



Group 3 Quarter Summary

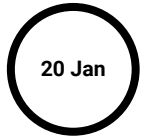
Comprehensive Usability Study on What's Up and Sanvello

A Presentation on Projects 1-4 of HCI 460
By Dhaivat, Joey, and Woo





Timeline

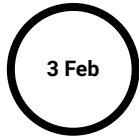


Project 1

Expert Evaluation Methods

Heuristic Evaluation Method

Cognitive Walkthrough



Project 2

Usability test

Assessment test



Project 3

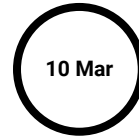
Interview testing

Exploratory test

Moderated

Live Zoom calls with screen share

1 or 2 observers per test session



Project 4

Fully fledged user testing

Comparison test

Unmoderated

Recorded



Project 1 | Overview

Expert Evaluation Methods

1. Heuristic Evaluation

- We applied a list of heuristics capable of identifying common usability problems.
- Based on the heuristics, we identified 9 usability issues that were categorized using the severity ratings.
- Severity Ratings are:
 - Severity 3: These issues are important and need to be fixed as soon as possible.
 - Severity 2: These issues are problematic but do not hinder users from using the app.
 - Severity 1: These issues are minor and have the least impact on usability. However, they are still visible and may influence users' overall perception of the app



Project 1 | Overview

2. Cognitive Walkthrough

- We identified three core tasks for the cognitive walkthrough. These are the tasks that are likely to be performed most frequently when using the app.
 - Logging into the app
 - Adding entry into the diary
 - Finding breathing meditation exercise








Project 1 | Findings & Recommendations


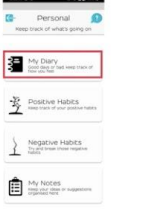



Based on our findings from Heuristic evaluation and Cognitive walkthrough, we compiled a list of 10 most common and severe usability problems and suggested solutions to address those issues.





#	Problem Description	Problem Justification	Recommendation	Screenshot
1	The heart icon (bottom left on the "Uplifting Quotes" screen) does not provide distinction for quotes that have been marked as favorite by the user.	Because distinction is not provided for favorited quotes, it'll cause confusion for users later when they want to remember which ones they marked as favorite.	Provide a distinction on the heart icon for quotes that users marked as favorite.	<p>You can fall at what you don't want. So you might as well take a chance at doing what you love.</p> <p>Jim Carrey</p> 
2	There is no indication that user needs to swipe horizontally to see contents in the next page.	Users will think there is only one page and miss additional contents that can be found by swiping horizontally.	Consider adding arrow buttons or page indicator on the page to show that there are more contents to the side.	<p>Roll Breathing</p> <p>Roll breathing helps you to develop full use of your lungs and to focus on the rhythm of your breathing. You can do it in any position. But while you are learning, it is best to be on your back with your knees bent.</p> <p>Swipe to continue</p> 
3	Only the icon is tappable in the Settings menu item. The text, which has more real estate is not tappable.	Users are used to tapping on the entire row to access menus. It would be confusing for users if they can't tap on the text. They might think the entire button doesn't work.	Make entire row item (icon + text) tappable.	
4	'Help Right Now' > 'Get Grounded' page. It is not clear how to go through this activity. The instructions are hidden in the Question mark icon on the top right of the screen but this is also not apparent to the user that instructions can be found there.	Users will not know how to go through this activity and thus not experience the full benefit of this app.	Consider one of the following: 1. add an interstitial as soon as the user enters the screen 2. provide the instruction on the body of the page. 3. provide an instruction page before starting the activity.	<p>Get Grounded</p> <p>Having a struggle you can't see that are awful</p> 
5	Ability to deselect stars is not provided. Once user selects a star they have continue.	Users might change their mind about the item they thought about and want to backtrack one or more steps. Not being able to deselect stars can be frustrating in this case.	Allow users to deselect stars.	<p>Get Grounded</p> <p>Having a struggle you can't see that are awful</p> 



6	There are many menu items available but grouped under only 4 categories. This can make it challenging to find items which are inside the menus.	This impacts the users' mental workload as it will be hard to find menu-items and make them slower. Also, reaching to the final task adds unnecessary steps and might lead to error.	Create more categories on the top depth and include some of the hidden activities so that more features are easier to find. "HelpRightNow" has significantly more menu than others. These menus can be regrouped and brought to the top depth. Consider adding "Recently viewed" feature.	
7	Adding new entry to the Diary is hard to find as there is no label of 'adding entry' until the user reaches at the final step.	It impacts the efficiency as users can get confused how to add new entry without any visibility of the label on the initial steps. These can create errors landing users to different screens and not the intended one.	Consider adding 'add new entry' in the text description of 'My Diary' button. Also, can do a major navigational change in the app mentioning 'add entry' in the home page itself.	
8	Its possible to change the color palette of both body and text to be the same color.	This may cause user frustration if they accidentally choose the same color for both text and background.	Disallow light+light or dark+dark color palettes (Heuristic - Error Prevention)	
9	Text alignment is not consistent. Some screens show text center-aligned (e.g. - Help Right Now screens) whereas others show text left-aligned (e.g. - Information screens)	Inconsistent text-alignment can negatively impact perception of the app's quality. Center-alignment also makes it more difficult to read than a left-aligned paragraph.	Make all text be left-aligned so that it's easier to read.	
10	Too much text used in each content screens. It's difficult to engage users if only text is used.	It unpleasing to see just the texts and might decrease the user engagement with the app.	Consider providing interactive features and/or more images to make absorbing content more enjoyable.	



Project 2 | Overview

Usability test

Assessment test

- The assessment test helped to address and discover problems users had when using the What's Up app.
- The tasks included in the test checked for usability and design issues in the app. Activities like finding ways to stay positive, new diary entry, breathing exercise and changing the settings in the app are asked to the users. These tasks helped us evaluate the app and find usability issues with the app.



Project 2 | Overview

Test Objectives

Our main test objectives for this moderated test were:

1. Can users successfully complete activities?
2. Can users navigate and find information about different ways to cope with their emotions?
3. How helpful are the contents and information provided for coping with emotions?
4. Can users easily make configurations to the app settings?



Project 2 | Overview

Test Method and Environment

- We used exploratory test to identify point of confusion and efficiency of the What's Up app. Participants performed 8 tasks and we gathered data about the success and failure rates.
- We also obtained qualitative data about participants' experience using the app. Qualitative data includes quotes from participants, record of notable actions that were observed, and suggestions based on usability issues identified. It helped us in determining whether users can easily find and utilize the app's resources.
- Before recruiting actual users for the interviews we performed pilot test to identify discrepancies and improve the test plan.



Project 3 | Overview

- Interview testing
 - Exploratory test
 - Moderated
 - Live Zoom calls with screen share
 - 1 or 2 observers per test session
- Research focus
 - App navigation
 - Task efficiency



Project 3 | Results

- Users found difficulty in multiple navigational exercises
 - The app changed gesture methods repeatedly, confusing our participants
- Users found it easy to configure app settings
- Recommendations
 - Consider providing consistent use of gestures on all screens OR
 - Consider providing instructions on navigation with images rather than words
 - Consider providing activity overviews prior to the user starting them
 - In general, consider using less textual instruction and more imagery



Project 3 | Results

Research Objective	Insight Summary
1. Can users successfully complete activities?	A portion of the participants could not complete activities successfully. Insufficient instructions on how to proceed with activities caused users to get stuck.
2. Can users navigate and find information about different ways to cope with their emotions?	There is difficulty in finding and navigating to the information. Unclear and inconsistent navigation methods caused some participants to fail finding the desired information.
3. How helpful are the contents and information provided for coping with emotions?	Participants found the contents and information somewhat helpful. The average score was 4.6 with the lowest of score of 3 and highest of 6.
4. Can users easily make configurations to the app settings?	All participants found it easy to find the setting and make configurations.



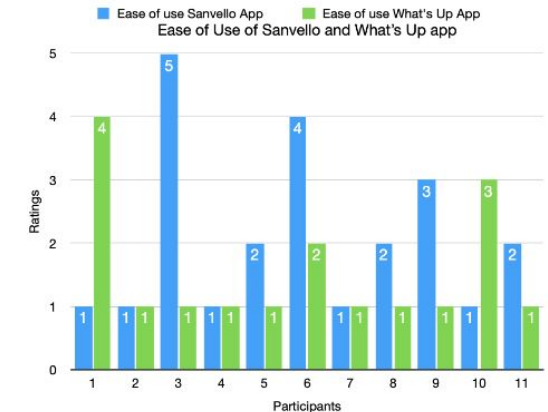
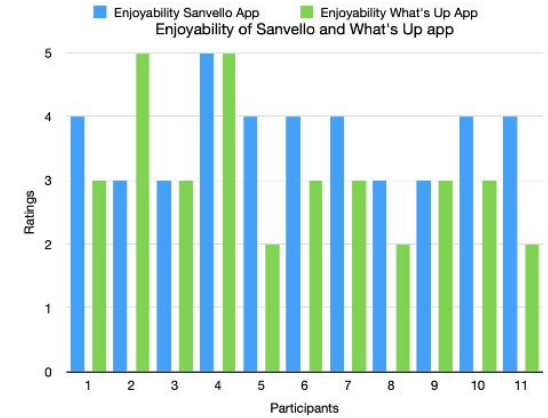
Project 4 | Overview

- Fully fledged user testing
 - Comparison test
 - Unmoderated
 - Recorded
- Single objective
 - Quantitative variable analysis
 - Across **two** applications



Project 4 | Results

- Within-groups app testing between Sanvello and What's Up (N=11)
 - Variables: Enjoyability and Ease of use
 - 1 Breathing exercise activity in each app
 - Likert scale questions between app activities
- Data
 - Sanvello had higher averages on both ease (2.09 vs 1.55) and enjoyability (3.73 vs 3.09)
 - Within-groups Paired T-Test (Analysis of result differences)
 - Ease: P value = 0.3674
 - Enjoyment: P value = 0.0889





Thank You

