

## Heuristic Evaluation of Lucidly

### 1. Problem/Prototype Description

Lucidly is a self-care app that promotes well-being by helping users to understand how they are feeling currently and over time, as well as utilizing the power of community and friends around them to create a sense of empathy.

### 2. Violations Found

**1. H4: Consistency & Standards / Severity 3 / Found by: A, C, D**

- The interface used the string “Save” on the first screen for saving the user’s profile, but used the string “Update” on the second screen. Users may be confused by this different terminology for the same function.
- Fix: Use the same string on each screen.

**1. H1: Visibility of System Status / Severity 1 / Found by: C**

- **Task:** Garden/Home Screen
- **Description:** No status on other fruits
- **Rationale:** Besides the berries, the user can’t click on any other fruit, so they can’t tell what’s the status of those. The user won’t have any information about how ripe and ready those fruits are.
- **Fix:** Add a pop-up reminder that the fruit isn’t ready for harvest or a percentage bar to show how much longer until harvest time. Also add a confirmation prompt before harvesting a berry

**2. H1: Visibility of System Status / Severity 0 / Found by: C**

- **Task:** Compare and track mental and physical well-being over time
- **Description:** Couldn’t finish reading the waiting message
- **Rationale:** The waiting time for the transition message “One moment while we gather your data” is too short. The user probably couldn’t finish reading the message before it loads to the next page.
- **Fix:** Trim the message down to “One moment…” or some icon is better.

**3. H1: Visibility of System Status / Severity 3 / Found by: A, B**

- **Task:** Earning Coins, receiving recipes
- **Description:** After you complete a survey, you are supposed to receive coins, but there is no indication of where those coins go, what you can do with them,

how they influence your harvest, etc. also there is no indication of where the recipe goes once you return to the home screen.

- **Rationale:** if coins are incentives and have functions, it should be clear what happens to them and how the user is able to use them!
- **Fix:** have a coins basket on the home screen and make it intuitive on how to use them

**4. H2: Match between system and the real world / Severity 0 / Found by: B, C**

- **Task:** Record one's current mental and physical well-being
- **Description:** Use programmer language
- **Rationale:** The welcome message "Hi, User!" isn't welcoming and personalized to the user but rather on the programming side (although this could be a placeholder value).
- **Fix:** Replace with the name of the user.

**5. H2: Match b/w System & World / Severity 2 / Found by: B, C**

- **Task:** Graph task graph
- **Description:** The labels for the graph of the axis
- **Rationale:** Although the graph y axis is intuitive in terms of its purpose, it is not intuitive that I can actually click the emojis on the left to filter. In addition, it is unintuitive what the x axis means. Is it days? If so, why are there 8 days? What does 0 day mean? How does selecting emotions change the graph
- **Fix:** Add a label for the x axis for what unit of measurement it is while also make the emojis on the left stand out so users know they can filter or have a separate filtering method entirely

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

- **Task:** Daily Survey
- **Description:** On the emotions page, in order to select the emotion, the slider goes away from the emotion instead of towards it, indicating that it is already selected (i knew that it wasn't based on the state change when sliding it and it appearing blue, not looking at it directly)
- **Rationale:** user should be able to know what state those sliders are in without having to slide them
- **Fix:** label the slider states, change their direction, or change the style of button

**7. H2: Match between systems and real world / Severity 2 / Found by: A, B**

- **Task:** Mental Wellness Tracker
- **Description:** The pie chart doesn't convey selectability, but instead feels like it should be showing me statistics. Nothing about these four sections of the pie

chart seem selectable without reading the entire chart and assuming that they must take you somewhere else.

- **Rationale:** Pie charts are often used to convey statistics, not as a mode of navigation. The user is unlikely to intuitively know that they are buttons.
- **Fix:** add boxes around the titles in the pie chart, replace text with symbols, or revert to the button scheme you have been using in the app

**8. H2: match between system and real world / Severity 1 / Found by: A**

- **Task:** harvesting
- **Description:** if something is harvestable, you must select harvest and cannot tap on those food items
- **Rationale:** not only does that make the target small, but if something is collectable then the entire thing should be selectable
- **Fix:** make the entire area of harvestable food selectable

**9. H3: User control and freedom / Severity 4 / Found by: A, B, C**

- **Task:** Record one's current mental and physical well-being
- **Description:** Can't go back to the previous question
- **Rationale:** If the user changes their mind at a later point in the survey and wants to edit their answers to the previous question, there aren't any buttons that let them go back. The only option for the user is to exit the entire survey and lose all progress.
- **Fix:** Add an arrow button to go back to previous questions.

**10. H3: User control and freedom / Severity 2 / Found by: C**

- **Task:** Compare and track mental and physical well-being over time
- **Description:** Can't change the timeline of the chart
- **Rationale:** There isn't a time filter which allows users to see the overview chart of another week.
- **Fix:** Add a setting to adjust which timeline slot the user wants to view.

**11. H3: User control and freedom / Severity 1 / Found by: C**

- **Task:** make others aware of how one is feeling
- **Description:** Can't personalize the message

- **Rationale:** All message functions (send a request to visit and ask them to visit) right now don't have editable text so they are just the default message. If the user wants to invite their friends over for a particularly bad day, they don't have the option to mark that this visit is more crucial than any other informal check-in.
- **Fix:** put a default message in a textbox that allows editing from the user. This way the user can choose to send the default message if they don't have anything special to add and create the space if they actually want to tailor their message in light of some situation.

**12. H3: User control and freedom / Severity 0 / Found by: C**

- **Task:** make others aware of how one is feeling
- **Description:** can't see daily status if receive an invitation
- **Rationale:** The pig sends an invitation to the user to check on them which leads the user to the pig's garden. There isn't an intermediate step to sneak peak how the pig's feeling today compared to the other friends who you can see their daily status. The user could want to view their friend's status first as an overview before deciding whether to take the invitation or not.
- **Fix:** It's unclear whether this is due to the pig refusing to disclose their general status or the app doesn't show it once the pig sends an invitation. If the latter case, allow the user to sneak peak into the pig's daily status in parallel with the invitation function.

**13. H3: User Control and Freedom / Severity 3 / Found by: B**

- **Task:** Friends globe view
- **Description:** As a user, when I see a globe, my first intuition is to be able to interact with the globe in some way to see my friends around the world
- **Rationale:** This intuition to be able to interact with a globe generates confusion when as a user, I'm unable to rotate the globe in any way and am stuck on a fixed image
- **Fix:** Have a rotatable globe or have friends in a list view

**14. H4: Consistency & Standards / Severity 2 / Found by: A**

- **Task:** Daily Survey
- **Description:** In the survey, the rectangle with rounded edges appears as the same shape as selectable buttons elsewhere on the page
- **Rationale:** makes user want to select it
- **Fix:** Don't use this type of box for a note

**15. H4: Consistency and standards / Severity 4 / Found by: A, B, C**

- **Task:** Record one's current mental and physical well-being
- **Description:** Bear icon confusion

- **Rationale:** The bear icon in the left corner as an exit button can be confused with settings or a personal profile page which usually has such a generic icon.
- **Fix:** add a back arrow to the bear or create a running bear icon as the back button instead of just the regular bear

**16. H4: Consistency & Standards / Severity 3 / Found by: A**

- **Task:** Daily Survey
- **Description:** On the emotions page the “click to add new feelings” button is in dark gray which is being used for deactivated buttons
- **Rationale:** the user should not have to read the box to know it is selectable
- **Fix:** change the color of the button to know it is selectable

**17. H4: Consistency and standards / Severity 1 / Found by: B, C**

- **Task:** Record one’s current mental and physical well-being
- **Description:** Dimmed happy faces
- **Rationale:** The color scheme on the 2 happy faces on the right seems to be more dimmed and faded out compared to others. Users can be confused that those particular options are not available to press, because dimmed icons are usually used that way.
- **Fix:** Choose another brighter color scheme to show the happy faces are active

**18. H4: Consistency and Standard / Severity 1 / Found by: B**

- **Task:** Graph task monthly graph
- **Description:** Font size for headers of each graph is not standard
- **Rationale:** Some headers for some graphs are different from other headers. As a user this draws my eyes as I feel like if a part of the page is not standard, then it means I should press it.
- **Fix:** Standardize font sizes

**19. H4: Consistency & Standards / Severity 2 / Found by: A, B**

- **Task:** Daily Survey
- **Description:** on the emotions page, the questions are in a dark gray box, on the prior page they were in a white box
- **Rationale:** user should know that the box is a prompt based on color scheme
- **Fix:** change this box to white

**20. H4: Consistency and standards / Severity 2 / Found by: B, C**

- **Task:** make others aware of how one is feeling
- **Description:** Pin icon confusion

- **Rationale:** The pin icon that is used to express that the friends are feeling a certain emotion doesn't feel as intuitive as a user. Because conventionally the pin icon is used for navigation in maps.
- **Fix:** change the icon to be a face to be 1 of the 5 in previous parts so it's more consistent and faster for the user to just glance over and see immediately

**21. H4: Consistency & Standards / Severity 2 / Found by: A, B**

- **Task:** Daily Survey
- **Description:** Text fields are in same color as the instructions
- **Rationale:** user doesn't know what is selectable without consistent color scheme
- **Fix:** make these fields white

**22. H4: Consistency and Standard / Severity 1 / Found by: B**

- **Task:** Home page
- **Description:** Home page icons have inverted coloring schemes
- **Rationale:** Glancing over the icons made me do a double take as the friends icon has its colors inverted from the graph icon
- **Fix:** Have consistent color schemes for icons

**23. H4: Consistency and Standard / Severity 3 / Found by: B**

- **Task:** Inviting a friend over to my garden
- **Description:** The page after sending an invite contains a back button
- **Rationale:** The standard for a back button is that a back button will redirect you to the last page you were at by undoing any changes you made in the last page
- **Fix:** Rename back button to return to globe or something other than back

**24. H4: Consistency and standards / Severity 2 / Found by: C**

- **Task:** make others aware of how one is feeling
- **Description:** Order of sender and receiver flipped
- **Rationale:** The image of the sender (bear) is on the right, whereas the image of the receiver (other animal) is on the left. This order is flipped from the conventional sender on the left, receiver on the right, which could be confusing for users.
- **Fix:** Flip the image of bear to the left side and other animal to right, possibly add an arrow

**25. H4: Consistency & Standards / Severity 2 / Found by: A**

- **Task:** Daily Survey

- **Description:** on the rewards page, the instructions are not always in the same colored box
- **Rationale:** similar information should be in the same color scheme so it's easier for the user to digest
- **Fix:** keep consistent colors here, or change the bears color to pink to know that it is the next advancement, or change the bear icon to a home icon, or put these instructions in \*\* just like the first survey page

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

- **Task:** make others aware of how one is feeling
- **Description:** position of send button
- **Rationale:** The “Send request to visit” button is at the middle at the high top position of the screen. Usually send button would be at the middle at the bottom of the screen.
- **Fix:** Move the send button down to the bottom of the screen.

**27. H4: Consistency and standards / Severity 1 / Found by: A, B**

- **Task:** Sharing
- **Description:** The “invite them over” and “ask to visit them” buttons are the same color
- **Rationale:** different functions should have different colors associated with them, especially if they are adjacent to each other.
- **Fix:** take text out and use icons, or differentiate them via color or shape

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

- **Task:** Home screen navigation
- **Description:** two of the three task buttons at the top have different colors
- **Rationale:** it implies that those two have similar functionality
- **Fix:** have all the same color

**29. H4: Consistency and standards / Severity 2 / Found by: A, B**

- **Task:** Inventory
- **Description:** static bar at the bottom instructs the user to use the bear to return to the garden, which is not present in any other tasks
- **Rationale:** if the user doesn't need instructions on what the bear does elsewhere, why do they need it here ?
- **Fix:** remove it

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

- **Task:** Inventory

- **Description:** the subtitles are below the section which they represent
- **Rationale:** the subtitles should be above the area that they are referencing, making it confusing to follow. Headers and footers should be consistent.
- **Fix:** remove these subtitles or reorganize the page

**31. H5: Error Prevention / Severity 4 / Found by: A, B, C**

- **Task:** Record one's current mental and physical well-being
- **Description:** Click on multiple faces at the same time
- **Rationale:** If the user makes a mistake the first time picking and proceeds to click a new face, the old face still lights up. Thus the users can click on all of the faces to indicate how they're feeling i.e being extremely happy and sad all the time which isn't possible. This is also a contrast with the "Choose one" message above.
- **Fix:** Dim the old selection, only light up one face at a time

**32. H5: Error Prevention / Severity 2 / Found by: C**

- **Task:** Record one's current mental and physical well-being
- **Description:** Add a new feeling but can't go back to master list
- **Rationale:** After the user finish adding new feeling(s), if they can't remember if this feeling is on the master list or not, they would want to go back and see their old selections and newly added feeling(s) together to compare and continue adding or removing. Right now the app just assumed you're done with inputting and continues on without going back, taking the opportunity to fix any error entry away from users.
- **Fix:** After adding new feeling(s), go back to the master list of feeling instead of going to next question

**33. H5: Error Prevention / Severity 2 / Found by: A**

- **Task:** Mental Wellness Tracker
- **Description:** In the monthly summary and physical insights, the back buttons are located at the bottom of the screen, making the user have to scroll down to access it
- **Rationale:** if the back button is not visible, the user will likely use the bear/home button in the top left relocating them to the home screen, exiting the intended module
- **Fix:** Make the back button always available in the top bar of the screen

**34. H6: Recognition rather than recall / Severity 4 / Found by: C**

- **Task:** make others aware of how one is feeling



- **Description:** Doesn't display friend's name
- **Rationale:** In the world map screen, there are avatars of the animals but there aren't any names of which friends is it. The user would have to recall from memory which friend has which avatar so it adds an additional mental step.
- **Fix:** Add the name of the friend associated with the avatar below the animal image

**35. H6: Recognition rather than recall / Severity 1 / Found by: C**

- **Task:** Compare and track mental and physical well-being over time
- **Description:** Can't figure what's the mechanism behind the name and order of charts
- **Rationale:** Since there are 4 categories (emotional, physical, mental, and others insights) in the pie chart, users would expect to see the monthly report to break down in the same categories. However since the name of the charts is different, it can be confusing for users to figure out if the monthly chart gives different categories than the insight categories or not.
- **Fix:** Add a categories label in parentheses to be consistent with the pie chart insights outside. For example Neck discomfort (physical) to refresh the users' memory on which insight category it was.

**36. H6: Recognition rather than recall / Severity 3 / Found by: C**

- **Task:** make others aware of how one is feeling
- **Description:** Doesn't display recipient's name
- **Rationale:** Before the user sends out a request to visit, they only see the animal avatar but couldn't tell who this avatar represents. They would have to dig back into their memory in order to retrieve that information before they are confident they send the request to the right person.
- **Fix:** Add the name of the recipient associated with the animal avatar

**37. H7: Flexibility and efficiency of use / Serenity 0 / Found by: A, C**

- **Task:** Record one's current mental and physical well-being
- **Description:** Repeat check-in message
- **Rationale:** On the same page, the check-in message "Take one minute to check in with your mind/body" shows up many times along with each question, which could be redundant since they will see this repeatedly throughout the survey.
- **Fix:** Only show "Take one minute to check in with your" one time at the beginning of the page or survey

**38. H8: Aesthetic & Minimalist Design / Severity 2 / Found by: A, B, C**

- **Task:** Record one's current mental and physical well-being

- **Description:** “Choose one” redundant
- **Rationale:** The user should be able to recognize that they can choose only one emotion rather than the app having to explain explicitly that to them.
- **Fix:** Delete the “Choose one” message

**39. H8: Aesthetic and minimalist design / Severity 1 / Found by: C**

- **Task:** Compare and track mental and physical well-being over time, physical health section
- **Description:** one box has multiple categories in it (i.e. drowsiness and hunger), whereas they should have their own separate category
- **Rationale:** In the physical insights sections, symptoms about drowsiness and hungry are grouped together. Consequently, the solution recommendation is also squeezed together in the same box even though they are separate symptoms and don't have any correlation.
- **Fix:** separate them into 2 different boxes so there is less text in one box and each symptom gets its own space.

**40. H8: Aesthetic and minimalist design / Severity 1 / Found by: A, B, C**

- **Task:** Garden/Home Screen
- **Description:** Show too many text instructions about how to navigate and use the app
- **Rationale:** In the “Garden Inventory” there is some text in the gray box “Scroll to view your inventory” at the top and “tap bear at the top left to go back” which is unnecessary because these actions should be internalized and intuitive.
- **Fix:** Remove all instruction text, maybe put a slider on the side to indicate the page is scrollable

**41. H8: Aesthetic and minimalist design / Severity 2 / Found by: B**

- **Task:** Daily Survey Completion Screen
- **Description:** Small unintuitive text for recipes
- **Rationale:** Although the user can see they gained a new recipe, they are unable to read from a glance what the recipes actually is since there is no text defining it nor a large image that tells the user about the recipe. This makes it difficult for the user to understand.
- **Fix:** Have the recipe be a image of the meal and have a function where you can click the recipe to be directed to a detailed version of the recipe.

**42. H8: Aesthetic and minimalist design / Severity 2 / Found by: B**

- **Task:** Daily Survey Completion Screen
- **Description:** Too much text on the completion screen
- **Rationale:** Difficult as a user to read text that have large jumps in between them. For example, 'You have earned...' -> 'Tap the bear in the top left...'
- **Fix:** Reduce the text through shortening the text itself or with use of emojis or buttons

**43. H8: Aesthetic and minimalist design / Severity 2 / Found by: B**

- **Task:** Daily Survey How are you feeling page
- **Description:** Intuitive font sizes
- **Rationale:** As a user answering a questionnaire, I associate to have the question font size be smaller than the font size for the placeholder. Makes me question whether the placeholder is the actual question itself.
- **Fix:** Have the placeholder be light grayed out and font size smaller than the actually question.

**44. H8: Aesthetic and minimalist design / Severity 2 / Found by: A**

- **Task:** ALL
- **Description:** punctuation is inconsistent throughout the app, especially the use of colons in headers / titles
- **Rationale:** this is unnecessary, do not use punctuation unless you feel it conveys necessary information to the user
- **Fix:** remove it

**45. H10: Help and Documentation / Severity 2 / Found by: B**

- **Task:** Friends globe view
- **Description:** Icons above friends on the globe
- **Rationale:** Although there are icons above friends that have a specific purpose and reasoning for their shape and color, there is not a legend that maps each icon to their meaning
- **Fix:** Have a legend that maps icons to meaning or change icons to be more intuitive

**46. H10: Help and documentation / Severity 1 / Found by: C**

- **Task:** make others aware of how one is feeling

- **Description:** Don't know the consequences of yes, no and later option
- **Rationale:** When the user opens the invitation and faces the yes, no and later option, it isn't clear what the consequences of clicking each button do. Will clicking any of them inform their friend? Will only yes or no inform their friend? The user doesn't hesitate or press something they don't fully understand its consequences (upset the friend...) by accident.
- **Fix:** Add short instructions what does each button do under each selection

**47. H10: Help and documentation / Severity 3 / Found by: C**

- **Task:** Garden/Home Screen
- **Description:** No information on harvest
- **Rationale:** For those who are new to the app and don't know about the inventory yet, they might be hesitant to click harvest the fruits because it isn't clear what would result in. Do they lose their fruit stock, points, money...etc.
- **Fix:** Add a small message somewhere that describes the relationship between harvesting the fruit and cooking for your idol on the inventory page. Or makes the "Garden inventory" flash after one harvest to prompt the user to explore its function.

**48. H10: Help and documentation / Severity 2 / Found by: C**

- **Task:** Record one's current mental and physical well-being
- **Description:** Instructions on inputting emotions aren't clear
- **Rationale:** There are 2 lines "Click space to reveal feelings" and "click enter to lock feeling" that aren't super clear about what they are guiding users to do. Because there aren't any "space" or "enter" buttons on the screen to click, these instructions aren't helping users to figure out how to input emotions.
- **Fix:** These lines could be removed and make the option panes more flippable. Alternatively, they could be more specific to this UI rather than generic words like "space" and "enter".

**49. H11: Accessible Design / Severity 2 / Found by: A, B**

- **Task:** Main screen harvesting
- **Description:** Difficult to read text related to the garden for example 'harvesting'
- **Rationale:** Although it may not be a key feature in the app, I found it hard to read the text 'harvest' on the berries and had to zoom in to read it successfully.
- **Fix:** Rather than have a button with text that says harvest, it may be more intuitive to have an harvesting icon button. That way the user doesn't have to strain to read the prompt

**50. H12: Value alignment and inclusion / Severity 2 / Found by: A**

- **Task:** Sharing



- **Description:** After you visit a friend, there doesn't seem to be anything indicating that you've completed a task, either that they acknowledged that you came or a positive message about supporting a friend. Also I'm not sure if this action really addresses your *community support* value. What support are the users actually receiving?
- **Rationale:** if you want to build a community of support, there has to be more interaction than just visiting a friend's harvesting field and seeing how they are feeling
- **Fix:** facilitate communication between users / a way to provide actual support. Also incentivise the users to provide support via coins, recipes, etc.

**51. H12: Value alignment and inclusion / Severity 1 / Found by: C**

- **Task:** Record one's current mental and physical well-being
- **Description:** The bear shape is not personalizable
- **Rationale:** In the part pinpointing uncomfortable areas on the bear's body, the bear shape can't be specialized based on the user's physical conditions. Users who have lost a limb or have unconventional body figures and conditions may feel disconnected from the bear's figure.
- **Fix:** have different options when setting up how the user wants their bear to look

**52. H12: Value alignment and inclusion / Severity 0 / Found by: C**

- **Task:** Record one's current mental and physical well-being
- **Description:** Spectrum of emotion rather than specific face
- **Rationale:** Maybe the user can't really internalize, comprehend or connect their emotional or physical feeling with a specific fixed face, due to experience, culture, or lack of knowledge about their current state of mind/body.
- **Fix:** Replace 5 faces with a slider, both ends of a slider are two extreme emotions

### 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	0	1	0	3

H2: Match Sys & World	1	2	2	0	0	5
H3: User Control	1	1	1	1	1	5
H4: Consistency & Standards	0	5	9	2	1	17
H5: Error Prevention	0	0	2	0	1	3
H6: Recognition not Recall	1	0	0	1	1	3
H7: Efficiency of Use	1	0	0	0	0	1
H8: Minimalist Design	0	3	4	0	0	7
H9: Help Users with Errors	0	0	0	0	0	0
H10: Help & Documentation	0	1	2	1	0	4
H11: Accessible	0	1	0	0	0	1
H12: Value Alignment & Inclusion	0	1	2	0	0	3
<b>Total Violations by Severity</b>	<b>5</b>	<b>15</b>	<b>22</b>	<b>6</b>	<b>4</b>	<b>52</b>

*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 (in %)

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D
Sev. 0 Ex: Eval A count / total sevs 0 in table #3	1/5	2/5	2/5	
Sev. 1 Ex: Eval A count / total sevs 1 in table #3	4/15	4/15	8/15	
Sev. 2 Ex: Eval A count / total sevs 2 in table #3	14/22	13/22	7/22	
Sev. 3 Ex: Eval A count / total sevs 3 in table #3	2/6	3/6	2/6	
Sev. 4 Ex: Eval A count / total sevs 4 in table #3	3/4	3/4	4/4	
<b>Total (sevs. 3 &amp; 4)</b> Ex: Eval A = sum(sev 3: sev 4 counts) / sum(sev 3: sev 4 in table #3)	5/10	6/10	6/10	
<b>Total (all severity levels)</b> Ex: Eval A total sev count / total sevs (green cell) in table #3	22/52	31/52	29/52	

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

## 5. Summary Recommendations

Lucidly is a great application, but we wish some UI details can be flushed out further to be more functional and efficient to use. We love the color scheme as it stands out, is very calming and soothing, and geared towards interaction. We thought the interactive elements were engaging, especially for young people, and was almost like playing a game.

Some things that need improvement are cleaning up the amount of text across the entire UI. Much of the text was confusing, had inconsistent fonts and punctuation, and generally was very repetitive and unnecessary. We recommend taking these out completely and letting the user use their intuition / conceptual model, or trimmed down if absolutely necessary. Generally, the lack of symbols, icons, and images meant there was little recognition bias, leaving the user to have to read the text to understand functionality. We recommend using more icons that represent function then actually writing the function in text.

Often we found items in unconventional order (i.e. the back button, send button, subheaders, etc.) which made the app more confusing to navigate and understand. The most confusing button was the bear/home icon. You should really replace this icon with a home icon, and make it a color that is consistent with selectability. Button shaped boxes were used for subheadings, which confused us on what was selectable and what wasn't. Along the same lines, the colors were not consistently linked with function, causing uncertainty in our intuition, for example in the home screen. A quick fix to all of these is make them consistent with conventional use and among different screens of your app.

In the health performance module, consider the best way to represent the data you want the user to see, and how they will interpret / interact with it. We wish the graph could have been clearer with axes labeling to represent health trends, especially for a younger audience who have less attention to their health to understand the information as soon as they see it. In the sharing task, the globe appeared to be intractable given the design and layout of users who have pin icons on their heads which could be mistaken as map or navigation. There was also no way to add new friends or send messages to actually provide community support, which is one of your values in design. Thus it would be nice to tweak the design to allow for some personalized functions to incorporate more sense of community.

Finally, the most critical for the user is to have more context of their end goal. Clearly the app leverages incentives to get the user to fill out the health survey. However it is unclear how these rewards (recipes and coins) are supposed to be used. There is no intuitive connection between filling out the survey and growing crops, getting seeds, and receiving recipes. Please consider how you can design the UI to make this process intuitive, and refrain from adding more instructions in the form of text to show the user how to use the app.



## **Severity Ratings**

- 0 - not 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**

- Words, actions, and UI elements should be consistent across the entire platform
- Follow platform and industry conventions

### **H5: Error Prevention**

- Minimize error-prone conditions
- Remove memory burdens, support undoing, and warn your users when necessary

### **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, keyboard shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

### **H8: Aesthetic & Minimalist Design**

- No irrelevant information. Focus on the essentials.

### **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

### **H11: Accessible**

- Users can interact with the system using alternative input methods.
- Content is legible with distinguishable contrast and text size.
- Key information is upfront and not nested for screen readers.
- Purely visual or auditory content has text-based alternatives for users with low vision and low hearing.

### **H12: Value Alignment and Inclusion**

- The design should encode values that users can understand and relate to.
- It should make a diverse group of users feel included and respected.
- The design should prevent the reproduction of pre-existing inequities and not create additional burdens for members of disadvantaged populations.