

Heuristic Evaluation of Phocus

1. Problem

We are evaluating the user interface of Phocus, a mobile app that helps individuals and groups attend to specific tasks by requiring them to complete a “dare” if they fail to focus.

2. Violations Found

1. **[H2-10 Help and documentation] [Severity: 3] [Found by: A]**
The starting screen doesn't have any information about what the app is for or what the user is supposed to do. This lack of documentation will likely leave a new user completely lost. To fix this, add some kind of tutorial.
2. **[H2-4 Consistency and standards] [Severity: 5] [Found by: A]**
It's not intuitive how to set the time. If you hadn't told us in class to use the circle with the dot on it as a wheel, I likely never would have turned it. On the iOS platform, users are used to setting the time by using a certain kind of time selection (see the Timer screen of the default Clock app). Switch to a more conventional time setting method.
3. **[H2-8 Aesthetic and minimalist design] [Severity: 2] [Found by: A, B, C, D]**
Rotating the wheel on the home screen produces a weird and asymmetrical motion. This is aesthetically displeasing. To fix this problem, make the wheel symmetric—or as I suggest above, remove the wheel entirely.
4. **[H2-7 Flexibility and efficiency of use] [Severity: 1] [Found by: A]**
If the user wants to focus for a long amount of time, it's not efficient to do so since the user must spin the wheel multiple times. To fix this problem, remove the wheel as I suggest above.
5. **[H2-8 Aesthetic and minimalist design] [Severity: 2] [Found by: A, B, D]**
Many parts of your prototype are not properly centered. For example, the circle in the middle of the home screen and the “Challenge Type” text are both not centered. This is aesthetically displeasing and communicates a lack of care for visual design. To fix this problem, center things properly.
6. **[H2-8 Aesthetic and minimalist design] [Severity: 2] [Found by: A, B]**
There's a lot of blank gray space between “Start Phocus” and the time on the home screen. This is aesthetically displeasing. To fix this problem, remove the gray space.
7. **[H2-1 Visibility of system status] [Severity: 4] [Found by: A, C]**
After clicking on the “Group” button, we're brought to some screen with a checklist. It's not obvious what we're doing here. Keep the user informed about what's going on by providing a title for the screen.

8. **[H2-5 Error prevention] [Severity: 4] [Found by: A, C]**
On the group invite screen, no one can be invited, but one can still click “Phocus.” Either display some kind of warning if no one is invited or don’t allow the button to be clicked until at least one other person is invited.
9. **[H2-3 User control and freedom] [Severity: 5] [Found by: A, B, C]**
There’s no back button once you click on the group challenge button from the home screen. There is an option to cancel in the next screen if they click Phocus, but back button functionality should be supported throughout. If a user is trying to do the first task and focus on their own work but accidentally clicked on the group button, they should be able to go back. Support undo by adding a back button.
10. **[H2-8 Aesthetic and minimalist design] [Severity: 2] [Found by: A, B]**
The horizontal spacing isn’t symmetric on the group invite screen. This is aesthetically displeasing. To fix this problem, make the horizontal spacing for the names on the left the same as the spacing for the dots on the right.
11. **[H2-1 Visibility of system status] [Severity: 5] [Found by: A, B, D]**
Whenever you click on settings, the currently selected tab changes. This is confusing to the user. Keep the same tab selected when the settings button is clicked.
12. **[H2-2 Match between system and the real world] [Severity: 5] [Found by: A, B, C, D]**
Clicking the “About” button should not bring you to the scoreboard. This is illogical. Make the “About” button go to an “About” screen.
13. **[H2-3 User control and freedom] [Severity: 5] [Found by: A, B, C, D]**
There’s no back button once you click on the single challenge button from the home screen. The problem is exacerbated by the fact that there are also no tabs to click on. I know you may have implemented this in order to force users to do their dare as part of your third task, but what if someone accidentally clicks on the single user button? They should have some way of cancelling without taking a photo or video of themselves. Support undo by adding a back button.
14. **[H2-4 Consistency and standards] [Severity: 2] [Found by: A]**
The “Cancel” button on the group and single locks screens is a big centered orange button. The convention for iOS apps is to have the cancel or back action be a button in the top left corner. Follow the convention and move the cancel button to the top left.
15. **[H2-2 Match between system and the real world] [Severity: 5] [Found by: A, B, C]**
Clicking the “Cancel” button on the single lock screen signals that the user has lost phocus. This is not what “Cancel” normally means. Make the “Cancel” button cancel the action.
16. **[H2-4 Consistency and standards] [Severity: 5] [Found by: A, C, D]**
The “Cancel” button on the group lock screen brings the user back, but the same button on the single lock screen signals that the user has lost phocus. Make the two screens consistent by making the button cancel on both screens.

17. **[H2-4 Consistency and standards] [Severity: 2] [Found by: A, C, D]**
The group lock screen has a blue arrow that the single lock screen does not. Make the two screens consistent by either removing the blue arrow on the group lock screen or adding it on the single lock screen.
18. **[H2-2 Match between system and the real world] [Severity: 5] [Found by: A, B, C, D]**
It doesn't make sense to have "Scoreboard," "Progress Screen," "Sign Out," and "About" all under "Settings." This information does not appear in a natural logical order. To fix this problem, either create a "More" tab with this information and put actual settings in the "Settings" screen.
19. **[H2-4 Consistency and standards] [Severity: 2] [Found by: A]**
Typically, the "Sign Out" button is the last option of a list. The interface has the "Sign Out" button above the "About" button which doesn't follow platform conventions. To fix this problem, make the "Sign Out" button the last button.
20. **[H2-2 Match between system and the real world] [Severity: 2] [Found by: A, D]**
On the "Settings" screen, "Progress Screen" is an outlier since it has the word screen after it. There's no need to use a system-oriented term such as "screen." To fix this, simply change the button to be "Progress."
21. **[H2-7 Flexibility and efficiency of use] [Severity: 4] [Found by: A, B]**
On the group invite screen, the checklist buttons are very small and hard to click. It's inefficient to force the user to click on such a small button. This is especially problematic for someone with large fingers on a smaller touch screen. To fix this problem, make the entire row clickable. As a cool extra feature, it may also be helpful to pre-check people in a very close vicinity by using GPS.
22. **[H2-1: Visibility of the System Status] [Severity: 3] [Found by: C]**
The Phocus screen prompts you to lock your phone in a set amount of time, but does not provide feedback on what will happen if you lock or don't lock. The user may be confused about what the system will do when they lock their phone or if they don't. Provide better feedback as to what will happen when you lock your phone.
23. **[H2-1: Visibility of the System Status] [Severity: 3] [Found by: C]**
The interface does not allow you to include preferences for who will see any given post. Users may be confused about who can see their post and what privacy the system allows. Create privacy settings and allow users to identify who will see their post.
24. **[H2-2: Match Between the System and the Real World] [Severity: 4] [Found by: C]**
The interface requires users eyes to move in an unfamiliar pattern on the start screen because you set the time on the dial move to the bottom to select the challenge type then press in the middle to progress. It is natural for us to read top to bottom or left to right. Break out tasks into three screens or segment the primary screen so tasks progress top to bottom or left to right. (i.e. Set time, select challenge type, select group or individual)
25. **[H2-2: Match Between the System and the Real World] [Severity: 4] [Found by: C]**
The interface uses the metaphor of a timer dial to set time, but does not carry out the

metaphor in a way that is intuitive for a user to latch onto. Without reading documentation I would not understand that moving the circle on the dial would adjust the Phocus time. Make the metaphor of a time dial a bit stronger possibly by adding clock hash marks.

26. **[H2-2: Match Between the System and the Real World] [Severity: 3] [Found by: C]**
The interface uses a message icon for challenge friends. Users may be confused because this icon, which should be familiar to the average user is mismatched with its functionality. I assume there would be an inbox here, change the icon to something related to challenging a friend.
27. **[H2-4: Consistency and Standards] [Severity: 4] [Found by: C]**
The interface has a call to action to Phocus for the group focus session, but for the individual focus session it goes straight to the phocus session screen. User may be confused by this mismatch. Have a phocus button to start both types of sessions.
28. **[H2-5: Error Prevention] [Severity: 4] [Found by: A, B, C]**
The interface makes it difficult for a user to understand how to progress forward from the start screen. The user may not understand where to click to interact with the app, which may lead them to a page they do not want to go to. If the single person, and group clip art is the call to action for setting up your Phocus session use affordances of a real world button to make it clear clicking here will begin your session.
29. **[H2-8: Aesthetic and Minimalist Design] [Severity: 4] [Found by: C]**
The interface does not allow you to filter your feed. This may give users too much information or information that is irrelevant to them. Allow users to filter by people that are their friends, just their posts, everyone, etc. (Venmo is an example of a platform that does this filtering well.)
30. **[H2-7: Flexibility and Efficiency of Use] [Severity: 5] [Found by: C, D]**
The interface hides stats and progress in a settings menu. Some expert users may prefer to see their personal stats or rankings opposed to social feed. Checking how much the user has phocused for the week takes at least two clicks (first on Settings icon then on 'Progress Screen'). Fix: Allow users to identify what is important to them. Make the individual summary more easily accessible, possibly from the home screen. A consistent top nav bar that slides down and then out of the way quickly to view one's score could work well, for example.
31. **[H2-8: Aesthetic and Minimalist Design] [Severity: 4] [Found by: C]**
The interface requires the user to complete numerous tasks on the start screen, but does not provide strong cues as to which order they should be completed in. It may be overwhelming for the user to identify the information and functions that are relevant to the task he/she is trying to carry out. Either break three subtasks (setting time, picking challenge type, and identifying group or individual) into three screens of provide helpful cues as to which order these should be completed in.
32. **[H2-1 Visibility of System Status] [Severity: 2] [Found by: D]**
It was very difficult to read the text on the 'Feed' page, which rendered the screen useless

to me. This may just be the result of embedding the prototype on the page. Fix: make sure text is large enough in the hi-fi version.

33. **[H2-7 Flexibility and Efficiency of Use] [Severity: 1] [Found by: D]**

On the second tag, there appears to be no one-click reset button for the timer. This may be a frequent sub-task for users. Fix: Consider a double tap the round knob or swipe the timer to reset option.

34. **[H2-1 Visibility of System Status] [Severity: 3] [Found by: D]**

On the page where you are selecting group members there is no count of how many people you have selected to join the group. This could be helpful as I imagine the primary user will be scrolling through their contacts list. Fix: Add a line that calls out how many people you will be focusing with.

35. **[H2-5 Error Prevention] [Severity: 4] [Found by: D]**

After you've selected Phocus group members it is unclear what happens to the contacts selected once you press Phocus. Do they get an invite to join the Phocus group? Does the Phocus time start automatically, or does everyone have to join the group first? Fix: Using the term 'Invite to Phocus' may also be worth considering.

36. **[H2-6 Recognition Rather than Recall] [Severity: 1] [Found by: D]**

On the group Phocus brief page, there appears to be no way to see who you're focusing with. This may be helpful if you're phocusing with folks who are not in the same room with you. Fix: Consider the not co-located group use case (ex. group studying) and allow the user to view who is in, or who had joined the Phocus group.

37. **[H2-4 Consistency & Standards] [Severity: 3] [Found by: D]**

The page to select Phocus group members and the page to select who to send a challenge to are not consistent with one another (ex. different spacing and the presence of profile pics on one vs the other). This could confuse users and makes the app look unfinished. Fix: Make sure these are streamlined in the hi-fi version.

38. **[H2-8 Aesthetic and Minimalist Design] [Severity: 2] [Found by: D]**

The blue heart background on the page with the notification that reads, "Looks like you couldn't..." feels inconsistent with the design of the rest of the app. Fix: choose a more consistent background.

39. **[H2-2 Match Between System and the Real World] [Severity: 4] [Found by: D]**

The 'Continue' button on the page with the notification that reads, "Looks like you couldn't..." doesn't match the tone of the notification. This could be an opportunity to get the user excited (or anxious) about the challenge. Fix: Make language between notification and call to action consistent in tone

40. **[H2-10: Help and Documentation] [Severity: 4] [Found by: B]**

It is a little unclear what the send a challenge page does. Do my friend or friends get this challenge immediately? What happens if a friend sends me a challenge? What if I send challenges that are too ridiculous to work? Some of the details of this are not clear to me as

a user and a help or documentation button would be helpful to understand the details of this page's process.

41. [H2-3: User Control and Freedom] [Severity: 3] [Found by: B]

On the interface's challenge a friend page, there is currently no way to type into the text field. How will the interface look when that typing option is created? Will a keyboard slide up from the bottom and the whole page will scroll? Will it take me to a new typing page that I will accept and revisit to edit? To fix this, implement a typing UI for the "what will this challenge look like?" text field.

42. [H2-4: Consistency & Standards] [Severity: 3] [Found by: B]

On the cancel group focus page message it says, "Phocus for 1.5 hours...." But on the home page it displays the time as 1:30 hrs. This is inconsistent. To fix, pick one representation of time and stick with it.

43. [H2-7: Flexibility and Efficiency of Use] [Severity: 3] [Found by: B]

On the group focus page when selecting friends, the search bar is already filled. When a user goes to type in it, it is already filled with the word "search" that must be deleted. This should be a placeholder, but not have to be deleted in order to complete a search.

3. Summary of Violations

Category	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (sev 5)	# Viol. (total)
[H2-1: Visibility of Status]	0	1	3	1	1	7
[H2-2: Match Sys & World]	0	1	1	4	3	9
[H2-3: User Control]	0	0	1	0	2	3
[H2-4: Consistency]	0	3	2	1	2	8
[H2-5: Error Prevention]	0	0	0	2	0	2
[H2-6: Recognition not Recall]	1	0	0	0	0	1
[H2-7: Efficiency of Use]	2	0	1	1	1	5
[H2-8: Minimalist Design]	0	5	0	2	0	7
[H2-9: Help Users with Errors]	0	0	0	0	0	0
[H2-10: Documentation]	0	0	1	1	0	2
Total Violations by Severity	3	10	9	12	9	43

4 Evaluation Statistics

severity\evaluator		evaluator A	evaluator B	evaluator C	evaluator D	evaluator E
level 1		1				
level 2		8	4	1	6	
level 3		1	3	3	2	
level 4		4	3	8	2	
level 5		8	6	7	6	
total (levels 4 & 5)		12	9	15	8	
total (all levels)		22	16	19	16	

evaluator # Ex. C	# problems found Ex. 7	# unique problems remaining & problem IDs Ex: 5 (1, 7, 11, 13, 17)
A	22	5 (1, 2, 4, 14, 19)
B	16	4 (40, 41, 42, 43)
C	20	9 (22, 23, 24, 25, 26, 27, 28, 29, 31)
D	18	8 (32, 33, 34, 35, 36, 37, 38, 39)

5. Summary Recommendations

A: As it currently stands, your app does not look polished. The largest trend that is spread across many of the violations is that the app is not particularly aesthetically pleasing and that it does not follow platform conventions. I would recommend getting someone with a keen eye for design and who cares about detail to work on the overall visual appearance of your app. Using an app should be a delightful experience, and a lot of that comes from attention to small details. I would also recommend looking at a bunch of iPhone apps and looking at things that they all do consistently similarly, such as placing a back button in the top left corner. I would encourage you to learn about the various platform conventions and then think very strongly about why you would decide to break certain conventions. If there's not a very good reason to stray from the conventions, I would recommend sticking by them. For example, I believe your decision to use the circle with the dot may be misguided and may leave multiple users—including myself— baffled. There is additionally one small issue that bothered me that didn't fit into the violation categories. The glasses logo reminds me of Whatsgoodly's logo. Since Whatsgoodly is a product that I don't have good feelings about, some of the negative feelings carry over to your app. I may be the only one with this view, but

if other users have a similar thought, I would suggest altering the logo. This is clearly a very small and personal issue, but I thought it would be good to let you know. My largest overall recommendation would be to look at a bunch of apps that you really like and that you really enjoy using and think hard about what makes their user interface great. Your idea is interesting, but your design needs a lot of work. Thankfully, this is still only the medium-fi prototype, and you can do a lot of polishing before the high-fi version. I'm excited to see you produce something truly delightful!

B: Generally, you have put together a very good minimalistic prototype of Phocus. Your consistent color scheme and use of white space very effective. I think there are some consistency issues that you have with text alignment and button interaction. By centering text, and dealing with the bottom navigation bar, you will make the app's interactions feel more consistent. Additionally, there are some ease of use and navigation that could be improved. By fixing the issue of getting stuck once a solo focus session is selected, making the size of the buttons when selecting friends larger, your original UI can become much easier for a new user to navigate quickly. Overall, I think you guys have a very good start that with another iteration or two, could become a great UI.

C: It is clear that technology has had a profound impact on most individual's ability to focus for extended periods of time. Thus, I think the foundation of your product is very relevant, and you have a good start towards creating something that could in fact impact focus behavior, but in my opinion it may be a good idea to take a step back and think a good deal about accountability and what role that will play in the viability of this concept. I will break my further feedback down into three categories and touch on what I think you do well and what I think you could improve moving forward. These categories will include: aesthetics, expert users and accountability.

To begin with aesthetics, I found the color scheme you choose to be a bit aggressive for the purpose of your product. The orange is very strong and elicits a bit of a stressful response. I would think about how the colors and fonts you use make your user feel. I do like that you made a clear effort to stick to a minimalist design, with few screens and distractions, but would urge you to think about how breaking out your tasks (example the begin focus screen) into multiple smaller subtasks might impact the ease of use. The goal being that each screen has the least number of distractions as possible without increasing memory load. This may allow the user to focus a bit more on the goal of your app and less on how to carry out a task. In summary, I think the functionality should be minimal since you are encouraging users to use their phone less, but think more about the visual identity of your product.

In the spirit of full disclosure, I have terrible ADHD. This is something I have dealt with for my entire life, and have been un-medicated for about 5 years now, so I am the queen of distractions. To be completely honest with you I don't know how well your product would work in the wild as it stands now. There are so many ways to be distracted and your phone, while a top offender, is definitely not the only one. If I'm writing an essay let's say, I will likely be most distracted by my computer, where I can still respond to all of my text messages, answer my phone calls, go on facebook, etc. etc. I would ask the question of how can a mobile application impact my multitasking behavior to help me focus on what I am doing? How will it encourage me to focus? I think bringing in a social component is good here. It allows you to be accountable to others, but what I'm not sure what I

agree with is how you realize this social component. Your platform focuses on failure. What happens if I fail to focus, opposed to what happens when I succeed. The idea of success really gets people excited and I think you should focus in on how you could play to this human behavior.

James' paper on Ubifit which is the mobile phone screen where a garden grows as people engage in physical activity is a good example of visualizing success in a way that encourages real world behavior. I have included a link to the paper here if its helpful.

https://www.cs.umd.edu/~jonf/publications/Consolvo_ActivitySensingInTheWild-AFieldTrialOfUbifitGarden_CHI2008.pdf

Finally, and most importantly, I think you should figure out **WHY** your users should feel accountable to your app. If you are trying to solve a problem of helping people focus, individuals using your app should feel very accountable. This requires developing trust with your users and creating a platform that they want to go back to to see. I think it would be cool if this app was meant to be a bit more in the background. For example, if it helped you understand how you spent the time on your phone and other devices, and how much time you spent being productive.

I hope some of this advice is helpful and actionable. I'm happy to discuss more!

D: Overall, I like the prototype's simplicity though its color induces stress. Without the readme and prior context on the app's purpose, I think I would have found it a bit difficult to navigate as there was no backward navigation functionality and some menus were in awkward locations. Additionally, some task flows did not feel entirely complete. Notably, the prototype for the most complex task (i.e. failing the focus so one must execute a challenge) appeared to be the least fleshed out. Although the readme indicated that might be somewhat due to prototype tool limitations and the lack of a live database, I thought there were still some cases / screens left off the table. For example, for the individual case, the prototype goes from taking a video or photo (imaginary) directly to the Phocus brief page. An asset re-take option and confirm to start phocus screen seemed missing. When the user clicks to accept his/her fate after canceling, the prototype ends abruptly by redirecting to a the Feed page which has no clear indication that one just completed a challenge (or at least it was not visible due to text size). I would recommend thinking through the experience of being notified that their challenge was shared as well as how he/she receives ongoing feedback when friends have seen the challenge submission.

Severity Ratings

- 1- don't agree that this is a usability problem
- 2- cosmetic problem
- 3- minor usability problem
- 4- major usability problem; important to fix
- 5- usability catastrophe; imperative to fix

Heuristics

[H2-1: Visibility of System Status]

- keep users informed about what is going on

[H2-2: Match Between System & Real World]

- speak the users' language
- follow real world conventions

[H2-3: User Control & Freedom]

- "exits" for mistaken choices, undo, redo
- don't force down fixed paths

[H2-4: Consistency & Standards]

[H2-5: Error Prevention]

[H2-6: Recognition Rather Than Recall]

- make objects, actions, options, & directions visible or easily retrievable

[H2-7: Flexibility & Efficiency of Use]

- accelerators for experts (e.g., gestures, kb shortcuts)
- allow users to tailor frequent actions (e.g., macros)

[H2-8: Aesthetic & Minimalist Design]

- no irrelevant information in dialogues

[H2-9: Help Users Recognize, Diagnose, & Recover from Errors]

- error messages in plain language
- precisely indicate the problem
- constructively suggest a solution

[H2-10: Help & Documentation]

- easy to search
- focused on the user's task
- list concrete steps to carry out
- not too large