

Heuristic Evaluation of [Petivity]

1. Problem

Petivity is a web and mobile app that helps users reduce distractions and organize tasks, using an animated "Pet" that reflects and motivates your performance.

2. Violations Found

1. H10 Help and documentation / Severity: 4 / Found by: A, B, C, D

On the page after you sign in on the mobile app, there are no instructions on what to do next. A new user will not know that touching the crab will start the blocking page + timer, and will likely be startled.

Fix: Have an onboarding process and/or add a text label above the crab that says something along the lines of "click me to start working effectively."

2. H5 Error prevention / Severity: 3 / Found by: A, B

On the Blocked Sites section of the website, it doesn't seem like the system checks if an added URL is a valid site, or defines behavior to handle this error.

Fix: If the site is not a valid URL, pop a dialog expressing that "Oops, we could not find that site. Please try again!" (or something to that effect). Better still, recommend what the user should spend less time on based on their browsing history (with Chrome you can show the user a breakdown of their average time per site per day).

3. H1 Visibility of system status / Severity: 1 / Found by: A

On the web calendar, there is no bar or sign that indicates what day/time it is currently, which makes it difficult for users to see what activity is up next.

Fix: add a horizontal bar (like Google calendar) to indicate the current time and day.

4. H4 Consistency and standards / Severity: 2 / Found by: A

Clicking the pet on the website (nothing happens) leads to different behavior than clicking on the pet in the mobile app (blocking page). This may be confusing to a user because 1) they may miss the functionality on mobile or 2) they may be frustrated that the same functionality does not exist on web.

Fix: make web also block the desktop screen.

5. H10 Help and documentation / Severity: 2 / Found by: A

On the web calendar, there aren't any detailed instructions on how to engage in self-care activities, where they are, or how to actually get the materials to do them. This may cause the user to ignore the reminder when the suggestions are vague.

Fix: suggest a location, and maybe a friend to do the activity with.

6. H2 Match between system and real world / Severity: 1 / Found by: A, D

On the web calendar, there aren't any lines, so it's difficult to see exactly what time something starts or ends at. This may cause problems for the user, who needs to be on time and prepare for events.

Fix: add lines for each hour.

7. H4 Consistency and standards / Severity: 3 / Found by: A

The user does not have a sign in flow on web, while they do on mobile. Users might be confused as to how the app maintains state of the pet for web, and why there is an extra step for mobile.

Fix: add one-time sign in pane for web app.

8. H8 Aesthetic and minimalist design / Severity: 2 / Found by: A, D

On the web calendar, it seems like the user can add multiple calendars in addition to their own calendar and Petivity calendars. Are birthdays + local events really necessary for this calendar, or will they just add clutter?

Fix: just have one main calendar in addition to the Petivity calendars.

9. H3 User control and freedom / Severity: 2 / Found by: A

On the web calendar, it almost seems like the user has too much freedom in being able to start and stop the blocking at anytime, simply with the toggle of a button. If it's this easy, it defeats the purpose of the block in the first place.

Fix: make the disable button less visible or make the user jump through some hoops before they are able to access.

10. H4 Consistency and standards / Severity: 1 / Found by: A

When attempting to add a new blocking time on the web calendar, the user is not able to see visually on the calendar what time block is being added (is not highlighted), so the dialog that pops up appears to be floating arbitrarily. Though the start and end time is listed on the dialog, it is difficult for the user to see how this fits with the rest of her schedule. This is also inconsistent with what you would expect from a typical web calendar.

Fix: Highlight calendar visually when creating a block of time.

11. H3 User control and freedom / Severity: 2 / Found by: A, B, C

On the web calendar, there is no way for the user to edit the time of an existing block or delete the block altogether. What if the user's schedule changes and she has a bit more downtime? It would be frustrating if the sites were still blocked in that case.

Fix: add functionality to edit or delete the times of the blocking, maybe up to a certain point in advance to ensure that users aren't taking advantage of this feature to sneak onto Facebook.

12. H8 Aesthetic and minimalist design / Severity: 1 / Found by: A

As the TODO list grows on the web app, it may eventually cover the pet. The user will no longer be able to see the emotions of the pet or see the reward when they complete a task. Fix: consider shuffling the placement of elements, or implementing a scroll in TODO (though may be detrimental if a user can't see all of their TODOs).

13. H5 Error prevention / Severity: 2 / Found by: A

While adding to the TODO list, there is no check if the user has entered a valid end date. What if they cause the days remaining to be negative? This might be confusing to the user. Fix: add an error check by making sure the entered date is the current day or later

14. H4 Consistency & Standards / Severity: 1 / Found by: B

The self-care calendar (featuring things you want to do more of) is named differently on the "Interests" page in settings. It is unclear that the two are related to each other.

Fix: Have a consistent name in the settings page, e.g. "Self-care activities" or "What do you want to do more of?"

15. H6 Recognition not Recall / Severity: 1 / Found by: B

In task 2, when adding a website to the blocked sites list, there is no "Add" button, which makes it unclear to determine when a site is added.

Fix: Add an "Add" button next to the field that the user inputs the site.

16. H7 Flexibility & Efficiency of Use / Severity: 1 / Found by: B

(Task 2) The settings button is hidden at the top, and does not have a clear call to action. As a user, I would expect that this allows me to edit my profile/peripheral settings (e.g. change name/ avatar) rather than actually set the core functionality of the web app.

Fix: Have a clear "Edit Blocked Sites" and "Edit self-care activities" button on the main page, so the user can easily see how to do frequent functions. In the onboarding, have the user initially input sites they want to spend less time on and activities they want to do more of, so it is inbuilt initially.

17. H7 Flexibility & Efficiency of Use / Severity: 2 / Found by: B, C

For users that operate with different calendars (e.g. Google Calendar) it is unclear how they could integrate their calendar with Petivity.

Fix: Have an upload calendar icon so that users can integrate their existing calendar and do not need to add new events to their Petivity calendar each time.

18. H1 Visibility of System Status / Severity: 2 / Found by: B, D

On the blocking time, it is unclear which websites will be blocked at any given time. For instance, in the second task if I want to block BuzzFeed but not Facebook for a given time slot, there is currently no way to do that without editing my overall blocking list.

Fix: For each blocking time, display which websites will be blocked. Allow the user to customize the list of sites for each blocking time on the calendar.

19. H3 User Control & Freedom / Severity: 3 / Found by: B, C

There is no functionality for the user to edit any settings, view progress or perform any tasks beyond basic blocking.

Fix: Have a home button and a menu so that the user can perform different actions e.g. view their best concentration times, which apps they spend the longest on, their average block time, how many worm points they get over time, the state of their avatar etc.

20. H10 Help & Documentation / Severity: 2 / Found by: B, C

There is no description for the whole screen block -- the user can be left unclear on what the block is doing, how they can get out of it, whether they can turn their screen off, etc.

Fix: Insert an instruction when the block starts as to how the user can turn it off (click the home button) and how long it will last. If the user clicks their screen off, show the time remaining on the lock screen (like a normal iPhone timer).

21. H1 Visibility of system status / Severity: 3 / Found by: C

In both of the mobile app and the web app, users can not see the status of the pet, and thus can not see the entire progress apart from feeding it.

Fix: Show the status of the pet when clicking the pet.

22. H4 Consistency and standards / Severity: 1 / Found by: C

In the web app, there is a "days remaining" title on the second column of the "to do" card, which is not consistent with other interfaces.

Fix: Add a title row in the top of the table.

23. H4 Consistency and standards / Severity: 1 / Found by: C, D

In the mobile app, users need to feed the pet manually, while the pet will eat worms by itself in the web app.

Fix: Feed the pet automatically in the mobile app when the user completes a task.

24. H4 Consistency and standards / Severity: 1 / Found by: C

In the web app, the title of calendar is “CALENDAR” and the title of to-do list is “TO DO:”.
Fix: Remove the colon in “TO DO:”.

25. H8 Aesthetic & Minimalist Design / Severity: 1 / Found by: D

(Mobile) The low contrast between the text and background on the “SIGN UP” and “LOG IN” buttons makes them somewhat hard on the eyes to read.
Fix: Use a darker color background for these buttons to contrast with the white text.

26. H4: Consistency & Standards / Severity: 0 / Found by: D

(Mobile) The login page asks for name, email, and password. A standard login page will ask the user to enter their password and either their username or their email, but not their name. A name field on the login page might confuse the user because it's non-standard, and also decreases login efficiency.
Fix: Remove the name field from the login page.

27. H3: User Control & Freedom / Severity: 2 / Found by: D

(Mobile) A user who clicks the login button on accident (but doesn't have an account) has no way of going back to create an account. This can be problematic for user onboarding.
Fix: Either create a back button from the login page or a small option to go to the create an account page.

28. H1: Visibility of System Status / Severity: 3 / Found by: D

(Web) There's no indication to the user that their settings are saved after they are updated. A user might misinterpret the “back” button as erasing their changed settings.
Fix: Indicate with text that the user's settings updates have been updated in the system.

29. H2: Match b/w System & World / Severity: 1 / Found by: D

(Web) The word “Avatar” in “Pet Avatar” isn't necessarily clear to a user who hasn't used a virtual world/pet interface before.
Fix: Remove the word “Avatar” in “Pet Avatar”--I think just calling the setting “Pet” is sufficiently clear.

30. H5: Error Prevention / Severity: 2 / Found by: D

(Mobile) If the user enters their password wrong on the create account page, they will be locked out of their account.

Fix: Ask the user to enter in their password twice when signing up for an account and verify that the passwords match. This way, the likelihood of the user making a typo while setting their password is minimized.

31. H4: Consistency & Standards / Severity: 1 / Found by: D

(Web) The site uses a mix of full uppercase, full lowercase, and title case text. An amalgamation of these styles can be confusing for a user.

Fix: Choose two casing styles and eliminate the third: I like how the full uppercase text is being used for headers, perhaps the rest of the text should stick to one casing style.

32. H4: Consistency & Standards / Severity: 1/ Found by: D

(Web) The site uses a mix of rounded buttons and flat buttons in different scenarios. In the scenario where the user is setting block times, the confirm and cancel buttons are not backed by any shape (they lie flat on the interface), whereas the “START BLOCKING” button is backed by a rounded rectangle.

Fix: Apply a consistent button style to all buttons in the interface. Personally, I like the rounded rectangle buttons!

33. H7: Flexibility & Efficiency of Use / Severity: 1/ Found by: D

(Web) The checkboxes to complete a task are quite small on a web interface, and not that easy for a user to target. For me, it takes several tries to get my mouse within the bounds of the check box.

Fix: Make the checkbox buttons much bigger, so that they’re easy to click and very visible in the to do list interface.

34. H8: Aesthetic & Minimalist Design / Severity: 1/ Found by: D

(Web) The scheduled items in the Petivity calendar are hard to see, as it’s white text against a very light background.

Fix: Use a darker color background for these scheduled items to contrast with the white text.

35. H2 Match b/w System & World / Severity: 3 / Found by: B, D

It isn’t immediately clear what “Start Blocking” does, and which websites it acts on. Does the “blocking” feature launch when the user presses it or when it is scheduled in the calendar or both?

Fix: List the current websites that would be blocked below the button, so the user knows what will happen and to which websites when they click the button. It would also be good to have a quick description of what “blocking” is (tooltip? in onboarding?), as you also use it to describe “scheduled blocking times”. Finally, the “Start Blocking” button could be replaced with a “Demo/Try Blocking” label to give a better sense of its functionality.

36. H9: Help Users with Errors / Severity: 2 / Found by: B, D

(Web) If a user accidentally checks an item off their to-do list (when it hasn't actually been completed) the user has no way of recovering this item. I make this mistake a lot on my own to-do list, and it's really useful to me to have a way to undo my action.

Fix: Add a mechanism that allows users to "undo" when they check off an item.

3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status		1	1	2		4
H2: Match Sys & World		2		1		3
H3: User Control			3	1		4
H4: Consistency	1	7	1	1		10
H5: Error Prevention			2	1		3
H6: Recognition not Recall		1				1
H7: Efficiency of Use		2	1			3
H8: Minimalist Design		3	1			4
H9: Help Users with Errors			1			1
H10: Documentation			2		1	3
Total Violations by Severity	1	16	12	6	1	36
Note: check your answer for the green box by making sure the sum of the last column is equal to the sum of the last row (not including the green box)						

4. Evaluation Statistics

- Sum the total number of violations detected at each severity level
- Sum the number of violations **each evaluator** detected at each severity level
- For each evaluator and each severity rating, give the % of the total violations of that severity level found by that evaluator. (e.g., A found one of the five “level 1” violations, so 20%)
- For each evaluator, list the % of all violations found, and the % of level 3 & 4 violations.

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D
sev. 0	0%	0%	0%	100%
sev. 1	22%	17%	17%	44%
sev. 2	32%	26%	16%	26%
sev. 3	22%	33%	22%	22%
sev. 4	25%	25%	25%	25%
total (sev. 3 & 4)	23%	31%	23%	23%
total (all severity levels)	25%	24%	18%	33%

*Note that the bottom rows are *not* calculated by adding the numbers above it.

5. Summary Recommendations

Excellent job! The largest areas of improvement for Petivity are improving consistency across the mobile and web app, preventing errors, increasing / decreasing user control based on the task, and providing more documentation on how to use the app. Many functionalities exist in either the app or the web interface, such as the ability to log in, collect worms, or block the entire screen. These differences need to be better communicated to the user, and defined further to clarify whether the state of the pet will persist across platforms. An onboarding process and menu screens could greatly help in explaining what the user can do with the app. The calendar interface also needs to adhere to calendar standards to improve readability, and thus usability.

Additionally, there are many places where the user can add input and where potential errors may occur, but are not actively being prevented. The aspect of user control is also very important to this product. There are some areas where user control is lacking (being able to change blocking times in advance, especially as plans change), and others where user control should be decreased to ensure the functionality of the app (the disable button). Finally, a user

may be confused about how to begin using the mobile app - more instructions would definitely be helpful there.

In terms of moving forward, I would love to see a greater element of AI introduced - for instance, suggesting which websites the user should block, mapping their to-do list onto their calendar and setting weekly goals of self-care activities. I challenge Petivity to think beyond its traditional components (as currently a lot of its functionality is a merge between a to-do list, a calendar and a website blocker), and see what cross-functionality integrating these areas together can provide.

Overall - I loved the color scheme, and design of the web and mobile app. It was very readable and pared down. It would be super cool if you animated the bubbles in the background, and animated the pet to be happy/sad/disappointed to relate the user's performance!

Severity Ratings

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

Heuristics

H1: Visibility of System Status

- Keep users informed about what is going on

H2: Match Between System & Real World

- Speak the users' language
- Follow real world conventions

H3: User Control & Freedom

- "Exits" for mistaken choices, undo, redo
- Don't force down fixed paths

H4: Consistency & Standards

H5: Error Prevention

H6: Recognition Rather Than Recall

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

H7: Flexibility & Efficiency of Use

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

H8: Aesthetic & Minimalist Design

- No irrelevant information in dialogues

H9: Help Users Recognize, Diagnose, & Recover from Errors

- Error messages in plain language
- Precisely indicate the problem
- Constructively suggest a solution

H10: Help & Documentation

- Easy to search
- Focused on the user's task
- List concrete steps to carry out
- Not too large