

28 Days Later: Testing 1

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Executive Summary

We found a lot of problems with paper prototyping that were unexpected. Users are used to immediate, and sometimes subtle, feedback that we were not able to provide with paper prototypes. Additionally, people seemed less likely to click around and explore, since each click was accompanied by a tester changing the screen. Participants seemed more concerned about getting things “right” and did not want to take too many chances. We already noticed some changes we implemented after the in-class testing lead to more successful tests this time. For example, adding labels under the symptom icons meant participants did not need to interpret the images as much, although interpretation was somewhat problematic. We also confirmed that the app is well-disguised. Many passersby were clueless about what the app could be!

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1 Testing Protocol

We met the participants at Old Chicago on Pearl Street. Prototype B has a lot of small parts (different icons and movable pieces), so Toni constructed a board. Prototype A is a series of screenshots, so we did not need a board to keep it together. Since we recruited friends as participants, the atmosphere was more casual than it would be testing strangers. Specifically, the introduction and task explanation was more casual. We did not read from a script or explain tasks exactly as they were written in the previous assignment.

We planned on using the “Think Aloud” method. In some ways testing people we knew made this process easier, because they felt more comfortable talking through the tasks. They also felt more comfortable asking questions, though. It was harder to withhold hints when the atmosphere was casual and the participants had an existing relationship with one of the interviewers. We did not use task 4, because this task does not work well with a paper prototype. There are no images to upload, and the user wouldnt be familiar with images we made for them to upload. We did not use task 5 for prototype A, because we do not have “blood buddy” capabilities in that prototype.

Based on our in-class testing, we decided not to test the widgets. Participants were confused by them, because normally a user would not have widgets on their homescreen unless they put them there. This would only apply to individuals who are already familiar with the app. Additionally, platform differences made it hard to represent widgets in a way that Android and iOS users would all understand.

2 Usability Problems

2.1 Calendar looks like keyboard

Found by: Tester #2

Prototype: A

Severity: high; interferes with core functionality

Description: The current appearance of the calendar looks more like a keyboard than a calendar. This made it difficult for the tester to use the calendar.

2.2 Sliders ambiguous

Found by: Tester #2

Prototype: A

Severity: moderate; can be worked around

Description: Since all symptom sliders began in the middle, their meaning was ambiguous. If the slider was moved *left* of center, what could that mean?

2.3 Sliders look like buttons

Found by: Tester #1

Prototype: A

Severity: moderate; likely to resolve itself with better graphics

Description: The symptom sliders did not look like sliders, but buttons.

2.4 Calendar not swipable

Found by: Tester #3

Prototype: A

Severity: low; minor inconvenience

Description: The tester expected to be able to swipe forward or backward in the calendar, based on her previous experiences with her phone.

2.5 Trust

Found by: Tester #2

Prototype: A, B

Severity: moderate

Description: Tester did not expect even remotely accurate predictions from the app. Said she could only determine her next period if she had symptoms today.

2.6 Text field looks like search box

Found by: Tester #1 and #2

Prototype: B

Severity: moderate; temporarily annoying but does not affect functionality long-term

Description: Testers tried to use the symptom text field as a search box to find specific dates or features in the app. When a “record saved” alert appeared, they realized it wasn’t working, but were still somewhat confused.

2.7 Zombies do not appear tappable

Found by: Tester #2

Prototype: B

Severity: high; interferes with core functionality
Description: Symptom zombies do not look interactable.

2.8 Calendar difficult to locate

Found by: Tester #1 and #2

Prototype: B

Severity: high; interferes with core functionality, but tester #2 found a workaround

Description: It was difficult to find the calendar for past lookup and future predictions. In one case, the tester was able to get around the problem by repeatedly pressing the arrows in the forecast title.

2.9 Countdown unclear

Found by: Tester #1 and #2

Prototype: B

Severity: moderate; likely less confusing with real dates

Description: Especially when using fake dates, it was difficult for testers to interpret the countdown to their next period.

2.10 Sharing hidden

Found by: Tester #1

Prototype: B

Severity: low; sharing is an advanced feature

Description: Sharing was hidden behind the generic “gear” icon for settings.

2.11 Settings icon is unclear

Found by: Tester #3

Prototype: B

Severity: low; the settings page contains advanced options

Description: The gear icon looks like a leaf.

2.12 Plus button is ambiguous

Found by: Tester #2 and #3

Prototype: B

Severity: low; distracting, but not breaking

Description: The button to add a custom zombie was frequently mistaken for other features.

3 Subjective Feedback

3.1 On looking in the past

- Confusion about the countdown: “I started the 18th of last month?”, “I like it but is it 18 days from tomorrow? Countdown underneath?”
- Estimation: “I’d say that was the day I started”
- Text entry: “I’d enter ‘last period’ or ‘back button’ ”

3.2 On looking into the future

- Countdown: “It’s right there!”
- More estimation: “Hm, I could look at calendar, but let’s try ‘Moody’ ”, “If I want to know when my next period is, I need to know how full I am now, so if this says I’m crying 75%, I need to figure it out”
- Other symptoms: “Where’s ‘Horny’?”

3.3 On logging

- Relativity: “If the middle is zero, then what does moving back mean?”
- Text entry: “I’d enter text and say incorrect prediction and dialog says ‘record saved’... what the hell, I want to enter more data”
- The butcher: “I’m at ‘cleaver’ level of pain”

3.4 On sharing

- Low-fidelity: “Settings gear looks like a leaf”
- Location of sharing: “Oh my, that is not intuitive”

4 Proposed Design Changes

4.1 Text entry

One of the designs included a text field for miscellaneous symptom entry. Unfortunately, it was unlabeled. In hindsight, this was an obvious flaw — conventionally, unlabeled text fields are almost exclusively used for search. So our testers often tried to find application features or calendar dates by typing into the field. Once the users figured out that the field was for logging data, they tended to use it exclusively, ignoring any sliders or buttons.

We propose two changes. First, the symptom entry field needs to be labeled, either outside the field or with a watermark. Maybe it should even be hidden behind an “add text to this record” button. Secondly, we should remember to include text entry for the calendar dates.

4.2 Sensible defaults

Both prototypes involved symptom sliders of some kind. Both were more difficult to interpret when the slider began at a middle value. Was the middle value “no symptom”? “Moderate symptoms”?

The solution to this issue is relatively simple. Start sliders at their lowest value.

4.3 Interactive appearance

Testers struggled to decipher which items were interactable, and how they were meant to be interacted with. In a completed application, this would be partially solved by using standard idioms. For example, we might lightly shade the buttons, place drop shadows under scrollable/swipable areas, and use default OS sliders.

In the mid-fidelity prototype, we’ll primarily have to rely on shading differences. For swipable elements, we’ll want to see if we can make the next and previous items “peek”, so users can tell what options they have. In particular, it would have been very helpful to see the calendar peeking at the bottom of the screen.

4.4 Remove or hide advanced paths

Much of the testers’ frustration came from an overabundance of options. Fairly advanced customization options were easily accessible. Often, they were embedded into the home screen. This created a lot of noise for users interested in more common tasks.

To fix this, we should move things like custom zombies into the settings screen. We might even need to move some options into an advanced settings screen, or remove them entirely. Users were consistently confused by notification options, for example. Maybe such settings should be contextual, so they only appear if the user taps through a notification.

4.5 Tighten up the text

The apocalypse countdown was poorly worded and difficult to interpret. Testers also mentioned that they were more interested in the date of their next period, rather than the days remaining until it happened.

We plan to invert the current “Apocalypse in <days>, <date>” display so that it instead reads “Apocalypse on <date>: <days> days remaining”. This should better reflect the users’ preferences, as well as being more readable. The sizes will also be reversed, so <date> will appear large while <days> is small.

4.6 Include more text

One feature that will be easier to add to the mid-fidelity prototype — more text. Simple instructional prompts were lacking even from the more straightforward

prototype, and the picture-based prototype was much more obtuse.

Prompts such as “touch the zombies to change the forecast” or even a small “Settings” under the settings button will be helpful in the future.

5 Contributions

Toni rounded up the participants and took notes during the sessions. Mia developed the test script and organized the notes. Janeen compiled the notes into this report, and acted as the computer. Skatje guided testers through the tasks.