

Phase 2 Report

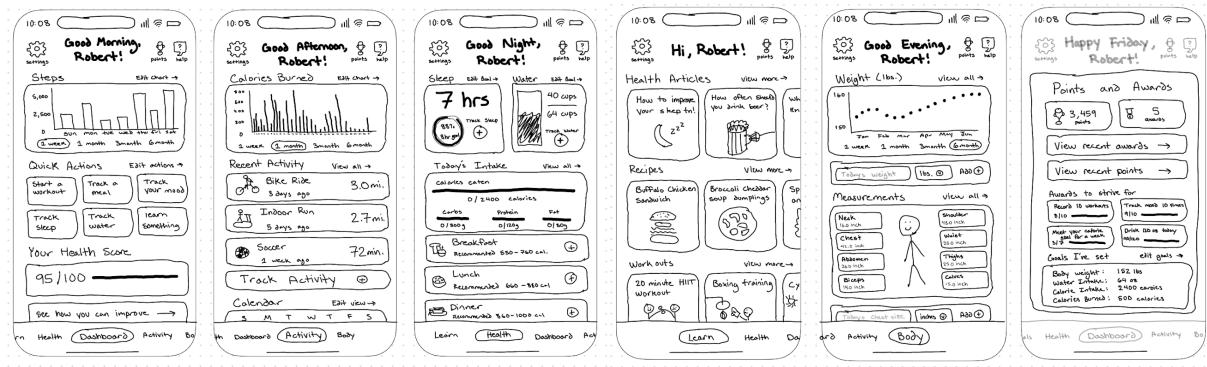
Jay Desmarais, Asha Nur, Erica Nwoga, Neel Joshi

2.1.1: Implementing a Horizontal Prototype

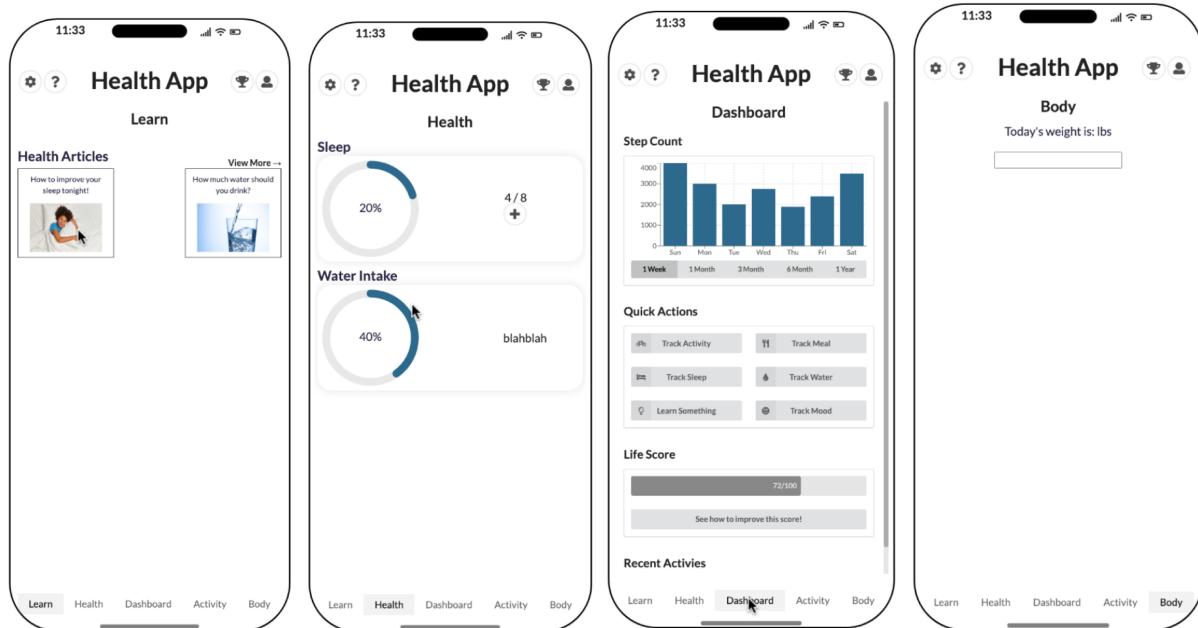
Phase 1 Feedback

"It is important to more easily understand how and where the user would interact with the app when looking at the drawings. For example, what are the important "clickable" things. There seems to be a lot of visualizations you plan on having, but it is unclear what the interactions will be, and interactions and data entry need to be a significant part of the prototype that you build - as you prioritize things (not done as required for this submission) keep that in mind. Also, these screens look very cluttered and hard to read at the size of a smartphone."

Low Fidelity Illustrations in Phase 1.3



Snapshots of screens during Progress Checkpoint in Phase 2.1



Horizontal Redesign Rational

When approaching phase 2, we used the feedback from our low fidelity prototype in phase 1.3 to expand on our design. By doing this, our medium fidelity prototype became livelier and more robust. Certain aspects of our prototype were maintained, while others were reconstructed.

There were broad ideas that we thought worked and wanted to keep in our design. We decided to stay loyal to the overall layout of our horizontal prototype. We liked the idea of having different screens that focus on one aspect of health. The navigation bar adds constraints to the scope of our app — forcing us to keep features organized and relevant. The dashboard remained as our starting Home Screen. Our Home Screen provides an easily accessible overview of achievements and potential tasks. We thought about what the most common task would be and implemented a “Quick Actions” section. A consistent design builds trust with the user and improves the flow of the system. Our components are organized in a column-like rectangular structure. Each feature is wrapped in a light gray box — indicating grouping of similar features. Since the dashboard uses blue bars to represent measurements, we wanted to make this our primary color throughout the app.

Alternatively, there were critiques given that we used to rethink and change our design choices. The most obvious error was that our app was seen as too cluttered. The number of features on each page were too overwhelming for an iPhone screen. So, we had to prioritize certain features for the horizontal layout and figure out how to incorporate secondary features vertically. After identifying our most important features, we worked on the UI. We introduced more spacing and better separation of elements, creating a more navigable UI. This lessens the confusion for users. The cluttering also impacted the readability of our app. We received feedback that our text was too small for an iPhone, so we increased the text size and weight throughout the app, making all text more readable, larger, and “bolder”, also decreasing the variety in fonts, making the app feel more simple and legible. Another issue regarded not only the arrangement of the components, but their usability. There were little indications of clickable components. This made our prototype feel flat — visually interesting to look at, but useless. In Phase 2, we specified where we wanted interactivity, and how to communicate that. Now, the components each have buttons and/or labels inviting the user to interact.

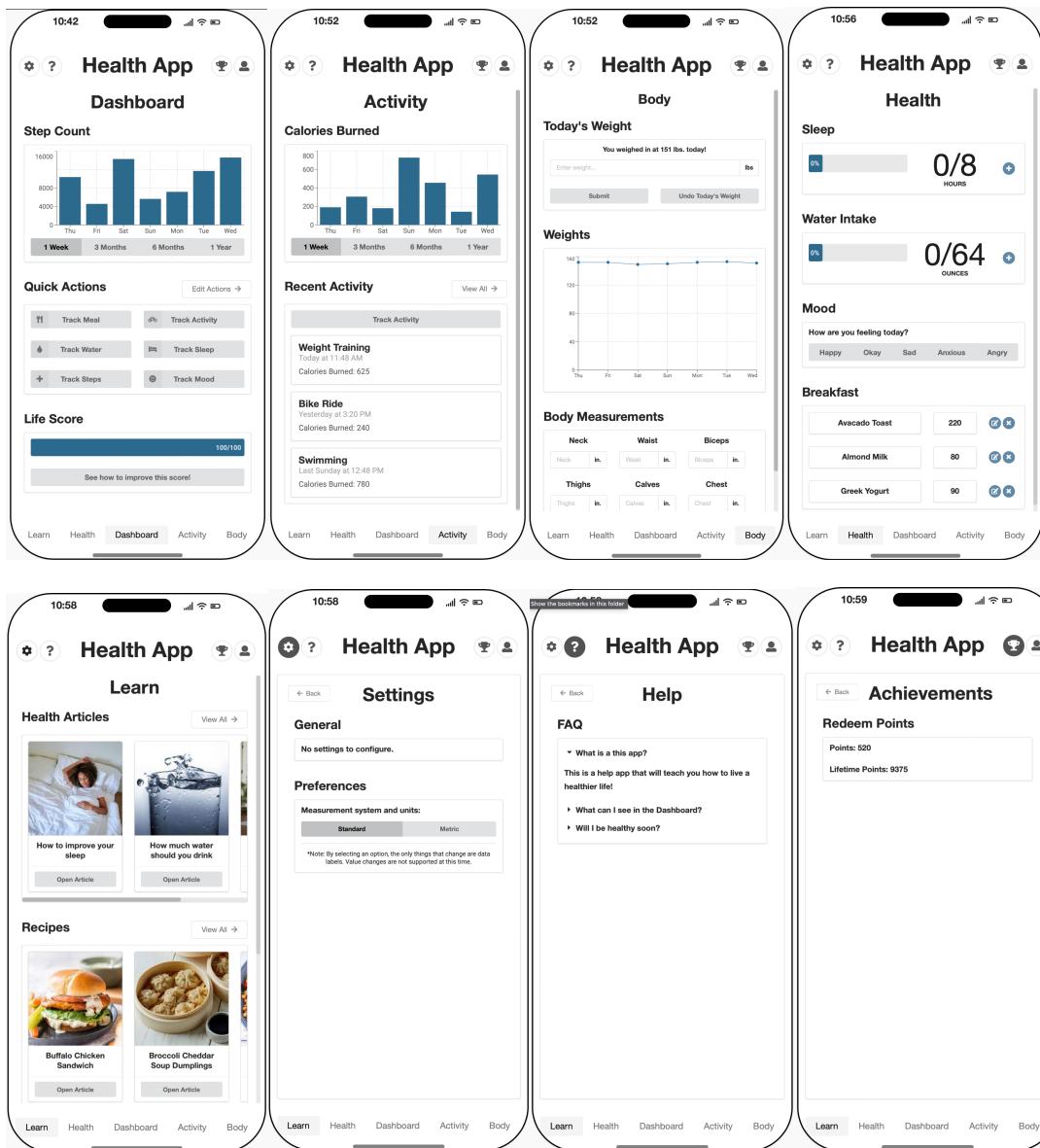
Overall, this phase allowed us to think about which features we want to implement and how it would look in the context of a functioning app. We thought more about the perspective of the user and how to accommodate their needs. Our goal for this phase was to lay the groundwork, and then build upon our design through feedback and experimenting.

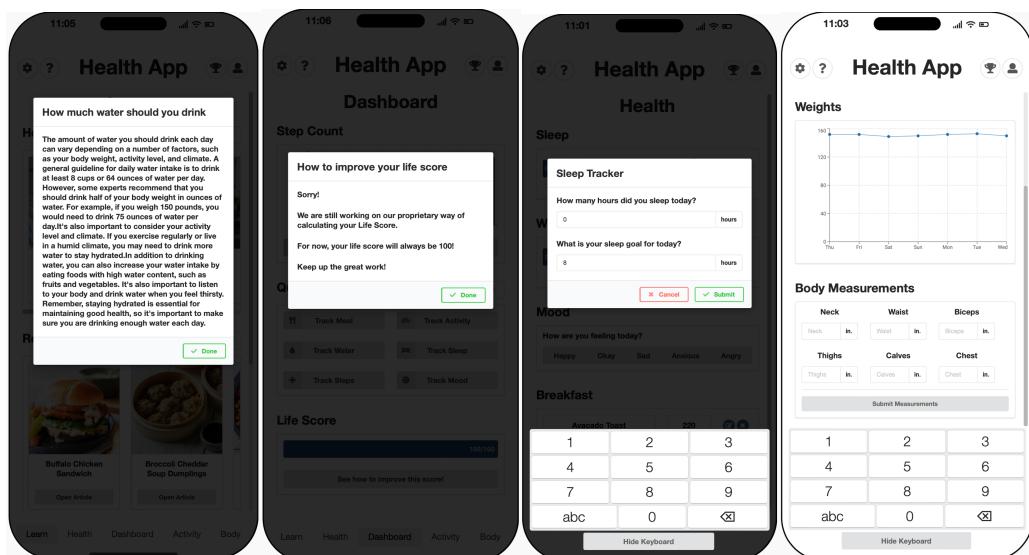
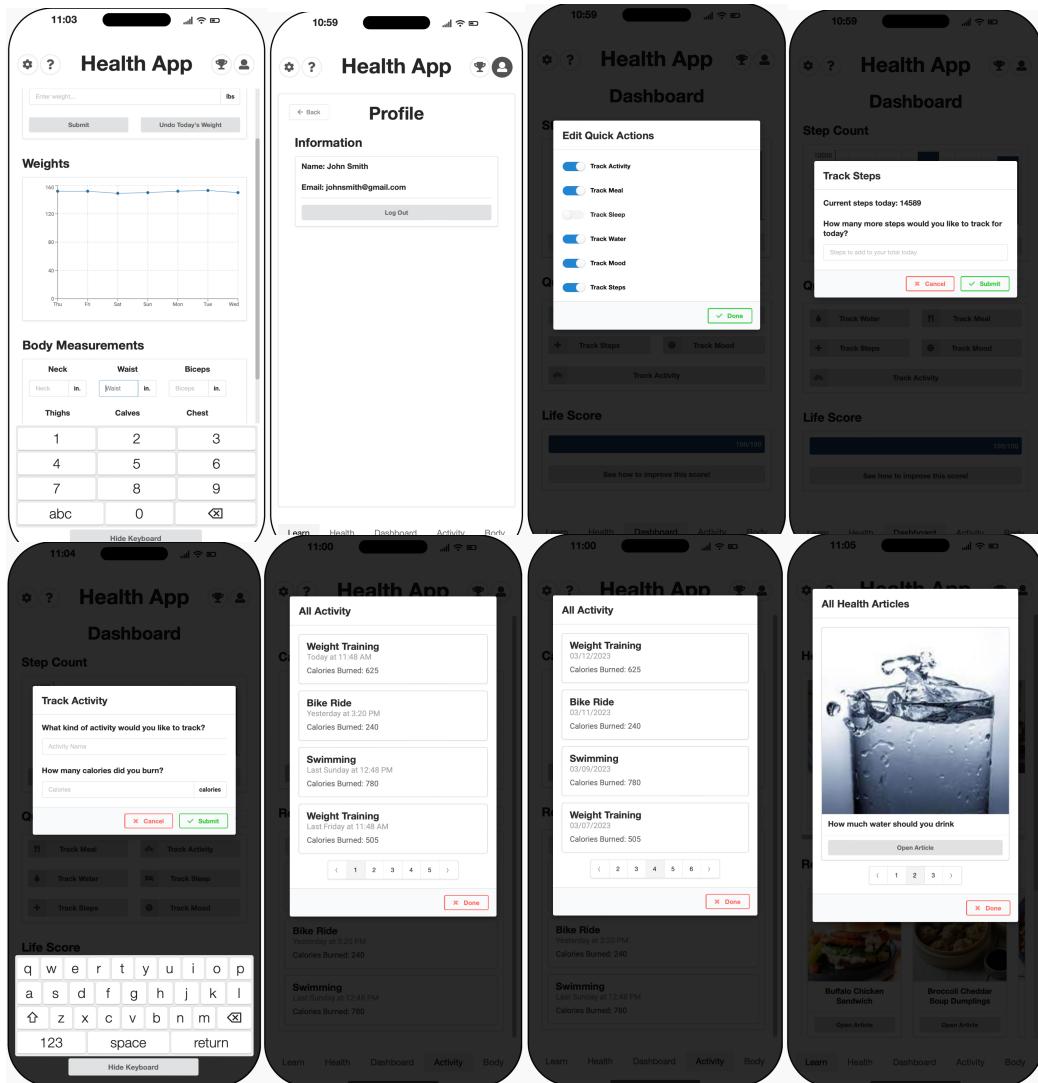
2.1.2: Implementing Vertical Prototypes

Progress Checkpoint Phase 2.1 Feedback

"There are many places where the text is too small - please review the entire work so far and update text sizes. The current look is not realistic. All interactive elements should have corresponding visual cues. The two "clickables" in the "learn" tab for example. Considerably more features are needed to fulfill the requirement for this phase. As such, it appears that significant design work is still needed. This could be due to it being the mid-way point but we felt it important to note."

Illustrations of our final implementation, using new screen snapshots.





Vertical Prototype Rational

Phase 2.1 was where we started to implement more complex tasks into our system. The horizontal prototype acted as our blueprint — signaling where and how tasks will be performed. Vertical prototyping helped us realize the ways our system should accommodate complex tasks.

First, we started with the concrete critiques that were given by the instructor. Our text sizing was still too small. So, we focused on increasing readability. The color of the font is dark blue against white. This contrast isn't too straining on the eyes, yet still readable. The bold headers in each section have several functions: grabbing the attention of the user, signifying the purpose of the page, and adding visual hierarchy. Each component has its own title, so that its purpose is clear. We also increased the sizing of the components themselves. We wanted each component to be purposeful. So, rather than cluttering multiple features into one page, we have large components capable of multiple actions.

Second, we focused even more on visual consistency. Each component, button, text, and modal should look like they belong in the same family. In Phase 1.3 for instance, we used circular measuring tools to display water and sleep amounts. We believed that using a circle graph would be fitting since many modern health apps use this shape. However, by having a view of the total design, this visual felt out of place. Our system uses clean boxes and rectangles all throughout the design. So, we decided to use progress bars for all data. Using a horizontal progress bar instead minimized space within the component and pulled the design together. The harmony of the components now communicates a functioning design. This shows that rather than following trends, we should choose designs that agree with our system.

Building this prototype helped us discover surprising occurrences. One way is that it allowed us to discover possible input errors and handle them. For example, we didn't consider error handling for the sleep and water input until this phase. Users cannot enter an hour amount less than 0 or greater than 24 for the day. We also thought about various users, and realized now everyone can see the red error box. So, we made sure the error messages are also written above the box. Also, while developing the water intake tracker, we realized that the unit of measure may be different for each user. Compared to hours, which is stagnant, we also started to think about varied user preferences. Now, we have more insights on which vertical tasks to add on. Our settings page will be developed so that users can set and edit their own preferences. Catering to user preferences helps the user feel more welcomed to the product, which enhances loyalty. Therefore, as we continue to work, we encounter even more ways to accommodate the user. Our goal is to cultivate a seamless flow of interactions to maximize usability.

Overall, The process of redesigning our vertical prototype was much more difficult, yet rewarding. Since our progress check didn't have as much functionality, there was a lot of growth during this phase. There is now actual data to work with, and ways to alter that data, which adds the liveliness our app was missing. As we continue to build our app, we are focusing on key, realistic user interactions and data management.

Final Discussion

A final discussion (two to three pages), of the state of your design where you discuss the quality of your system design, what parts of the design you feel works well and what still needs improvement.

There are aspects of our design that work well. Most notably, something we have done well is the user-friendly layout of the interface. The organization of components is very clean, lessening confusion within our app. The app currently seems easy to explore with a designated navigation bar for clarity. We also think we are effectively tracking and displaying most data that is collected. The learn section also has a good example of a few articles with useful information that are detailed ranging from recipes, health, and recommended workouts.

In addition to the visual consistency, we have a wide variety of features. Although they are not all fully developed, they give our users a good idea of the range of things they can accomplish in one place, where all the elements tie together in some way. Because of this, we can satisfy a lot of users who will be looking to accomplish and number of tasks related to their health all in one place.

As expected with any prototype, there were several areas needing improvement. By noting these issues, we can take steps to enhance our app. Although there are a decent number of things that we are currently supporting, there are also a lot of challenges we faced and improvements we can make. To start with our horizontal design, although it is our strongest, with lots of features shown at the fronts of pages that are partially implemented, some consistency is lacking, which can make it hard for users to understand the app and how it all works together.

Moving on to the vertical aspects, there is notably more that can be implemented to better aid our users in accomplishing their desired tasks. First, we could implement better ways for users to enter and edit their information. Currently, we have a wide variety of ways that users can input information or add on to what they have currently added, but there are very few ways to remove added data except for removing the most recent weight input on the body tab or overwriting the current day's sleep or water amount on the health tab. The ability for a user to have many ways (or more straight forward ways) to change their previously entered data would allow them to feel much more comfortable on the app so they don't have to be cautious with the data they enter.

Another aspect of the app that we can improve is the overall ability to view data. In many cases, there is only one view of a user's information. In a lot of these cases, a user is unable to view more than a day's worth of information. The ability for a user to see all their past entries is very important and we will definitely look into adding this to future prototypes.

Another thing to address is the visual identity of our app. The color scheme feels rather robotic and could feel more calming and soothing. To improve, we will try out fresher color palettes and try out brighter accent colors. Maybe using less gray, more blue, and more green would work well. We also need distinct colors in what is considered "enter" or "cancel". Currently they are red and green, but they feel quite jarring alongside the blue and gray app. Buttons can be changed to white instead, inviting "freshness" to our UI - most healthcare facilities have white interiors after all. If we proceed with the blue and green, we need to add a colorblind filter for those that are blue/green colorblind.

To further cater to those with visual impairments, a zoom in/out feature can help with readability. We want to add a way to allow users to change units of measure, chart settings, and display different time frames for their preferred interest. We are also looking into multilingual support — where the language can be changed at any time.

We also would like to improve the robustness of our app — by expanding on current features. This includes adding a “contact us” field to the help section in case the user has any questions or concerns. When it comes to activities, we’d like to allow users to track reps, weights, and type. We want to display user measurements for body parts, and a weight that is subtracted from their starting weight as a way to promote progression.

2.1.3: Who Did What

For each person, explain what portions of the project they worked on, what they wrote, portions of code, documents, etc. This is a public document that you must all agree upon.

Jay:

- Created React App and the development environment including the “phone screen”.
- Created a bottom “horizontal” nav bar and navigation functionality for navigation between app components as well as one at the top header section of the app for a few other items like settings, user profile, help, and achievements.
- Created skeleton components for main app pages/screens, graphing, page items, pagination, and pop-up modals to maintain consistency throughout the app.
- Created user profiles/data files, user schema, and a way to “log out” and switch to other pre-programmed users and view the data from other representative users.
- Developed the dashboard and activity pages and their contents, assisted in implementing the learn page and body pages.
- Added a keyboard to all input fields.

Asha:

- Implementing the articles in the learn page.
- Assisting in implementing the help page
- Task scenarios
- Helped write the part of what works well in the design and what still needs improvement in the final discussion.

Erica:

- Initialized the project repository on GitHub.
- Implemented the health section - sleep, water intake, mood, and calorie tracker.
- Added functionality and validation to the sleep and water intake modals, so that the visuals reflect user data.
- Wrote the Horizontal Redesign rational, the Vertical Redesign rational, and helped with the Final Discussion

Neel:

- Implementing the body section
- Allowed users to input weights and track their weight loss.
- Added to what needs to be worked on after submission.
- Helped on the Final Discussion