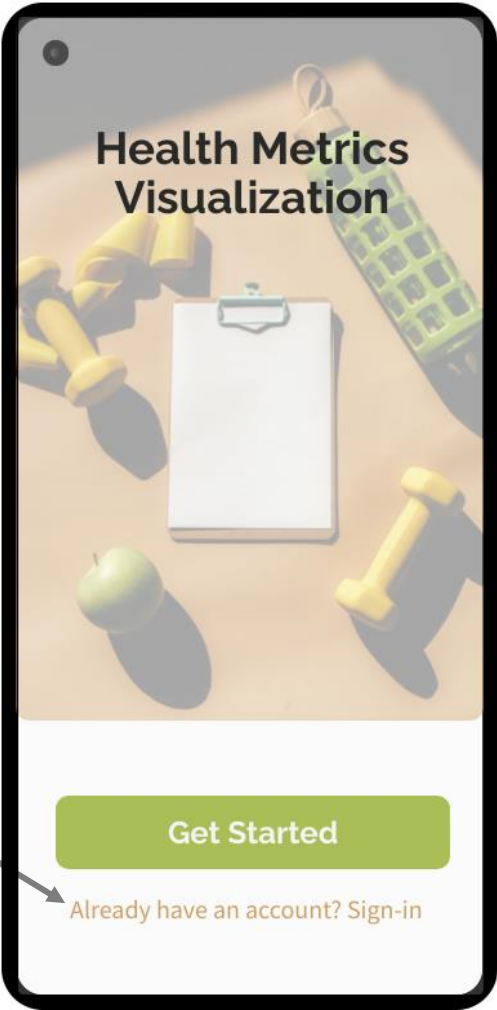
#D09F64

# Application of Colors

Alternative  
Action



#D09F64



Welcome to <Health Metrics Visualization>!

Get ready to level up your workout routine with <Health Metrics Visualization>.

Please fill out the following fields

Profile Information

Name  
John Doe

Age  
25

Weight  
200 lbs

Height  
5 feet 6 inches

Daily Goals

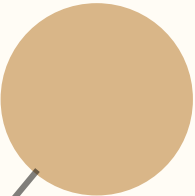
Weight  
180 lbs

Calories  
2000 cal(s)

Time Working Out  
2 hours 15 min(s)

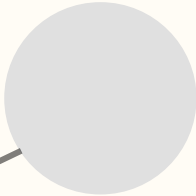
Water  
4 cups

Continue >



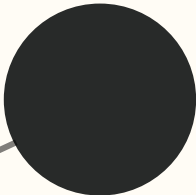
#D9B688

Background



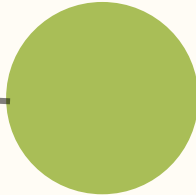
#E0E0E0

Background



#282A29


Generic Text



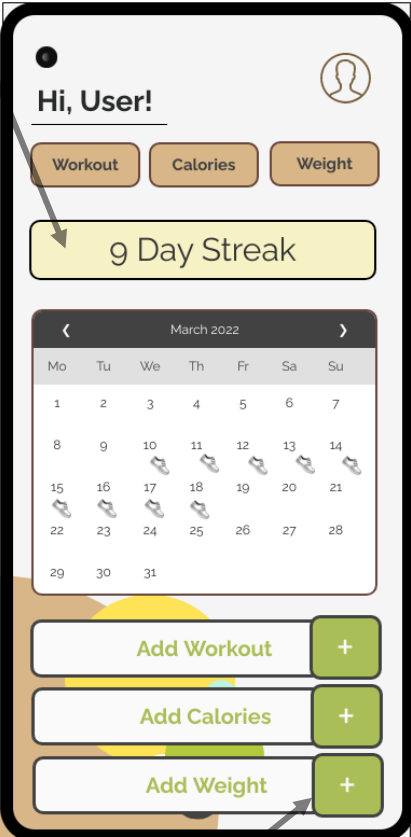
#A9BE57

Call to Action

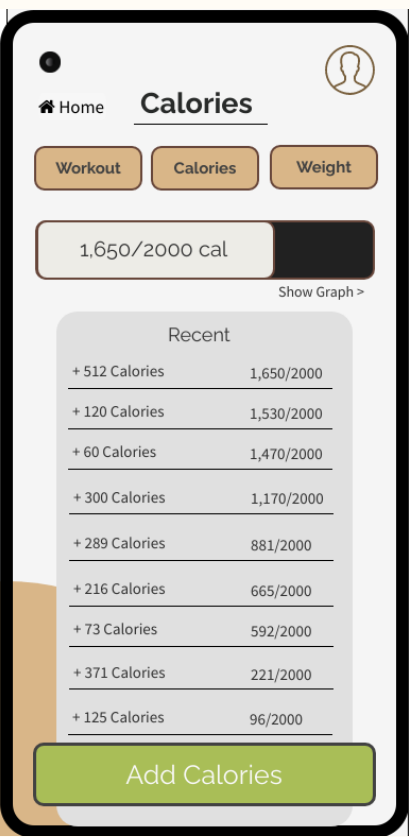
# Color Scheme Application

Check out the rest of the designs [here](#) 

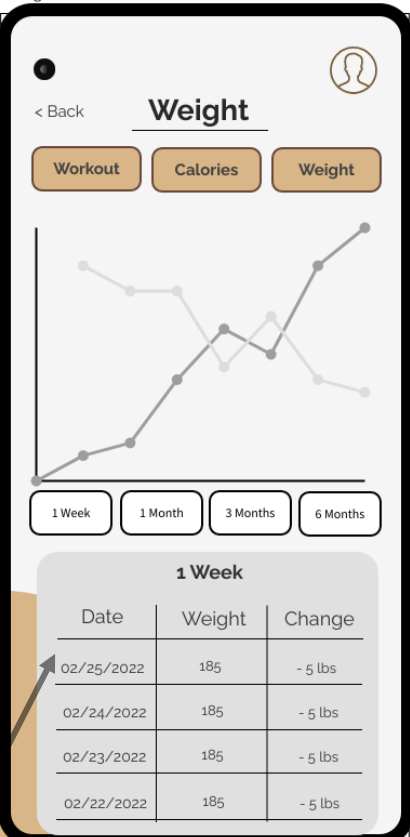
Bright Streak System



Dark Borders



Grayscale & Hierarchy

The "Fitness" screen. It has a header with "Back" and "March 20" tabs. Below are "Date" (02/20/2022) and "Time" (2 hour(s) 13 min(s)) fields. A "Description" section has a large white input box. At the bottom is a green "Add to Workout Log" button.

White Input Box

Grayscale

The "Profile" screen. It has a header with "Home" and "Profile" tabs. Below are "Workout", "Calories", and "Weight" buttons. A profile section shows "Name John Doe" with an edit icon. Below are fields for "Age 25", "Weight 200 lbs", "Height 5 feet 6 inches", "Daily Goals" (Water 4 cups, Calories 2000 cals), and "Time Working Out 2 hours 15 min(s)". At the bottom is a green "Save Changes" button.

# Colorblindness

## True

Get ready to level up your workout routine with Health Metrics Visualization

Register

Name

John Doe

Age

Age

Height

Feet

Inches

Weight

lbs

Water

5

cup(s)

Calories

2000

Time Working Out

2.5

hour(s)

CREATE YOUR PROFILE >



## Protanopes

Get ready to level up your workout routine with Health Metrics Visualization

Register

Name

John Doe

Age

Age

Height

Feet

Inches

Weight

lbs

Water

5

cup(s)

Calories

2000

Time Working Out

2.5

hour(s)

CREATE YOUR PROFILE >



Absence of the red-sensitive pigment in cones

## Protanomaly

Get ready to level up your workout routine with Health Metrics Visualization

Register

Name

John Doe

Age

Age

Height

Feet

Inches

Weight

lbs

Water

5

cup(s)

Calories

2000

Time Working Out

2.5

hour(s)

CREATE YOUR PROFILE >



Not a complete loss of red sight, some red sensitivity may still exist to some degree

## Deuteranopes

Get ready to level up your workout routine with Health Metrics Visualization

Register

Name

John Doe

Age

Age

Height

Feet

Inches

Weight

lbs

Water

5

cup(s)

Calories

2000

Time Working Out

2.5

hour(s)

CREATE YOUR PROFILE >



Sensitivity to green is reduced

## Deuteranomaly

Get ready to level up your workout routine with Health Metrics Visualization

Register

Name

John Doe

Age

Age

Height

Feet

Inches

Weight

lbs

Water

5

cup(s)

Calories

2000

Time Working Out

2.5

hour(s)

CREATE YOUR PROFILE >



A milder form of deuteranopia

## Tritanopes

Get ready to level up your workout routine with Health Metrics Visualization

Register

Name

John Doe

Age

Age

Height

Feet

Inches

Weight

lbs

Water

5

cup(s)

Calories

2000

Time Working Out

2.5

hour(s)

CREATE YOUR PROFILE >





Impaired blue and yellow vision



# How Does It Actually Look?


Design

Profile



Home **Profile**


 Name John Doe 

Age 25  Weight 200 lbs 

Height 5 feet 6 inches 

Daily Goals

Water 4 cups  Calories 2000 cals 

Time Working Out 2 hours 15 min(s) 

**Save Changes**

and

App

Health Metrics Visual vWill

WELLNES S CALORIES WEIGHT **PROFILE**

Profile

Name

Age  Weight

Height

**Daily Goals**

Water  Calories

Time Working Out

**SAVE CHANGES**

# Where can we go with our app?



Use Google Fit to visualize data more meaningfully



Set reminders to perform physical activities



Set streak reminders to improve user consistency



Give the user a virtual journal to record notes



Track sleep schedule provide suggestions on better sleep habits

# APIs Used

- **MP Android** for showing data to our users.
- **Calendar** and **Date** for getting the user's local date and time to show meaningful weekly and monthly data.

MPAndroidChart  
created by Philipp Jahoda



The background is a light cream color, decorated with several abstract geometric elements. In the top left, a large brown circle is partially visible, with a yellow arc curving around its bottom edge. In the top right, a dark navy blue circle is partially visible. Further right, a large yellow circle is partially visible. In the center, there is a medium-sized light grey circle. In the bottom left, a green circle is partially visible, with a brown arc curving around its top edge. In the bottom right, a small teal circle is visible, with a brown arc curving around its right side and a yellow arc curving around its bottom. There are also several small, isolated arcs in various colors (brown, yellow, green, grey) scattered across the page.

# Demo



# Thank You!

Aditi Kisara, Alejandro Sanchez, William Yang, Nu-Chong Lee, Cesar Garcia