



.calm

Interactive Prototype

## Introduction & Mission Statement

Anxiety disorders are among the most common mental health disorders in the United States. They can be chronic, debilitating, and incapacitating for those who suffer from them.

.calm aims to support those living with anxiety by encouraging self-awareness through the use of cognitive behavioral therapy.

.calm—it's CBT in your pocket.

## Tasks

Easy Task: [Create a daily log and check your history](#)

Create a daily log. Then, view the log you just created.

Medium Task: [Explore visualizations](#)

Explore the visualization section and graph Mood vs. Health.

Hard Task: [Create an event log](#)

Imagine you just finished a job interview and you don't think it went well. Create an event log about that experience.

[Additional content](#)

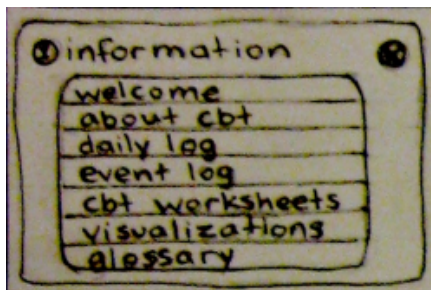
Explore the sample CBT worksheet.

## Interface Revision Sketches

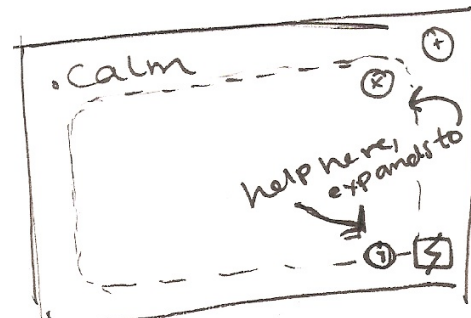
Based on the results of our low fidelity prototype usability tests, we elected to make the following changes.

### Information Screen

We decided not to drop the user straight into the information screens because it confused all of the participants in the test. Instead, the help section functions as a separate element which can be accessed through the information icon in the bottom right corner. This information screen is unimplemented in our prototype, however.



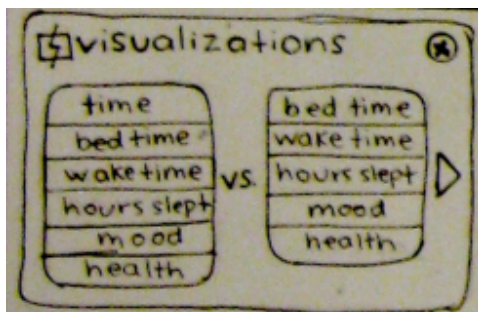
*old information screen*



*new information screen*

### Visualization Screen

Previously, graph options were selected in an alternate pop-up window. We decided to streamline this process by having the options embedded within the visualization screen, which is a modified version of the home screen.



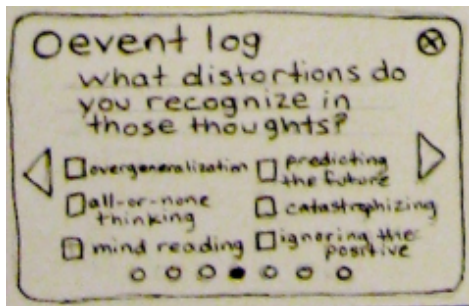
*old visualization screen*



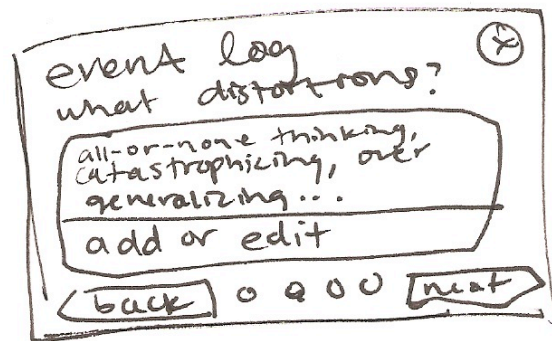
*new visualization screen*

## Event Log

We changed the check box interface to a different, smaller multi-select interface mostly due to space constraints. We were not able to fit all of the elements onto one screen with the check-box model. We also changed the buttons from plain arrows to arrows with text stating “back”, “next”, and “save”.



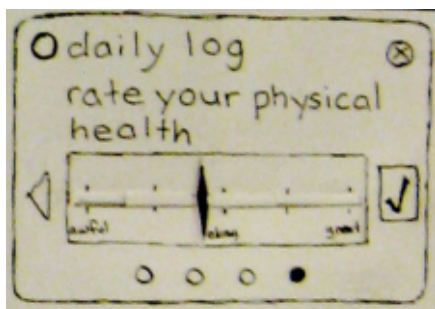
*old event log*



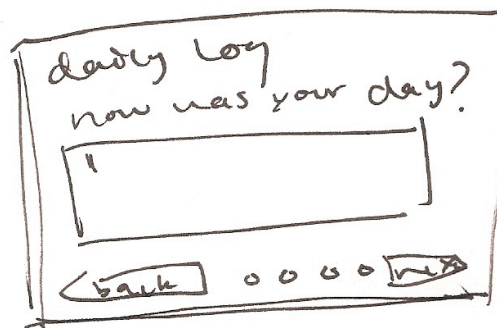
*new event log*

## Daily Log

We reordered the questions and added a free-form text field, which two of our participants requested. We also changed the buttons from plain arrows to arrows with text stating “back”, “next”, and “save”.



*old daily log*



*new daily log*

# Prototype Overview

## Overview of Implementation and Tools Used

The prototype is implemented in HTML, with jQuery powering all of the behavior. Most interactions were made trivial enough with jQuery's power that we were able to build or at least fake them, and it was possible to put real, albeit canned, data into the application, as this made the graphing feature much easier to implement. jQuery allowed us to approximate both the design and the interaction flow quite well.

There were parts that we could not build, or are only approximated — the home screen wave, for instance, is more regular and periodic than it would actually be, but our implementation depended on the use of a sin wave so that we would not have to rely on drawing bezier curves in SVG. Similarly, as we are not capable of drawing arbitrary lines without the use of SVG, we were not able to implement graphing modes comparing days to any y-axis variable. Finally, as the interaction is well-defined by the iPhone and would have been difficult to implement, we did not implement the behavior for the multi-select control to choose potential distortions.

Some features were considered future functionality, and would not have been implemented regardless of technical limitations. For instance, users should be able to pinch and zoom on any of the home screen views, but that feature is beyond the scope of this prototype.

All of our graphics were created in Adobe Photoshop.

## Scenario for Task 1: Create a daily log

Create a new daily log.

1. Touch the plus icon in the corner.
2. Choose daily log.
3. Use the slider to record your emotional state and then press the next button.
4. Use the slider to record your physical health and then press the next button.
5. Use the slider to record what time you last went to sleep and then press the next button.

6. Use the slider to record what time you last woke up and then press the next button.
7. Enter optional text in the field and then press the next button.

### Scenario for Task 2: Home screen

See your history.

1. Touch the dot to see the daily log you just created.
2. You can also scroll backwards through time by dragging.

Note that for this prototype we have limited the amount by which you may traverse backwards.

### Scenario for Task 3: Visualizations

Explore the visualization section and graph Mood vs. Health.

1. Touch the visualizations icon on the bottom of the screen.
2. On the x-axis (bottom) touch the label to change the criteria.
3. Choose Health.
4. On the y-axis (side) touch the label to change the criteria.
5. Choose Mood.
6. On the x-axis (bottom) change the criteria to Bed Time.
7. Note the changes that occur.
8. Touch the visualizations icon on the bottom of the screen to exit after choosing your graphing mode.
9. Note that in the 2d-graph view you can still touch dots to see the associated logs.
10. Revert your visualization to wave view by turning on the edit mode and choosing Wave on the y-axis.

### Scenario for Task 4: Create an event log or cbt worksheet

Imagine you just finished a job interview and you don't think it went well. Use to create an event log about that experience.

1. Touch the plus icon in the corner.

2. Choose event log.
3. Enter text in the field and then press the next button.
4. Repeat.
5. When you encounter the question about distortions, touch the edit button to add appropriate distortions. Note that for this prototype, the responses you can enter are not modifiable.

This same process also applies to the cbt worksheets available from the same menu.

### Omitted Content

In order to narrow the scope of our prototype, we omitted a few less important pieces of functionality. We chose to narrow our scope so as to create the most communicate artifact of our design that time allowed. We chose not to implement the help section, and also chose not to implement the part of our tool that will allow you to search through numerous worksheets to find one that interests you. Instead, clicking on “worksheet” takes you directly to a sample worksheet that we have written. We felt that it was important to include a sample worksheet even if we hadn’t fleshed out the process of getting there because we wanted all of the ways in which our tool assists with anxiety management to be clear.

The full text of the omitted help content can be found in the Appendix.

## Prototype Screenshots

The following screenshots include both the prototype, and the provided annotations for navigating through each scenario.

### Task 1: Create a daily log



Creating a daily log

Viewing the home screen

Using visualizations

Creating an event log or cbt worksheet

Use *.calm* to create a daily log.

1. Touch the plus icon in the corner.
2. Choose daily log.
3. Use the slider to record your emotional state and then press the next button.
4. Use the slider to record your physical health and then press the next button.
5. Use the slider to record what time you last went to sleep and then press the next button.
6. Use the slider to record what time you last woke up and then press the next button.
7. Enter optional text in the field and then press the next button.





Creating a daily log

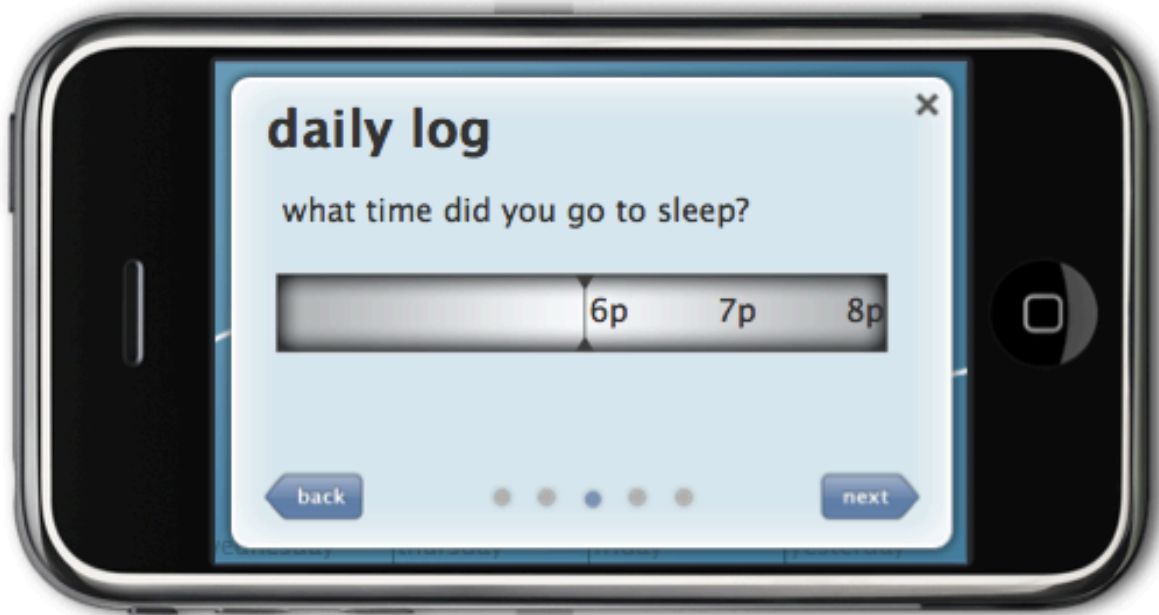
Viewing the home screen

Using visualizations

Creating an event log or cbt worksheet

*Use .calm to create a daily log.*

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Creating a daily log

Viewing the home screen

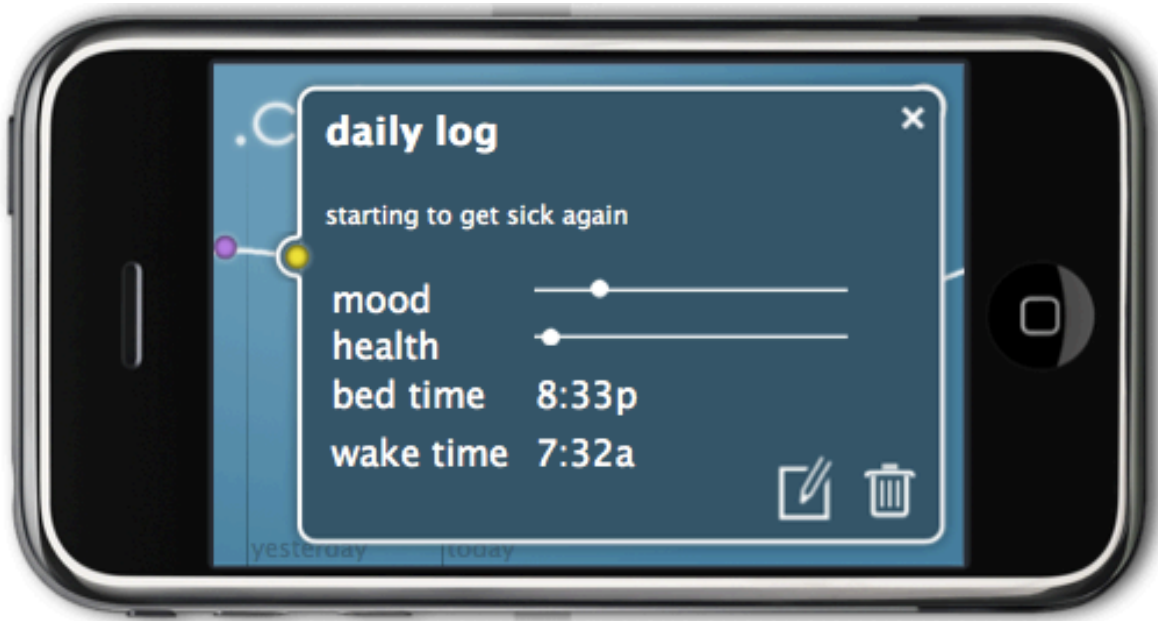
Using visualizations

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## Task 2: Home Screen



Creating a daily log

Viewing the home screen

Using visualizations

Creating an event log or cbt worksheet

*See your history.*

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You can also scroll backwards through time by dragging. Note that for this prototype we have limited the amount by which you may traverse backwards.

## Task 3: Visualizations



Creating a daily log

Viewing the home screen

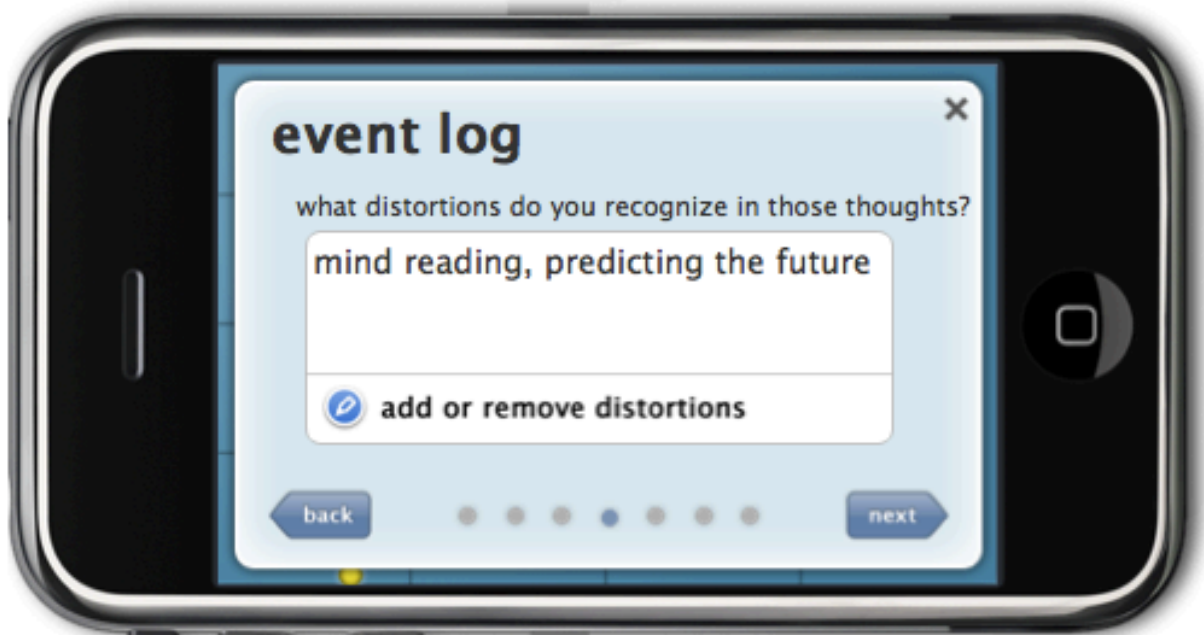
Using visualizations

Creating an event log or cbt worksheet

*Use .calm to explore the visualization section and graph Mood vs. Health.*

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2. On the x-axis (bottom) touch the label to change the criteria.
3. Choose Health.
4. On the y-axis (side) touch the label to change the criteria.
5. Choose Mood.
6. On the x-axis (bottom) change the criteria to Bed Time.
7. Note the changes that occur.
8. Touch the visualizations icon on the bottom of the screen to exit after choosing your graphing mode.
9. Note that in the 2d-graph view you can still touch dots to see the associated logs.
10. Revert your visualization to wave view by turning on the edit mode and choosing Wave on the y-axis.

## Task 4: Create an event log or cbt worksheet



Creating a daily log

Viewing the home screen

Using visualizations

Creating an event log or cbt worksheet

*Imagine you just finished a job interview and you don't think it went well. Use to create an event log about that experience.*

1. Touch the plus icon in the corner.
2. Choose event log.
3. Enter text in the field and then press the next button.
4. Repeat.
5. When you encounter the question about distortions, touch the edit button to add appropriate distortions. Note that for this prototype, the responses you can enter are not modifiable.

This same process also applies to the cbt worksheets available from the same menu.



Creating a daily log

Viewing the home screen

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# Appendix

## Omitted Help Content

The following help content was written but omitted from our prototype:

- Welcome

Welcome to .calm, a mobile application designed to put CBT in your pocket. .calm offers several logging tools and a visualizations interface that helps you see your progress and the relationships between your mood, health and sleep patterns. Included are some information screens that give insight into the intent behind each of the aspects of the application, but remember, this is your tool. You are welcome to explore it and use it however you like.

- What is CBT?

Cognitive Behavioral Therapy (CBT) is a combination of behavioral therapy and cognitive therapy. The term CBT is an umbrella for several different psychotherapeutic techniques that range from individual to group to self-help. CBT is primarily a framework for analyzing the relationship between your thoughts and emotions.

- daily log

.calm offers a daily log where you can keep track of a brief thought, your emotional state, your general health, and your sleeping and waking times. Over time, this information can be used to generate graphs to help you see trends and relationships between your mood, health and sleep patterns.

- event log

.calm offers an event log as a generic CBT tool to record thoughts about an upsetting event to help you recognize thought patterns. The event log is meant to be used as often as you like.

- worksheets

.calm offers different focused CBT worksheets to work on specific areas, such as relationships, negative thoughts and goal planning.

- visualizations

.calm offers a visualizations interface that allow you to view the collective information from your daily logs to help you see trends and relationships between your mood, health and sleep patterns.