

Milestone 1: Design Rationale Report - Full Stack Force - PetQuest

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<https://www.figma.com/design/Y77zK9JwYBDeSzFvpXDUjf/PetQuest?node-id=180-1878&t=8N7vIUEFyj0YhVU-1>

Introduction

Last semester we started a concept mobile application called PetQuest. The purpose for this application is to have a calendar and to-do list application with a gamification element. This app will primarily be targeted towards parents and children, where parents can give tasks and events to children in order for them to do them in real life in exchange for points for our gamification element. We will have a “pet simulator” that allows users to have pets both realistic and fictional that they can customize and level up. Our goal is to help parents educate their children on the importance of time management while making it fun. Individuals who would also like to use this app are more than welcome to set goals for themselves as well. For our first milestone of our second semester working on this project, we are finalizing our high-fidelity designs through Figma using our low-fidelity designs from last semester. We have considered many factors for our design including; user input, consistency, inspiration from other apps, and overall flow of the user experience. These designs will be our foundation for our coding sprints later this semester. We look forward to designing these applications for people to use.

Evolution from Low-Fidelity

When we created our low-fidelity design last semester, we kept it very barebones. With simple designs we laid out the foundations that we used for our high-fidelity design. We kept our task bar idea the same, having easy access to all of the important core features that our app holds

(calendar, to-do list, task post, pets, and profile). We have improved our sign in / login pages to include error messages when a user enters incorrect or unknown information. Thinking of all use cases like; incorrect email or passwords, resetting passwords, forgetting passwords, and connection errors. The calendar portion of the app remains relatively unchanged besides a few elements. Our to-do list has a more modern design compared to our original low-fidelity design, allowing for an organized system for tasks to be easily readable and ready to be checked off. Our settings page has a much simpler design that allows for easy management between different setting options. For our pet pages, we have expanded on them a lot more for people to upgrade and edit their pets. Overall these layout improvements help our user flow and user experience. We want our users to have easy navigation through our app through our new high-fidelity design.

Design System Justification

Our design decisions are all centered around our primary audience who are children. Apps can often feel overwhelming or overly complex, especially for young users who may be new to technology. Our goal was to create an interface that feels friendly, inviting, and easy to navigate. We chose a soft blue as the default app color to create a calm yet engaging environment. Blue is visually appealing to children and strikes a good balance between playful and neutral, ensuring it does not distract from the main tasks. We decided against a plain neutral color because it could feel dull for kids and discourage engagement. By using a cheerful blue, children can stay visually engaged while also looking forward to unlocking new themes with earned points. The earned points are a built-in motivation system that encourages continued app use. Our design uses two complementary fonts, Inter and Geo. Inter is a clean, highly legible font, which makes it perfect for the main content areas like the calendar and to-do lists. This ensures that children can easily

read their tasks at a glance. Geo, on the other hand, adds personality and playfulness making it ideal for headings such as the app name, dates at the top, the hamburger menu, and the task creation area. This combination of fonts keeps the app approachable while maintaining clarity and hierarchy. We aimed for a simple and intuitive layout with clear navigation so children can quickly learn how to use the app. Rounded buttons, sufficient spacing, and a visually guided flow help reduce cognitive load and make the experience more enjoyable. The design encourages interaction by making key actions (like adding tasks or changing themes) stand out visually without overwhelming the interface. The combination of friendly colors, playful typography, and simple navigation reinforces our brand identity which is fun, approachable, and kid friendly productivity. This design creates a fun and approachable experience, encouraging children to explore the app and stay engaged with their tasks over time.

User-Centered Validation

One of the clearest validations of our design comes from its alignment with Amanda's persona, the busy mother balancing work and family life. Her requirements emphasized parental control, simplicity, and security. We emphasized convenience by introducing clear task assignment flows where parents can set due dates, points, and rewards. We also designed minimal sign-in requirements for children to avoid excessive data collection practices. The notification system balances her need for gentle reminders with her recognition that excessive nagging reduces effectiveness, creating a structured approach that maintains parental oversight without creating dependency.

Joey's need for independence and organizational improvement manifests throughout our interface design, particularly in the subtle notification that allows the tasks to be sent remotely by

parents, eliminating constant parental reminders. Moreover, his desire for competition and incentives was validated through the pet simulator gamification feature. The ability to earn points by completing tasks, level up pets, and compare progress across siblings reflects direct feedback from young users seeking motivation beyond traditional lists. This also addresses common feedback found in external reviews of Microsoft To-Do, where users valued repeating tasks and daily planning features, but often critiqued the lack of advanced motivational or engagement-driven elements.

For Paloma, the college student persona, validation was achieved by ensuring that the app combined calendar and task lists seamlessly. Feedback from her and similar users emphasized the frustration with disorganized overlaps in existing shared calendars. Our design prioritizes clarity in how tasks and events are displayed, alongside features like recurring reminders and customizable notifications. Her appreciation for accessibility was also incorporated, with a clean interface and cross-device functionality that supports busy student lifestyles. This refinement aligned with broader positive user feedback about “daily planning” and “cross-platform accessibility” seen in productivity app reviews.

Key Feature Walkthrough

One core feature of our application is allowing parents to send tasks to their children. Parents can easily create tasks using the button on the bottom navigation bar that is always visible to users. When that button is tapped, they are brought to the child selector screen which displays the names and icons of their children. They can choose which child they are creating a task for by clicking one of those icons. After choosing a child, the screen then changes to the create task screen where they will give the task a title, due date, and the amount of points it's

worth. Parents can either choose to send the task after that or cancel it. The add task button is large and easy to see and since the bottom navigation bar is always visible, it is very convenient for users. The task creation and child selector pages also have a simple format and are very easy and fast to use for busy parents. The points on the task page are easy to designate and convenient rewards that can help parents motivate their children. Overall the design is simple and intuitive, making it easy for users to use, engaging, and improving their experience on the app.

Conclusion

In conclusion, we believe that we have improved our design from the low fidelity design, adding functionality missing in the original design. While parts of the design have remained the same, like the bottom navigation bar, we have improved the core features of the app. We have kept our audience in mind however with keeping the app simple in an attempt to not overwhelm children and older parents with features that may not be useful to them. We kept our account creation simple, asking only the necessary information to make the experience easy. The pet pages have been given an improved ui to prioritize showing the core functionality of the user's pet. Our task creation ui has been overhauled to give the user/parent a greater freedom over potential decisions and made more simple so that users will not have to learn a complicated method to participate in the app. Finally, we have changed the color scheme from red to blue as we found that red was more aggressive with the blue alternative being more calm and inviting, something we wanted to achieve the move from low to high fidelity design.

