Quirk: Iterative Design

Sketches

Summary of App: Quirk is an app that was pitched at the YCombinator's S19 Demo Day. Described as a "thought diary" that helps to stop panic attacks by using the concepts of cognitive behavioral therapy, Quirk acts as a journal and a platform for self-accountability and improvement. According to the startup's website, Quirk implements the popular cognitive behavioral therapy exercise of catching, checking, and changing the problem at hand. This kind of thinking can help combat any kind or degree of stress, sadness, or fear.

Pre-design questions:

What is a group of people that will be directly impacted by the interface?

The main group of people directly impacted by the interface would be those prone to panic attacks, other anxiety-related disorders, or anyone susceptible to stressful thoughts that need managing.

What is a group of people that will be indirectly impacted by the interface?

The main group of people indirectly impacted by the interface would be any psychologists or psychiatrists treating the user, or any individuals or groups personally close to the user.

How are these groups affected by the interface? What are some questions that your interface should address to ethically handle these effects?

The interface can guide the user to better identify and deal with their personal issues, which can assist others in knowing how to best support them. To ensure that the app handles such personal topics in an ethical manner, our team decided it would be appropriate to allow the user to lock their entries, and provide the option of printing or sending selected entries to a personal therapist upon finishing.

LOW FIDELITY SKETCHES







High-Fidelity Prototype



Link to Figma Prototype:

https://www.figma.com/file/87c2opoYxaUa6iCsLGhb0q/Iterative-Design?node-id=0%3A1

Design Explanations from Initial Sketches:

For our high fidelity prototype, we chose to begin the user experience with one simple welcome screen including only "New Entry" and "History" options, so as to not overwhelm users immediately. We also implemented a lock screen to align with our ethical objective of keeping the entries private according to the user's discretion. Additionally, instead of using tabs, we arranged the history page to resemble the iOS contacts page, where a minimalist scrolling function can allow the user to access months of data. This design choice, as opposed to tabs, increases usability and greatly reduces screen clutter. Lastly, we decided to have the user write a free response style journal entry to several guiding questions rather than respond to each question separately. We felt that this option restricted the user less and encouraged them to write freely and without the rigid structure of separate questions.

Design Explanations After Critique:

The main feedback given from the critique session revolved around the busyness of the colors, a lack of a home button to let the user move back and forth between the new entry and history pages, and not having a page that explained the high-level purpose of the app. In response to the critique, we made entry input sections a solid color rather than a gradient, which previously detracted from the actual written content. To increase memorability and to allow the user to cycle through the pages more easily, we created an obvious home button that linked back to the history page/create new entry function. In addressing the feedback about knowing the purpose of the app before even trying out the functions, we built an informational page that could be accessed upon login. Finally, we implemented a consistent lighter color scheme for the text entry boxes to visually reinforce the purpose and usage of writing.

Professional Email Sent to Startup:

Dear Quirk Team,

As a part of a UI/UX class assignment at Brown University for CSCI 1300 taught by Professor Jeff Huang, our team (comprised of me, Ariana Barzinpour, Cooper Birdsall, and Jordan Idehen) was inspired by the description of your startup on the YCombinator's S19 Demo Day page. We designed an interactive interface that acts as a journal and platform for self-accountability and improvement through cognitive behavioral therapy approaches. We created this prototype entirely without looking at your product and by only knowing the objective of the app. You can find the prototype <u>here</u>.

If you have time to check it out, we'd love to know what you think, since you've been working on this a lot longer. If you have any questions or comments, we would very much like to hear any input you might have.

Thank you so much! Sincerely,

Charisa, Ariana, Jordan, and Cooper

Because Quirk did not have an external email on their website, we screenshot our response on the embedded contact page and also emailed a screenshot to the TA mailing list. We received an answer from one of Quirk's founders and CC'ed the TA mailing list on our reply to their email.

User Testing

Confirmation Emails from UserTesting





To test the interactive prototype and make iterative improvements based on the feedback, our team used the site UserTesting.com to run remote usability tests. We compiled a short list of experimental prompts, which included the following tasks:

Chosen Task:

Create and complete a new journal entry

Hypothesis:

We hypothesize that our interface is simple enough that most users will complete it fairly quickly and without too much difficulty. This is because the subtasks that would be performed are reliant on text entry, which is functionality that we did not implement (since the prototype is merely interactive at a high-level). Other than that, users simply need to click through to the next page. Experimental prompts:

- 1) Without leaving the welcome screen, what are your initial impressions of the app? Explain your answer.
- 2) Create and complete a new journal entry.
- 3) View a previously completed journal entry.
- 4) In your own words, describe what the purpose of the app is.

User Testing Feedback

USER 1

	Completion Rate	Error Count	Error Type	Time on Task
Create a new entry	100%	1	The user attempted to create a text entry multiple times despite the functionality not being implemented.	0:54
View a previous diary entry	100%	0	N/A	0:21

User Satisfaction: The user rated the app 8/10 and did not find anything confusing.

USER 2

	Completion Rate	Error Count	Error Type	Time on Task
Create a new entry	100%	0	N/A	1:36
View a previous diary entry	100%	0	N/A	0:42

User Satisfaction: The user rated the app 7/10 and did not find anything confusing due to the clarity of the interface.

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	Completion Rate	Error Count	Error Type	Time on Task
Create a new entry	100%	0	N/A	1:45
View a previous diary entry	100%	0	N/A	0:51

User Satisfaction: The user rated the app 8/10, but had some confusion about the page that showed the previous response to an entry. They did not understand that the response on the interface was built in and not changeable.

Qualitative Analysis of the Experiment & Explanation of Metrics

In the above table, the completion rate metric reflects whether or not the user completely finished the task proposed to them. Because each user completed the given tasks, the completion rate was 100% for each metric. From the videos of user testing, there were very few errors in the interactions with the interface, but the first user did have trouble understanding that the "create a new entry" step merely referred to pressing the correct button indicating a new entry and not actually adding a text entry. This could be clarified by either making the instructions clearer or implementing the ability to add text to the appropriate area. The error type metric relates to the explanation of the error, if one was committed at all. Lastly, the time on task refers to the recording time the user took to complete the entire task. The times vary pretty widely, but mostly because some users spent more time narrating their process than others. All in all, our testing results were in line with our hypothesis, as users concluded that the app was easy to use with enough clarity and intuition.

Potential Interface Changes

Based on the videos of user testing and the concrete feedback given by the users, it seems that the biggest challenge to easy and intuitive use lies in orienting the user to understand the context and purpose of the app. This might translate into creating

a tutorial process to show the user exactly how to follow the steps of the cognitive behavioral therapy exercise given to them. One user also recommended that more quantitative features could improve the experience. We imagine that adding a scale that people can assess their daily feelings by (i.e. a 1-to-10 scale for emotional wellness) could help them rationalize their emotions and situation.

Reflections

The actual process of user testing was a lot faster and easier than we expected. The main challenge with the process was turning some of the more vague comments and feedback from the users into concrete ways we could improve our interface. From this user testing experience, we learned how to analyze the way users interacted with our app and gain further understanding on what to add or subtract from the interface to make the experience more memorable and intuitive. An area for improvement would be providing more specific tasks for the user to complete during the testing process in order to assess the effectiveness of all features, including more stylistic choices. Overall, we found that creating tasks and garnering feedback was a smooth procedure without any major difficulties.