

A6 - Digital Prototyping and User Testing

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Figma Link - [A6 - Digital Prototyping and User Testing Proposal – Figma](#)

Vertical Prototype - One Task (med-fi to hi-fi version of our paper prototype design):

Task Definition: We collaboratively identified key tasks for user testing after PACT analysis as the following:

- Account Creation
- Real-Time Data Tracking
- Personalized Feedback
- Wearable Device Integration
- Automatic Data collection (This was initially tagged under should include if possible category but later on we identified it's a must include task upon more research)

The pages on figma named as vertical 1- 4 correspond to the vertical prototypes of our app which represents the automated data collection task.

Horizontal Prototype (med-fi to hi-fi version of your paper prototype design):

The rest of the pages other than the ‘workout’ page, starting from getting started, menu and the pages that are navigated from the menu correspond to the horizontal prototypes of our app.

HealthTrack App Prototype - Interactive Steps:

Welcome Screen:

- User opens the app and sees a welcome screen.
- Click "Get Started" to proceed.

Login/Signup:

- Users can login with an existing account/password.
- Option to register for a new account.
- Sign up with Google or Email.

Menu Page:

- Serves as the main hub after login/signup.
- Various icons with clear text descriptions for different functionalities.

Exercise Tracking (Automated data collection task):

- User clicks the "Workout" icon to begin workout tracking.
- "Start Workout" button initiates tracking.
- Workout Tracking:
 - Interface allows real-time data tracking during the workout.
 - "Finish Workout" button ends the tracking session.

Post-Workout Page:

- Recommendations for further activity or nutrition are displayed.
- Clicking "Done" returns the user to the Home Page.

Other Features (Horizontal Prototype):

- Home page has additional icons for other functionalities.
- Functionality of these features is not yet implemented in the prototype.

Test Your Prototype:

All our team members tested the prototype to ensure the functionality of the workout tracking (real-time data tracking) worked as expected and the horizontal prototype aligned with our previous discussions.

Discuss the Design Choices:

As we transition from a paper to a high-fidelity digital prototype in Figma for HealthTrack, we're focused on several key design choices:

1. **Visual Design for Health & Trust:** We're using calming colors associated with wellness and easy-to-read fonts for accessibility. A consistent design, guided by a style guide, ensures uniformity across UI elements.

2. **Interactive User Experience:** The app will feature responsive buttons, sliders, and date pickers, mimicking real-world interactions, with smooth transitions and clear user feedback.
3. **Intuitive User Flow:** We aim for a user-friendly flow, guiding users effectively through their health management journey, highlighted by clear instructions and interactive progress indicators.
4. **Data Visualization:** Users will see their health metrics like activity levels and calorie tracking through engaging data visualizations (charts, graphs).
5. **Accessibility Features:** We're including high-contrast themes, larger font options, and text descriptions for images, ensuring HealthTrack's usability for all users.

A Design Question and A/B - Two Alternative Designs:

Alternative Design for the Prototype

We have created a paper prototype for the alternative design. Before performing the user tests we will be creating the design in figma as a hi-fi prototype.

A/B Testing Proposal #1: Homepage Information Hierarchy

Design Question: Does prioritizing quick access to frequently used features on the HealthTrack menu page improve user experience and task completion compared to a more comprehensive information layout?

Usability & User Experience Considerations: This question focuses on how efficiently users can navigate the app to complete their desired tasks. We're interested in whether prioritizing commonly used features on the homepage reduces decision fatigue and improves overall user experience.

Alternative Designs:

- **Current Design:** The homepage displays a balanced layout showcasing various functionalities of HealthTrack, including food logging, mental health tracking, exercise initiation, and access to statistics.
- **Alternative Design:** The homepage prioritizes quick access to frequently used features with larger buttons or icons. Less frequently used features could be accessed through a secondary menu.

Version A	Version B

Testing Method: Conduct an A/B test comparing user interactions with the current vs. alternative homepage layouts. Track metrics like task completion time, success rate, ease of navigation. Gather user preferences on information hierarchy through interviews.

A/B Testing Proposal #2: Data Visualization Style

Design Question: Does presenting health data visualizations in a pie chart or bar chart format lead to better user comprehension and interpretation of their health trends?

Accessibility Considerations based on visual perception: This question focuses on how effectively users perceive the information on the HealthTrack statistics page. We're interested in determining which data visualization style (pie chart vs. bar chart) is more intuitive and accessible for a wider audience.

Alternative Designs:

- **Current Design :** The statistics page displays health data visualizations using bar charts for activity levels and calorie intake.
- **Alternative Design:** The statistics page displays the same health data visualizations but utilizes pie charts instead of bar charts.

Version A	Version B

Testing Method: Conduct an A/B test comparing user interaction with bar charts vs. pie charts on the statistics page. Assess user comprehension and data interpretation via surveys or interviews. Monitor engagement metrics, like time on page and visualization reference frequency, to gauge effectiveness.

Word Limit and Group Contribution:

To start off the group contributions, George Ibrahim started off with the hi-fi version of the horizontal prototype, assisted with the discussion of the design choices and flow of both the horizontal and vertical prototypes. Sangeeth Santhosh worked on building the hi-fi version of the horizontal prototype, assisting in creating the flow for the horizontal and vertical prototype and tested the prototype with other team members. Priyadarshini Ramakrishnan worked on creating alternate designs for the app for performing A/B testing and came up with design choices for moving to the hi-fi version. Duc Quang Tran worked on Vertical prototypes in Figma. Minh Khang Nguyen worked on Horizontal prototypes using Figma.