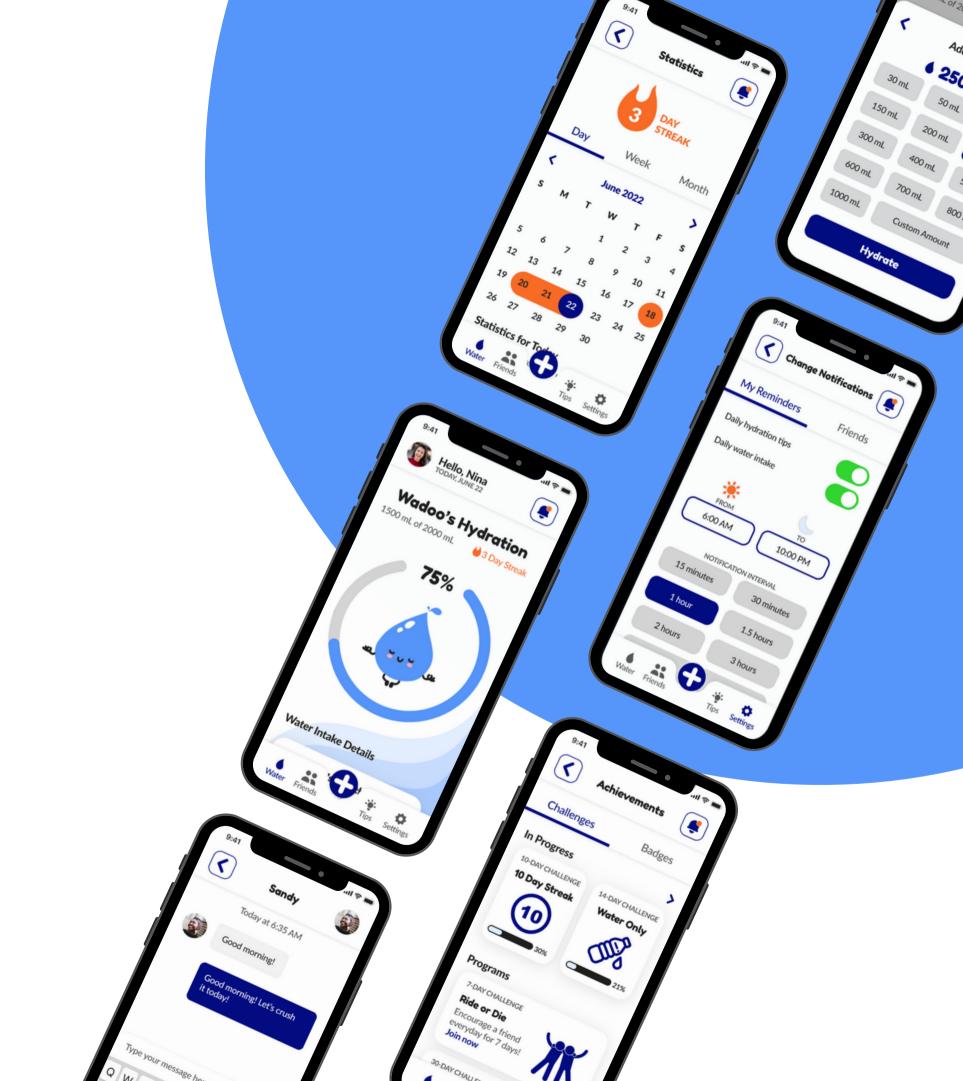
UX/UI Design Case Study

drippi Presentation

An interactive water tracking app to help you build a healthy hydration habit.



Context

Although all liquids can help with hydration, water is usually the best choice as it has no sugar or calories. Besides quenching thirst, water has been the "it" beverage in recent years due to its ability to maintain healthy skin, aid digestion, and assist in other bodily functions. Drinking water is clearly beneficial to our overall health and is easy to access in most cases. But why is something that sounds so simple so challenging and how might we help people drink water more frequently?

Role

Sole UX/UI Designer with full ownership of the product from conception to delivery

Method

Interviews, Surveys,
Competitor analysis, User
personas, Journey map,
HMW questions, User
testing, Wireframes and
Prototyping

Tools

Figma, Miro, Adobe Illustrator, Adobe Photoshop

Process







Secondary Research

To get a better understanding of the problem space, I began to draw from research articles on the topic of water hydration and motivation.



Water Hydration

Over the years, there have been various <u>studies</u> suggesting that we drink at least 8 glasses (2 litres) of water each day. Despite this claim, an average adult falls short of that and only drinks 0.5–1 litre daily whilst still being able to function well day to day. This is because no single formula fits everyone. Our individual water needs depend on many factors such as **age**, **environment**, **activity level**, **and overall health**. Keeping this in mind, our users should have the ability to **personalize their hydration goals** to ensure that they are drinking the proper amount based on their needs.

Though most of us can survive with less than 8 glasses of water a day, an average person usually has no idea that they are dehydrated! Drinking water doesn't come naturally to us as it should due to our busy schedules, as well as the tendency to opt for sweeter or caffeinated drinks. Hence, it's important to **find opportunities to remind users to drink and motivate them to choose water** over other beverages.



Motivation

When looking into what motivated and inspired people to achieve their goals, I stumbled upon an eye-opening statistic from the <u>American Society of Training and Development</u>:

"..people are 65 percent likely to meet a goal after making their goal public. But their chances of success increase to 95 percent when they have a specific accountability partner to report to"

Fortunately, the encouragement and support of another person can fuel one's desire to be consistent and succeed in their goals.

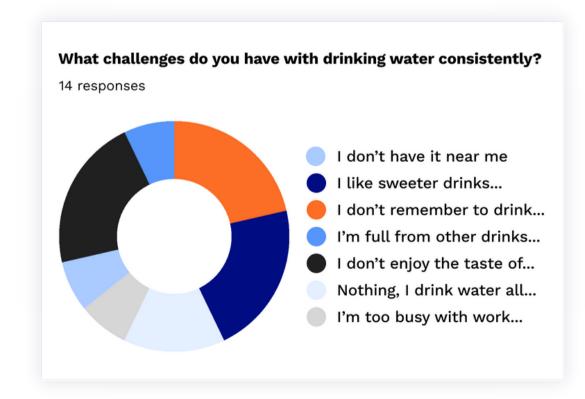


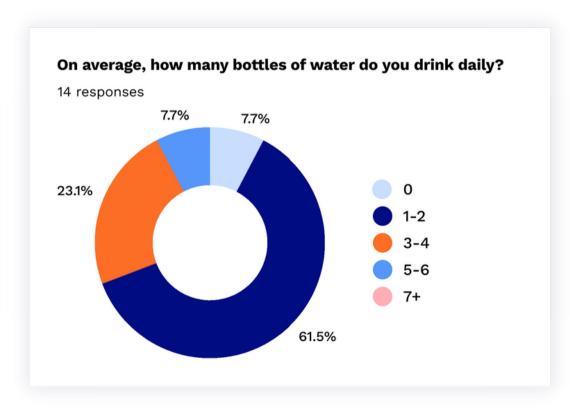
Primary Research

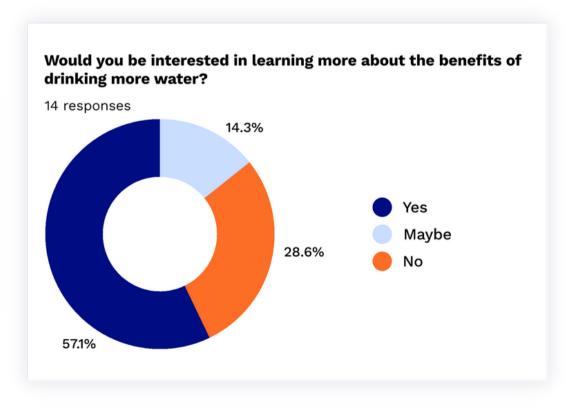


Survey

My focus with the screener survey was to determine which participants had difficulty drinking water consistently and to find out their challenges. This will help me discover what I can incorporate into their routine in order to motivate them.







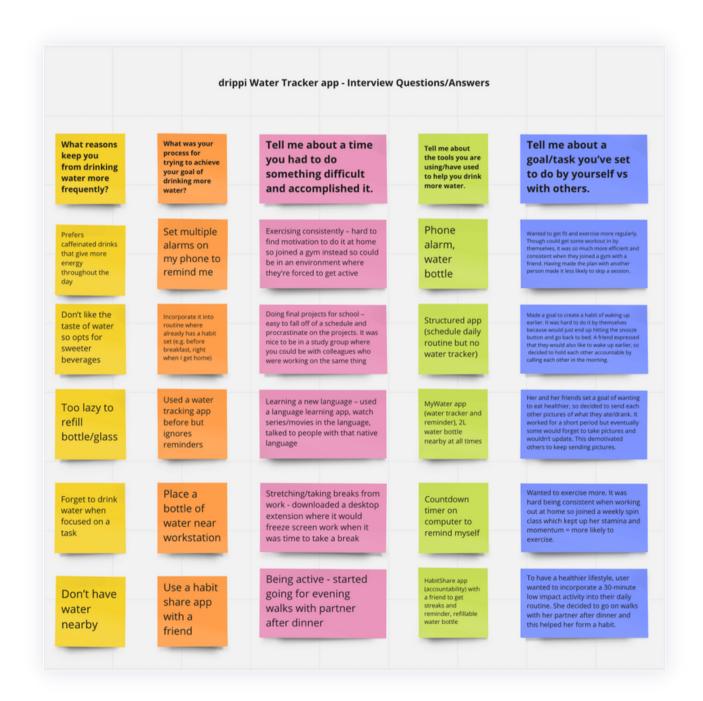


User Interview

With the goal of understanding how an average person made use of existing water tracking methods, which features they thought were most important, the issues they faced, and their personal experience with developing and maintaining habits, I surveyed 5 users of varying lifestyle and activity levels.

Interview Questions:

- What is your process for trying to achieve your goal of drinking more water?
- What reasons keep you from drinking water more frequently?
- Tell me about a time you had to do something difficult and accomplished it.
- Tell me about the tools you are using/have used to help you drink more water.
- Tell me about a goal/task you've set to do by yourself vs with others.



View board in full size



Competitor Analysis



















HabitShare

I analyzed 6 apps related to increasing water intake and forming habits. Based on my research, I knew that an accountability component is key to helping users achieve their daily hydration goals more consistently. The habit-forming app provided some insight into how another user with the same goal can help with staying motivated and consistent. However, I found that **none of the water-tracking apps had a focus on accountability partners and friendly competition**. This then became my opportunity for the solution.



Research Synthesis

After conducting the surveys, interviews, and competitor research, I now have a better understanding of the needs and frustrations of my users. I was able to gather a few important key findings to help shape my project



Insight 1 - Accountability is key

As the accountability statistic above mentioned, a person is more likely to achieve their goals when they have a specific partner to report to. This was further emphasized when the interviewees reported difficulty accomplishing goals they worked on by themselves versus having a partner who worked alongside them.

Solution: Have an accountability-focused functionality where users can easily motivate and remind each other to drink water.



Insight 2 - Drinking water is not a priority

Those who had busy schedules or were preoccupied with an activity did not see drinking water as a priority. When focused on a task, people often forget to take a sip of water especially when they don't feel thirsty. Regular reminders such as phone alarms or placing their cups beside them were helpful but were also sometimes dismissed.

Solution: Encourage users to prioritize drinking water by correlating it to a digital character that they need to take care of as well as regular reminders with motivating messages.



Insight 3 - Drinking other beverages

One of the reasons why interviewees did not drink enough water was because they were already full from sugary or caffeinated drinks. Although drinking any kind of beverage to stay hydrated is better than drinking none at all, water is still the best choice as it has no sugar or calories. There are water flavoring products in the market but we want to encourage users to get used to drinking plain water.

Solution: People are more likely to do something if they know the "why" behind it. We can't change people's taste preferences but we can encourage them by informing them of the benefits of drinking plain water.



User Personas

Since one of the key findings from my user research was the fact that there were varying factors that determined a person's hydration needs and willingness to accomplish a goal, I created 3 different personas: the **anti-water drinker**, the **preoccupied drinker**, and the **dehydrated drinker**. I often revisited these user personas to remind myself of the needs and frustrations of my users, and to maintain a user-centric focus throughout the project.



Discovery: User Personas (The Anti-water Drinker)

Forrest

The Anti-water Drinker | 20 years old | Engineering Major | Eureka, Nunavut



About

Hello, I'm Forrest. I'm 20 years old and I'm an engineering major. I often spend a lot of time studying and sometimes lose track of time so I forget to drink water and hydrate myself. When I do, I find myself drinking caffeinated drinks instead to help me stay awake during long study sessions. Despite my busy schedule, I still try to be more conscious about my health, so I usually eat healthy meals. Because of this, I view drinks as my personal treat and end up choosing sugary drinks when I'm thirsty. I don't really like the taste of plain water but I've noticed that I haven't been drinking enough of it so I want to change that.

Pain Points

- Always carries a bottle of water with him but often forgets to drink or refill it.
- Finds himself choosing sugary or energy drinks over water. Already eats healthy meals, so feels that he doesn't have to be strict when it comes to beverages.
- Drinking water is not an enjoyable experience and sometimes feels like a chore.
- Often forgets to sip on water when focused on studying.

Goals

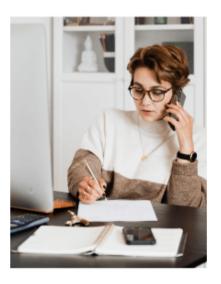
- Understand more about the benefits of water for a healthy lifestyle so he can be more proactive with choosing water over sugary or caffeinated drinks.
- Remember to drink water regularly throughout the day.
- Be able to track water intake to make sure he is drinking a healthy amount.



Discovery: User Personas (The Preoccupied Drinker)

Katherine

The Preoccupied Drinker | 36 years old | Entrepreneur | Edmonton, Alberta



About

Hello, I'm Katherine. I'm 36 years old and I run my own clothing e-commerce site. I am also a single parent to two young kids. With so many things on my mind in a day, drinking water has never been a priority. When I have meetings or work on the computer, I try to take a sip of water periodically but I often just forget about it. In the mornings, I am in such a rush that drinking water doesn't even cross my mind. I want to find a better way to be reminded to constantly drink water whilst juggling my kids and business.

Pain Points

- Constantly on the go, running a business and taking care of kids.
- When preoccupied with another task, drinking water is not a priority.
- Wants to drink more water but doesn't know how to plan it into her routine.
- Often forgets to drink water. Even when she remembers, it's easy to dismiss it.

Goals

- Make drinking water a priority.
- Feel hydrated and energized throughout the day to tackle on busy schedule.
- Remember to drink water during a morning school rush and when working.

Discovery: User Personas (The Dehydrated Drinker)

Ari

The Dehydrated Drinker | 28 years old | Athlete and Instructor | Victoria, BC



About

Hello, I'm Ari and I'm a 28-year-old athlete. I have a very active lifestyle as I train for badminton most of the day and teach a fitness class in the evening. Because I am always moving, I want to ensure that I am drinking enough water and replacing the fluid I sweat out. I don't track how much I drink but I don't think it's enough. I sometimes feel lightheaded when I train and have dry mouth/skin. This is starting to concern me so I need to find a way to ensure I drink sufficient water everyday.

Pain Points

- Forgets to replenish body with enough water during training sessions and fitness classes.
- Notices signs of dehydration. Wants to stop having light-headedness and dry skin when working out.
- Doesn't have an effective way to track water intake throughout the day.

Goals

- Reach a daily goal of water intake to compensate for a very active lifestyle.
- Be able to track water intake and progress.
- Remember to drink water throughout workouts and fitness classes.
- Optimize health to be able to train properly and safely.



Journey Mapping

Keeping my target users in mind, I created a user journey map in order to understand how the user might interact with the different features of the app and to create a more intuitive user experience.



User Journey Map						
Phase	Personalization	Reminders	Accountability	Check Progress	Water Intake	Reach Goal
Tasks	Create account Input personal statistics (age, height, weight, activity level) Get recommended water intake	Select notification schedule	Add accountability partner	Check personal goal progress Check partner's goal progress	Get a reminder Add drink Select amount type	Meet daily water intake goal Adjust goal/statistics
Thoughts	"Signing up is boring but I like how I get to create my own character!" "I don't know my health statistics right now" "I don't agree with their recommended goal"	"I don't want to get too many alerts the whole day" "I want to differentiate this notification from others on my phone" "Hopefully I don't just snooze all of these reminders"	"I don't know who to add" "I feel motivated to work on the same goal with someone else!"	"How is my character doing?" "Have I been consistently achieving my daily goals?" "How's my partner doing today?"	"Time to hydrate my character!" "Should I ignore this message and drink later?" "Inputting a drink is fast and simple"	"Yay my character has been taken care of today!" "I am proud of my progress so far" "I can increase my daily water intake now"
Emotions	••	••	0		· ·	
Opportunities	Create app character during account sign up Sync existing health statistics to app (feature optional) Can accept recommended water intake goal or create own	Set notifications within a time window, with intervals Option to turn on/off partner notifications Option to change notification type/ sound	Allow to find partners through other social media platforms Quickly show friends' progress with option to send reminders/ messages	Quick overview of character on home screen with current water intake amount Show weekly/monthly statistics Overview of personal and partner's progress	Have character say a positive message after adding drink Reminders have motivational messages Daily tips of benefits of drinking water Have water amount suggestions for quick input or custom amount	Send a notification a few minutes before the end of reminder time window if user hasn't reached daily goal yet Have rewards feature for achieving goals consistently Notifications to/from friends after each achievement Option to change goal



"How Might We" Questions

To identify possible issues that the users might experience with the product, I developed a few HMW (How Might We) problem statements to guide me in developing creative solutions and focusing on the right problems to solve.





View board in full size

Define



Problem Statement

Users of every age, lifestyle, activity level, and in any climate need a way to easily track their water intake progress, as well as be motivated to consistently achieve their daily hydration goals.



Feature Prioritization

After exploring some ideas, I decided on a few core features of the app that I wanted to prioritize. These features will best help in addressing the user's needs and solving the issues revealed during my previous research.



Friends

Having an accountability-focused app can help encourage users' willingness to drink throughout the day, as well as create a positive and motivating environment.

Statistics Overview

Having an easy and intuitive way of viewing their daily, weekly, and monthly water intake ensures that users can efficiently track their progress towards their hydration goals.

Character Management

Making sure their character stays healthy and happy will help influence users to drink water consistently and input the amount in the app instead of just dismissing a drink reminder.

Achievements

This includes in-app challenges users can do by themselves or with a friend, as well as badges they can earn from completing milestones - all of which can help engage users to use the app and be consistent.



"Tips" Page

Gaining more knowledge about the benefits of water will encourage users to choose water over other beverages.

Personalized Goals

The ability to get a personalized water intake recommendation ensures that the user's goals are aligned with their personal health and environmental needs.

Optional Notifications

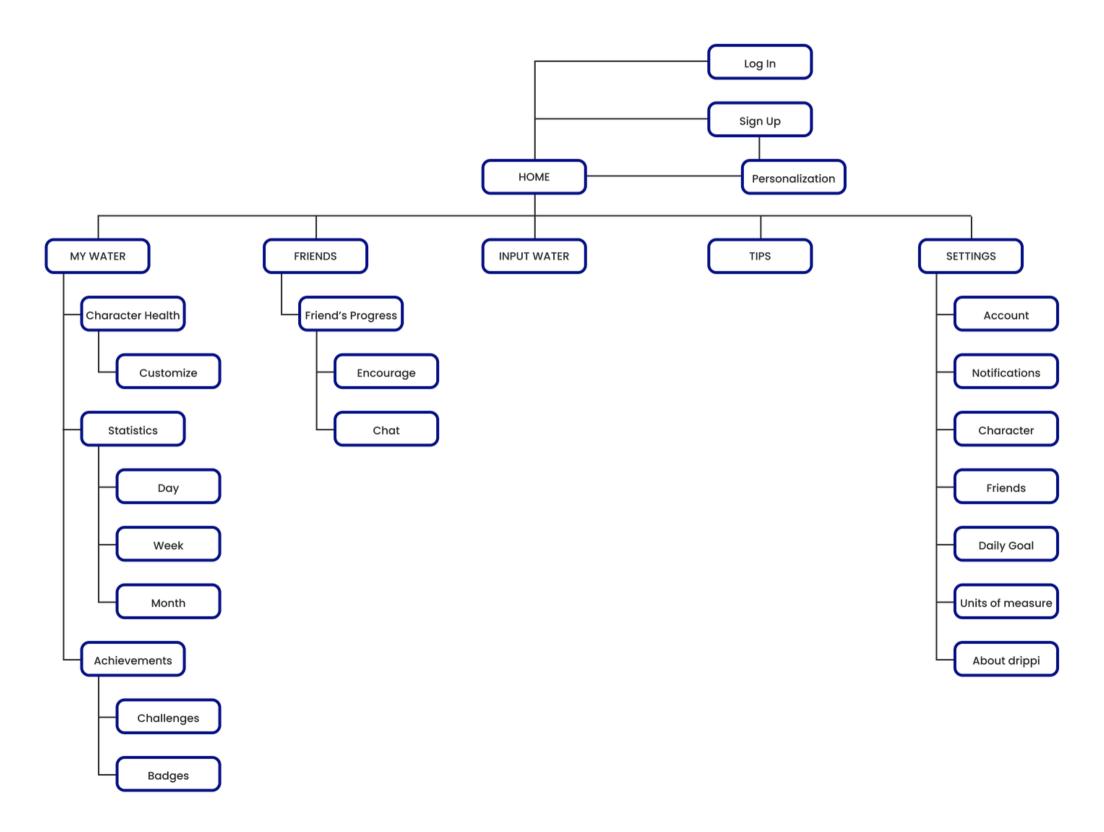
By being able to customize their notifications, users are more likely to repond to them well. The type and frequency of the reminders can be tailored to fit their schedule on a specific day.

Ideate



Sitemap

The Journey Map and HMW Questions helped me better understand the emotional experiences the users might have navigating the app and the possible solutions to them. Taking this insight, I identified core features that I wanted to focus on for the product and used the results to create a sitemap.





Sketches

Now that I have a better understanding of how the users might expect the content to be organized and displayed, as well as the core features to include in the app, I began sketching some ideas of how each screen might look like. This was an efficient way of exploring different ideas and iterating them before taking the time to produce them digitally.







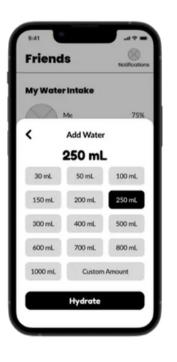
Mid-fidelity Wireframes

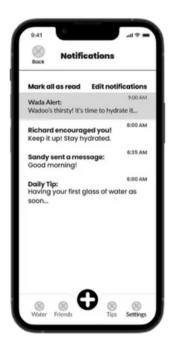
Simplicity and ease of use are one of the biggest aims of the app so I wanted to keep the number of screens to a minimum and highlight only the necessary features. I started with pen and paper, sketching different versions of each screen until I found a combination of features that I thought would display the concept of the app in the most intuitive way.

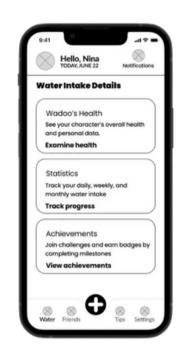


Design: Mid-fidelity Wireframes

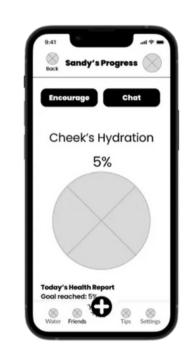




























I then transferred these onto digital mid-fidelity wireframes and made a clickable prototype for my users to test.

Testing



Objective

The core purpose of this application is to ensure that the users can easily track and view their hydration progress, as well as to motivate them to reach their daily hydration goals. By conducting usability tests, I was able to refine what features users were finding useful and what they weren't satisfied with. The users were asked to complete a few scenario-based tasks that allowed them to navigate through all of the features within the app.



Test Questions/Tasks

- Is the user able to input their water intake at any time throughout their navigation of the app?
- Can the user easily view how much water they drank today, this week/month?
- Can the user easily view their friend's water intake and encourage them?
- How does the user feel about comparing their daily water intake with their friends? Does it help in accomplishing their daily target?
- How does the user feel about the concept of taking care of a character to accomplish their goals?
- Does the user feel like they can personalize their notifications according to their preference?
- How does the user feel about the onboarding process and the ease of getting started with the app?
- Is the "Tips" feature helpful in encouraging the user to choose water over other beverages?
- What is the user's experience with navigating from one page to another?
- How satisfied is the user with the overall design of the app?



Testing Results

Overall, the users found the drippi app efficient to use. I made notes of the positive and negative feedback so that I knew what areas to keep expanding upon and what minor problems needed to be addressed.

Positive

- Users were able to complete tasks quickly and navigate throughout the app efficiently.
- Users thought the customizable character, challenges, and "Friends" was a fun way to motivate them to reach their daily goals.
- Users thought the "Tips" feature was insightful.

Negative

- Users wanted a way to revisit their water intake from a previous day.
- Users wanted to customize their character more than just changing its colour/name.
- Users wanted a better overview of their daily hydration progress.

Iterations



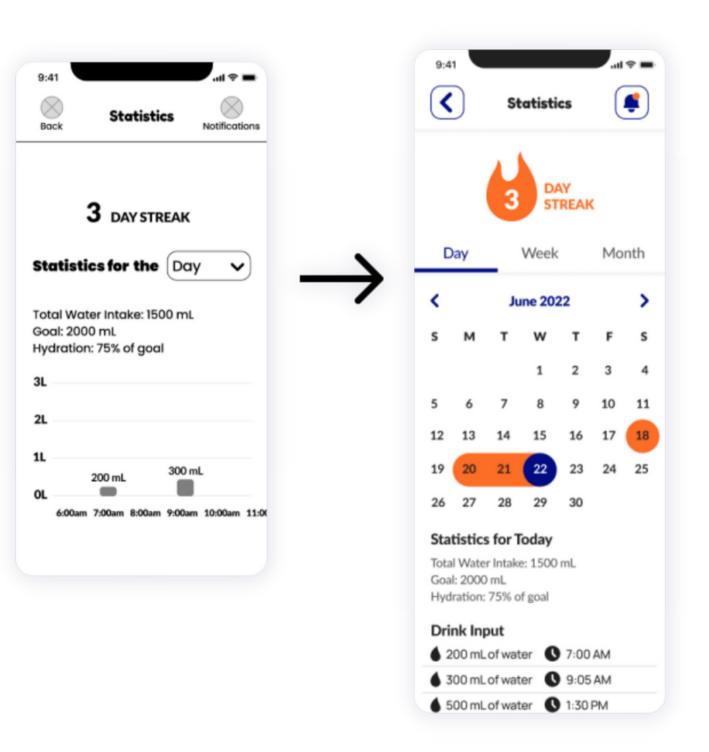
Design Changes

Based on the user feedback, I made a few changes on the design and features of the app. I also reached out for additional feedback from some fellow designers. Throughout my redesigning process, I made sure to apply the Gestalt Principles, colour theory, and made use of grids to ensure consistency within the entire app.



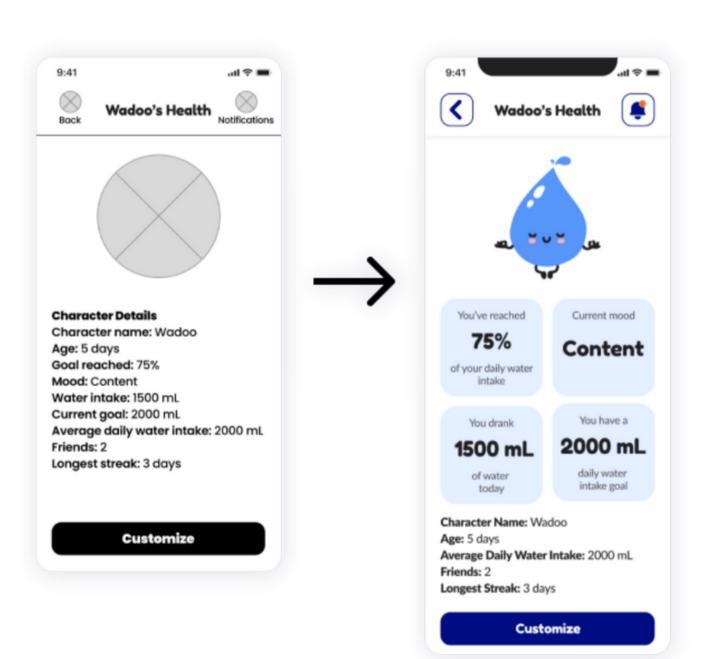
1. Daily Drink Input

Users that wanted to revisit their water input from a previous day were unable to do so with the initial design. To solve this issue, I redesigned the Statistics page so that a full calendar is displayed under the "Day" tab. Users can then tap on a specific day and view the Drink Input from that day. This also helps give a better visual overview of their daily progress and of any streaks.





Iterations: Design Changes



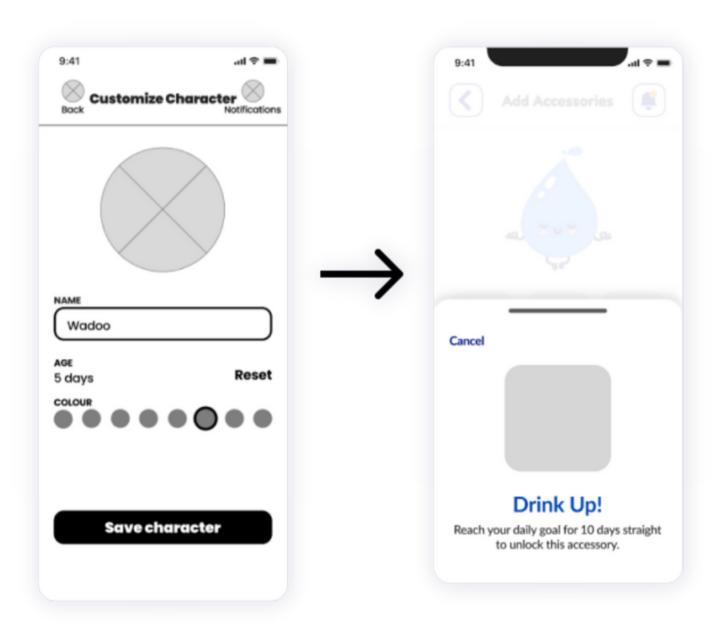
2. Hydration Overview

Users wanted a better way to view their daily hydration progress (their character's health) instead of just reading it through a body of text. To solve this, I determined which parts of their character's health the users would want to have an easy and quick glance of. After prioritizing 4 of these, I designed them onto a card where the main information was enlarged and capitalized.



3. Additional Character Customization

Users enjoyed the concept of taking care of a character in order to accomplish their goals. However, they wanted to customize their character with more than just a change of name and colour. After developing a few ideas, I decided to add an accessories feature and use this to incentivize users to complete challenges, earn badges, or reach a certain day streak to unlock an accessory. This will further engage users to use the app, interact with their accountability partners, and be consistent in drinking their water.





Accessibility

After conducting some research on accessibility in design, I made a few changes in order to meet WCAG requirements.



1. Placeholders and labels

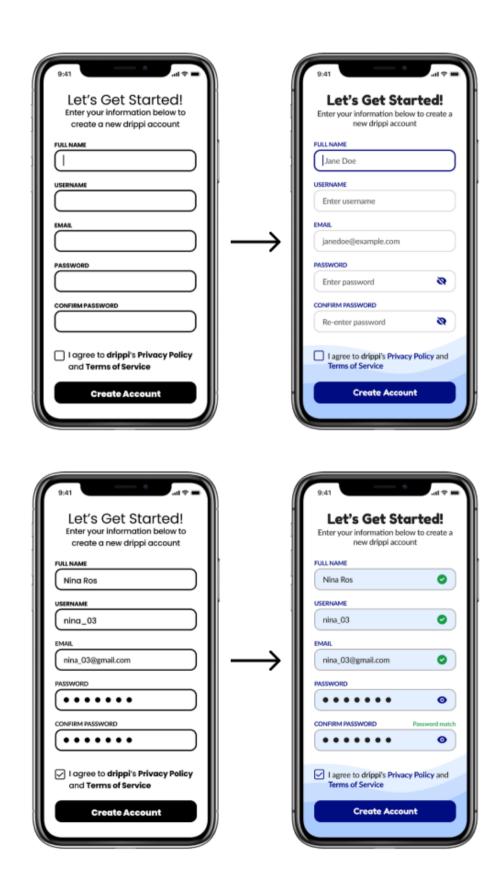
Originally, drippi's sign up form used only labels for each input field. Now, it also includes placeholder text to better guide users on the right information required.

2. Adding an indicator state

Originally, the only way for users to know which input field they clicked on would be the flashing text cursor. Now, there is a highlighted border to indicate the selected input field and where they will be typing.

3. Form validation

Originally, the only way to know if you had typed valid information was after submitting the entire form. Now, users are shown validation states (check mark, 'x', or text) while they are typing so they know right away if they need to re-type or change their response.





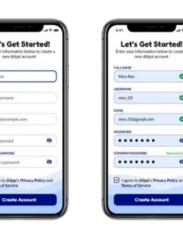
Final Design



High-fidelity Wireframes

After many tests and iterations, I was able to create a final product that solved the main problems users face when it comes to drinking enough water: consistency/prioritization, tracking their progress, and choosing water over other drinks. I was able to include core features within the app that aligned with my target users' needs and frustrations, while appearing visually appealing and simple to use. You can open the prototype here.













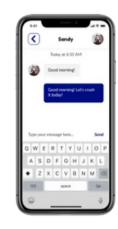














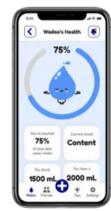








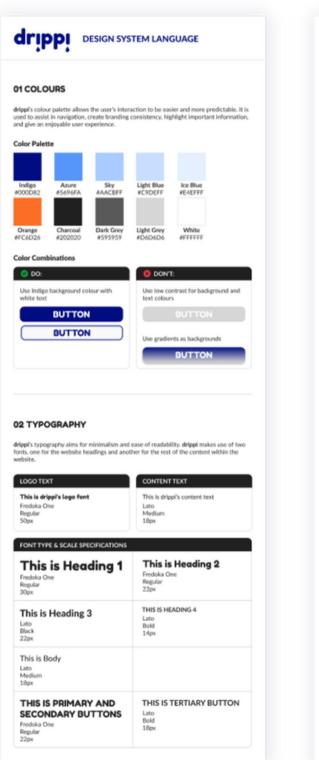




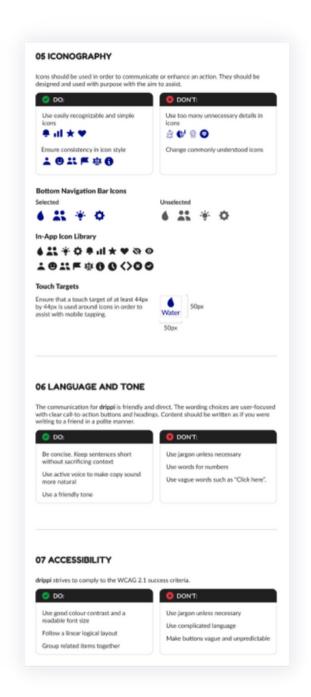


Design System Language

Lastly, I created a design system language that can be used by other designers in the future to ensure consistency throughout the app. You can view the full document here.









Retrospective



Challenges

My biggest challenge for this project was data visualization. I struggled with figuring out ways to display the Statistics information for example without making any charts/graphs too small to view on a mobile screen. I spent a lot of time creating iterations that would best show the hydration reports in an informative but also visually appealing way. This pushed back my timeline somewhat and I could not spend enough time on other aspects of the app such as illustration and overall design.



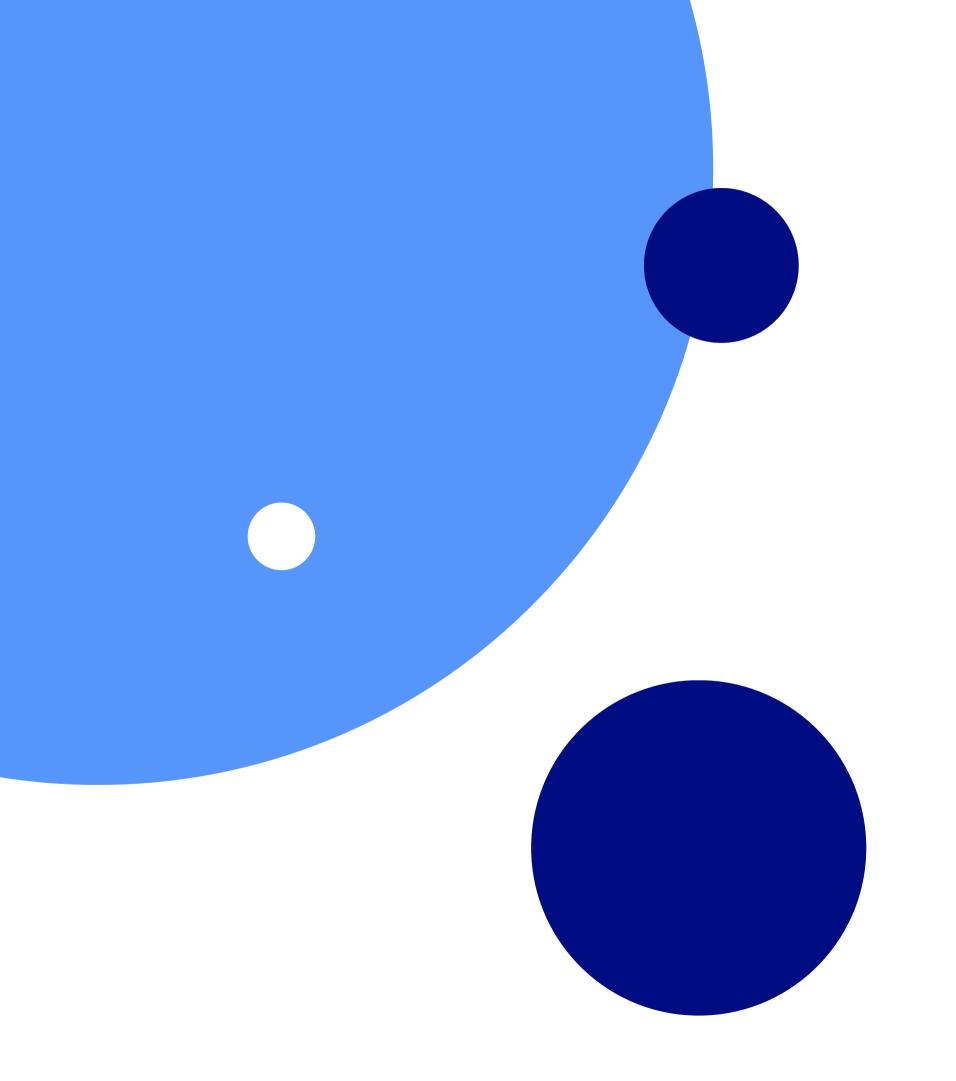
What can be improved?

Though my aim for the design was for it to be minimal and easy to use, I would have liked to explore different colour palettes or include additional illustrations/images to improve the aesthetic of the app. Having a unique branding can further motivate users to engage with the app and utilize its helpful features.



What's next?

I spent a lot of time looking into UI best practices towards the end of this project, and I believe drippi will benefit greatly from a UI rework. There were also a few additional screens I would like to add in the future such as what participating in each challenge would look like or creating a more satisfying reaction after a user has added a water intake.



Thanks for watching!

If you have any feedback, want to collaborate or just say hello, don't hesitate to <u>send me a message</u>:)