Heuristic Evaluation of Nurtue

Evaluator A
Evaluator B
Evaluator C
Evaluator D

1. Problem/Prototype Description

Nurtue is an app that helps improve relationships between parents and their children by enabling parents to seek advice on, improve, and practice their parenting skills, as well as making conflict resolution between parents and children more productive and meaningful.

2. Violations Found

1. **H1. Visibility of System Status / Severity 3 / Found by A**
    a. When responding to a community post thread, there is a "Reply Sent!" confirmation that pops up, but the user cannot actually see their response pop up in the thread at the top (assuming most recent posts go to the top). Only showing the "Reply Sent!" confirmation does not give the user actual assurance that their response has been posted.
    b. Fix: As soon as the user posts their response to a thread, they should see their response pop up at the top of the thread in addition to the confirmation message. It might also help to highlight the new response for a few seconds just so it is very apparent to users that their response has been posted.
2. **H1. Visibility of System Status / Severity 2 / Found by B**
    a. On the practice page, there is a tracker at the top that shows which day of the week the user is on and if they have practiced their modules during the days prior, it can be lacking. There is no guarantee that the user will start their task on Sunday. Additionally, users can have streaks for longer than a week and the interface would not be able to indicate this.
    b. Fix: Add a "streaks" count that shows how many consecutive days the user has been active.
3. **H1. Visibility of System Status / Severity 1 / Found by B**
    a. On the practice page, the quiz lists however many questions there are. The progress bar uses percentages, which may not be a good style choice since 100/15 = 6.67 and intervals of 6.67 may not look very good. A better design would be which question you are on out of 15.
    b. Fix: Make the progress bar whichever question the user is on instead of percentages.
4. **H1. Visibility of System Status / Severity 1 / Found by D**
    a. On the filters page, there is no indication as to how many results will be returned when certain filters are applied. Users might want to know how many results they will see when they hit "Apply", or if certain filter combinations will not return any results at all.
    b. Fix: At the bottom of the filters page, include a text field showing "X results found" that is updated every time a filter is added, deleted, or changed.

5. **H2. Match Between System and the Real World / Severity 1 / Found by A**
   a. The name of the "Practice" page is vague and confusing–there is nothing the user is directly practicing here.
   b. Fix: Rename the "Practice" page to "Learn".
6. **H2. Match Between System and the Real World / Severity 2 / Found by C**
   a. There are two tips that say: "Consider Braedon's needs that may have contributed to his behavior" and "Consider what Dad is asking from you and <u>why</u>." These tips assume that the conflict is due to Braedon's behavior and something that Dad is asking from Braedon. This may not always match real world scenarios – what if it is the other way around, where the child is asking for something from the parent?
   b. Fix: Remove "Consider Braedon's needs that may have contributed to his behavior." Make both prompts say: "Consider what X is asking from you and <u>why.</u>" since this is more broadly applicable.
7. **H2. Match Between System and the Real World / Severity 2 / Found by C**
   a. The prompt is directed at Braedon, asking him to explain his point of view in a recording. However, the tip advises "Remember not to interrupt." Users might assume that the prompt and tip are both directed at Braedon and not Dad, since the tip does not name either party but comes after the prompt. This could create confusion, since the prompt prompts Braedon to speak, but the tip advises to "not interrupt."
   b. Fix: Make a Tips button that the user can click to see all tips relevant to explaining and listening to the other explain their point of view. Add a clarification before each tip so that we know who the tip is directed towards, like: "If you are listening to someone explain their point of view, remember not to interrupt."
8. **H2. Match Between System and the Real World / Severity 2 / Found by A, C, D**
   a. The language of the instruction to "Braedon, explain your point of view using objective language. Succinctly justify your reasoning." feels too complex for young children. While children at the middle school age and older would be able to understand this language, I think the language is not inclusive of young children.
   b. Fix: Make the language easier to understand, perhaps: "Braedon, explain what you think about this situation and explain why."
9. **H2. Match Between System and the Real World / Severity 3 / Found by C**
   a. The term "objective language" might not be well understood by users. Users might have trouble understanding whether or not they have explained their point of view using objective language.
   b. Fix: Provide an example of a point of view that uses objective language and an example of a point of view that does not use objective language. Change the prompt to something like: "Dad, explain your point of view. Focus on facts rather than emotions. Succinctly justify your reasoning."
10. **H2. Match Between System and the Real World / Severity 2 / Found by A, C**
   a. The instructions on the Practice page say "Complete today's daily practice!" However, there is no indication of what the "daily practice" is supposed to be or what it means to "complete" the practice. There is a list of the modules given but no indication of which

modules are in "today's practice." This is a violation because the language of the prompt implies that these things should be there.

b. Fix: Change the prompt to "Improve your parenting skills."

11. **H2. Match Between System and the Real World / Severity 1 / Found by D**

a. Under the search bar for the community page, some tags fall under the "Recommended Topics" category. Users might not know why those topics are recommended to them.

b. Fix: If appropriate, rename "Recommended Topics" to "Frequently Viewed".

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

a. As the user goes through the conflict resolution form, there is only an option to go back to the previous page. A user may want to exit out of this form when they have already completed multiple fields, but would need to click back many times.

b. Fix: Add a direct "To Home" button.

13. **H3. User Control and Freedom / Severity 2 / Found by A, B, C**

a. When users are practicing their communication language in the modules, they cannot go back to a previously answered question to see their response. Users may be interested in reviewing previously answered questions in order to recollect their responses.

b. Fix: Add a back button that allows the user to go back and see their response to the last answered question. Add a frame that includes a list of all questions in the module and enable the user to click on any question to go to its response.

14. **H4. Consistency and Standards / Severity 2 / Found by B**

a. The search bar on the community page will suggest recommended and trending topics whereas the feed is posts that do not feature any sort of topic. In the feed, each post has a topic and description and the topics are not seen from the feed. This is inconsistent.

b. Fix: Add topic tags to each post in the feed. Coordinate what is shown in the feed with what is shown in the search bar.

15. **H4. Consistency and Standards / Severity 1 / Found by B**

a. On the "solidify" page for new agreement, the text with the instructions and choosing emojis feels misplaced and inconsistent with the previous pages. The text is off center.

b. Fix: Decrease the right margins.

16. **H4. Consistency and Standards / Severity 3 / Found by B**

a. After "solidifying" an agreement and landing on the finish page, there is a message that the agreement is saved. However, the user can still go backwards and edit the terms of the agreement despite the agreement being saved already, which would resolve in multiple copies. This situation would leave users wondering if they can alter an already saved event since they have the option to go back.

b. Fix: Make the "Finish" button a "Save and Finish" button. After saving, there is no option to toggle screens back.

17. **H4. Consistency and Standards / Severity 4 / Found by A**

a. The "Filters" page allows you to filter community posts by child age, gender, and family dynamic. However, the prototype does not ask for this information when a user wants

to make a community post. Furthermore, the "Community" page displays posts with descriptions of who the users are (i.e. "Father of 11 y/o boy, 13 y/o girl"), but there is no explicit field when making a post to input this information. It is not clear in the current prototype where the user descriptions are coming from.

    b. Fix: Draw out a "Profile" page where users can set up their profile of who they are, their child's age, child's gender, and family dynamic.

18. **H4. Consistency and Standards / Severity 2 / Found by A**
    - **a.** When clicking on a community post and viewing the replies in the thread, the "reply" icon is still displayed in the original post. The user might be confused if they're actually seeing the thread responses or if they're still in the original "Community" page.
    - **b.** Fix: Remove the "reply" icon and format the thread page differently than the community forum page to help the user understand that they are now in a thread.

19. **H4. Consistency and Standards / Severity 4 / Found by A**
    - **a.** On the "Community" page, one of the posts that is on there displays an image of a poor grade on an assignment. However, when making a new post, there is no option for the user to upload an image.
    - **b.** Fix: Allow the user to upload an image when making a new post.

20. **H4. Consistency and Standards / Severity 0 / Found by A**
    - **a.** The main widgets on the "Conflict Resolution" and "Practice" pages are a sky blue color, but the main widgets on the "Community" page are white.
    - **b.** Fix: Either make the widgets of the "Conflict Resolution" and "Practice" pages white, or the widgets on the "Community" page sky blue. The latter might make the community forum page seem not as clean, so another suggestion is to add some sky blue accents on the "Community" page to keep the color scheme between pages relatively consistent.

21. **H4. Consistency and Standards / Severity 1 / Found by A**
    - **a.** Under the "Practice" page, the user is 20% through the "Discipline" module. However, when clicking on that module, there is a button that says "Start Practice", indicating that the user has not made progress through the module at all.
    - **b.** Fix: Rename the "Start Practice" button to "Resume Practice" for modules that the user has already started.

22. **H4. Consistency and Standards / Severity 1 / Found by A, B**
    - **a.** The progress bar for going through a quiz on the "Practice" page is a dark turquoise color, whereas the progress bar when creating a new agreement is red.
    - **b.** Fix: Make the progress bar for going through the quiz red to keep it consistent with the color scheme.

23. **H4. Consistency and Standards / Severity 1 / Found by A**
    - **a.** The list of resolutions in the resolutions page includes a wide array of emojis that are not included in the list of emojis when the user is actually creating a resolution with a child.
    - **b.** Fix: Either get rid of the emojis list or include a wider range.

24. **H4. Consistency and Standards / Severity 1 / Found by A**

   a. The "Conflict Resolution" page displays the text "Last Month" for the resolutions that were created last month, but does not display the text "This Month" for the resolutions that were created this month.
   b. Fix: Either display the text "This Month" for the resolutions that were created this month or change this page into a grid view (see #26).

25. **H4. Consistency and Standards / Severity 2 / Found by A**
   a. When creating a new agreement between parent and child, there is the option to voice-record the agreement. However, the prototype fails to document what a voice-recorded agreement would look like on the "Resolution History" page.
   b. Fix: Include what a voice-recorded agreement would look like.

26. **H4. Consistency and Standards / Severity 2 / Found by A**
   a. Each blue resolution "box" on the "Resolution History" page has a fixed size, suggesting that the resolution themselves need to have a certain word count limit (otherwise the resolution would not fit in the box). However, when creating a new resolution, there is no indication of a word limit.
   b. Fix: Include a word limit for how long a resolution can be when creating a new agreement to avoid messing with the size of the blue resolution "boxes" on the "Resolution History" page.

27. **H4. Consistency and Standards / Severity 1 / Found by A**
   a. On the "Conflict Resolution" page, the title "Resolution History" implies that everything on the page is resolutions that have been made. However, when creating a new resolution, the title says "New Agreement". There is inconsistency between the use of the word "resolution" and the use of the word "agreement".
   b. Fix: Change the word "agreement" to "resolution" wherever it pops up.

28. **H4. Consistency and Standards / Severity 2 / Found by D**
   a. On the community page, the search bar is placed under the "Good Morning, Emily!" title and the tagline, whereas in other instances (e.g. the conflict resolution page) it is on the top of the page. Users might find it frustrating that the search bar is not always in the same place.
   b. Fix: Place search bar at the top of the page.

29. **H4. Consistency and Standards / Severity 3 / Found by A, C, D**
   a. On the new post page, the post button is small and in the top right corner, while the main action buttons for other pages are large, highlighted, and near the bottom of the page (e.g. the finish button for new agreements, the next practice buttons for training modules). Users might find this placement unintuitive and inconvenient.
   b. Fix: Place the post button at the bottom of the page, with the same style as the other main action buttons.

30. **H4. Consistency and Standards / Severity 1 / Found by D**
   a. On the community search page, a "cancel" button brings you back to the previous page, whereas in most other cases in this app, the back button is a left chevron (<) in the top left corner. Users might find the purpose of the "cancel" button confusing (back to the previous page, or clear text field for the search bar, or quit out of the search bar) and appreciate consistency across pages.

      b. Fix: Include a left chevron (<) in the top left corner for users to return to the previous page.

31. **H4. Consistency and Standards / Severity 1 / Found by D**

      a. On certain pages, some box items on the field have edges that are more rounded than others (e.g. on the community page, the text box that says "be the parent you needed when you were younger" is less rounded than the post containers). It might improve the aesthetic if all box items shared the same roundedness on the edges.

      b. Fix: Make the border radius consistent across all box items.

32. **H4. Consistency and Standards / Severity 1 / Found by D**

      a. On the community page, the search bar is not flush with the rest of the items on the page. This might make it easier to overlook for users.

      b. Fix: Lengthen the search bar so it is flush with the other items.

33. **H4. Consistency and Standards / Severity 1 / Found by C**

      a. On the Community page, on each post there is a "Continue Reading" text with an arrow. However, the user can actually click anywhere on the post to get a more detailed view where they can continue to read it. This violation is inconsistent with both conventions surrounding usage of arrows in apps, and how the arrow symbol is used elsewhere within the Nurtue app. I would have expected that only tapping the Continue Reading arrow should enable the user to continue reading, rather than tapping anywhere on the post.

      b. Fix: Tapping the post itself should not have any interactions. Tapping the "Continue Reading," on the other hand, should take the user to the Thread view of the post.

34. **H4. Consistency and Standards / Severity 2 / Found by C**

      a. In the quick access navigation bar at the bottom, the icons develop a red border around them once tapped. In other cases, white buttons become filled in when tapped. In the Community frame, the heart and comment icons have a red border and red circle around them. If the Nurtue team intends for the heart icon to become a button that can be tapped to like a post (this functionality is not yet implemented), then I do not know if the red border with light red circle around the icon means that I have already liked the post or have yet to do so.

      b. Fix: Make the heart icon have a black border around it when user has not liked the post. Remove the light red circle. Fill in the heart to be entirely red when the user has already liked the post.

35. **H4. Consistency and Standards / Severity 1 / Found by C**

      a. The profile icon is very small and available only at the top right of the Community page. I am assuming that the Nurtue team plans to implement profile creation later (in order to fill in details like "Robert: Father of 11 y/o boy, 13 y/o girl"). This is inconsistent with how other main icons are in the navigation bar at the bottom and much more easily noticeable.

      b. Fix: Add the profile icon to the bottom navigation bar.

36. **H5. Error Prevention / Severity 3 / Found by B**

     a. The "solidify page" for the new agreement asks that the user only input a recorded or text response, but it seems that the user can do both and suffer no consequences. If the user does both, will this cause errors in the system?

     b. Fix: Have a checkbox option that is either record or type, and show the selected interface only when one of the checkboxes is checked.

37. H5. Error Prevention / Severity 2 / Found by D

     a. The new post button on the community page and the new agreement button on the conflict resolution page look exactly the same (+). While the aesthetic is consistent, users may be frustrated if they click one by accident when they meant to click the other, and may appreciate some means of differentiation.

     b. Fix: Add a tag beside the buttons saying "Add Post" and "Add Agreement".

38. H5. Error Prevention / Severity 3 / Found by B, C

     a. When the user wants to make a New Post, if they click the X button there is no confirmation message to confirm that they want to exit. If a user accidentally clicks X, then all their work will be lost and they will have to re-type their entire post again.

     b. Fix: When the user hits x, add a confirmation message. "Are you sure you want to exit?" And give users the option to save a draft of their post before exiting.

39. H5. Error Prevention / Severity 1 / Found by C

     a. When the user replies to another parent's post, the send paper airplane icon is small and shaped in a triangle. Due to Fitt's Law, this icon may be difficult for users to correctly tap, and thus may be the cause of greater errors.

     b. Fix: Draw a circle around the paper airplane icon and allow users to tap anywhere in the circle to send their text.

40. H5. Error Prevention / Severity 2 / Found by C

     a. The back button in several screens is quite small, and I had trouble tapping on the correct spot. Due to Fitt's Law, this icon may be difficult for users to correctly tap, and thus may be the cause of greater errors.

     b. Fix: Make a back arrow like this ← rather than <, or make the < bigger, so that it is easier correctly tap on it.

41. H6. Recognition Rather Than Recall / Severity 2 / Found by B

     a. As a user fills out the fields for conflict resolution, though some conflicts may be simpler than others, there may be a more complex conflict that would require a larger memory load for the user.

     b. Fix: As users progress through the "New Agreement" page, instead of just "explain your POV using succinct language", include the topic at hand (ie. "explain your POV on _____ using succinct language"). This reminds and keeps users focused on the conflict at hand.

42. H6. Recognition Rather Than Recall / Severity 1 / Found by A

     a. On the "Conflict Resolution" page, it is unclear as to how users can decide on who the conflict is between. The prototype just displays "Dad" and "Braedon" as an example, but does not cover how these names are actually inputted. Are they fixed names? Or does the user type it in?

     b. Fix: Allow the users to type in who the conflict is between.

43. **H6. Recognition Rather Than Recall / Severity 2 / Found by D**
    a. On the new post page, the fillers for the text fields for the title and description say "Type here…". Users might not know what the conventions are for posts and may appreciate general guidelines.
    b. Fix: Replace the current fillers with more descriptive ones, such as "Describe your issue briefly", or give an example description.
44. **H7. Flexibility and Efficiency of Use / Severity 2 / Found by B**
    a. For selecting topics on the "New Post" page, there seems to be many options that the user can choose from and no specific ordering. Even with the search bar, users may need to always research for topics they've used before.
    b. Fix: Add a "Frequently Used" list to save topics that have been revisited multiple times.
45. **H7. Flexibility and Efficiency of Use / Severity 2 / Found by A, C**
    a. A dedicated user of the app may want to re-do a module that they have already completed to challenge themselves.
    b. Fix: Within a completed module, add a button to enable the user to re-do that module.
46. **H7. Flexibility and Efficiency of Use / Severity 3 / Found by A, C**
    a. There is no search bar for users to search their modules by name. This may help users who want to access their module of choice as quickly as possible. This will be especially helpful as the app scales and more modules are added.
    b. Fix: Add a search bar below the prompt and centered where users can search for modules by name.
47. **H7. Flexibility and Efficiency of Use / Severity 4 / Found by B**
    a. Solidifying the new agreement is confusing because there is an option for recording and texting. Though it is meant to be one or the other, it feels counterintuitive to have them both on the screen as the user may initially feel like both are needed rather than just one of them.
    b. Fix: Have a checkbox option that is either record or type, and show the selected interface only when one of the checkboxes is checked.
48. **H7. Flexibility and Efficiency of Use / Severity 2 / Found by A**
    a. For a thread on the community forum, it can be hard distinguishing between good advice and bad advice, and it is inefficient for the parent to filter through the responses to find one that is good.
    b. Fix: Allow the responses with the most upvotes appear at the top.
49. **H7. Flexibility and Efficiency of Use / Severity 3 / Found by A**
    a. There is no way to delete a resolution that has been made in the past that might not apply to the parent and/or child anymore. For example, if a child's grades are falling, the parent and child might come up with a resolution of "no video games on school nights", but choose to get rid of that resolution when the child's grades start improving.
    b. Fix: Allow resolutions to be edited and deleted.
50. **H7. Flexibility and Efficiency of Use / Severity 4 / Found by A**
    a. There is a set two minute timer for conflict resolution and set stages (stating your point of view, restating the other's point of view) which might not be enough for actual

disagreements that take place. Especially for a child, two minutes may not be enough for them to cohesively collect their thoughts.

   b. Fix: Allow the user to choose the amount of time that is set, or get rid of the timing completely and just use this page to record down agreements that were made and give tips to the parents on how to reach agreements.

51. **H7. Flexibility and Efficiency of Use / Severity 3 / Found by A**

   a. The app is on one parent's phone, yet resolutions can be made among any member in the family. For example, for a two-parent household, if resolutions are made on "Dad's" app, this makes it hard for "Mom" to view what resolutions have been made.

   b. Fix: For a two-parent household, if both parents have the app, allow them to form a "household" where both can view the log of resolutions that have been made.

52. **H7. Flexibility and Efficiency of Use / Severity 2 / Found by D**

   a. The agreements on the resolution history page are sorted by time. Users might appreciate different ways to filter these, such as by the frequency they are reviewed or accessed.

   b. Fix: Include different filter buttons for agreements, such as "time created" and "frequency of access".

53. **H7. Flexibility and Efficiency of Use / Severity 2 / Found by D**

   a. On the practice page, there does not seem to be a way to filter modules by most recently accessed or most frequently accessed. Users might appreciate a way to easily find the modules they most recently used or used the most.

   b. Fix: Add filter buttons (or some other sorting mechanism) for "recently accessed" and "frequently accessed".

54. **H8. Aesthetic and Minimalist Design / Severity 4 / Found by B**

   a. With so many responses in a thread, when adding a response of my own, it is unclear to whom I am responding to. The view feels cluttered and not minimalist, so my responses feel lost.

   b. Fix: Simplify the threads interface and also highlight whom one is responding to.

55. **H8. Aesthetic and Minimalist Design / Severity 2 / Found by B**

   a. After finishing practicing, the tips in the "remember…" section seems a bit arbitrary and nonspecific, given that there are 3 tips and 15 questions. Users should have the option to see all the tips corresponding to each question, and carefully selected tips.

   b. Fix: Let tips be answers to questions that were incorrectly answered, and have a "completed" section that the user can reference in the future for correctly answered questions.

56. **H8. Aesthetic and Minimalist Design / Severity 3 / Found by B**

   a. For the new agreement conflict resolution task, every page leading up to the "solidify agreement" page has only featured 1 task whereas the "solidify agreement" page features 2. Having users think about the emojis while asking to input an agreement can be counterproductive since these two tasks are competing for the user's attention.

   b. Fix: Split documenting an agreement and choosing an emoji into two different pages.

57. **H8. Aesthetic and Minimalist Design / Severity 2 / Found by A, D**

a. The "Community" page is too crowded with text and may overwhelm the user upon first glance.
b. Fix: Get rid of some unnecessary text on this page. The phrase "Be the parent you needed when you were younger" seems unnecessary, as is the "Good Morning, Emily!". While these are nice to have, the user will mainly be on this page either to make a post or search for a community post. If you get rid of some unnecessary text, you can make the search bar bigger on this page and make it easier for the user to navigate to.

58. **H8. Aesthetic and Minimalist Design / Severity 2 / Found by A**
    a. The "Conflict Resolution" page is too crowded and the more resolutions that are made, the further users will have to scroll to look at prior resolutions.
    b. Fix: Having a grid view of the months that users can then tap into and view the resolutions created in that month may be easier on the eye and easier to navigate.

59. **H10. Help and Documentation / Severity 2 / Found by B, C, D**
    a. There is no help or FAQ section. Certain users may run into difficulties navigating through the app and not have support.
    b. Fix: Add a help button and/or FAQ section.

60. **H11. Accessible / Severity 2 / Found by B**
    a. The interface used for sharing and posting parenting struggles seems pretty texting-heavy. For individuals who may suffer from motor issues, physical age-related issues, or poor vision, they may find a harder time logging in a post and typing out their responses.
    b. Fix: Add an audio to text option, that will parse words the user says and transcribe them into text. A more technically feasible option is to include more subtopics under each existing topic, so users can find their struggles with less clicks.

61. **H11. Accessible / Severity 2 / Found by D**
    a. On the filters page, the child's age selection bar has 2 circles and allows selections between 0 and 17. Users may not find it intuitive as to why there are 2 circles instead of 1, and may find it tedious to adjust the selection bar to the appropriate ages on their phones.
    b. Fix: For the age range selection, choose a more intuitive and easy-to-use selector, like counters with up and down arrows or text fields where numbers can be entered directly.

62. **H11. Accessible / Severity 2 / Found by C**
    a. When the user replies to another parent's post, the send paper airplane icon blends in with the rest of the interface since it is colored white with a black border, and the area around it has the same color scheme. This makes this button difficult to notice, especially for users who have low vision.
    b. Fix: Use a different color for the paper airplane icon that pops out.

63. **H11. Accessible / Severity 3 / Found by C**
    a. When the user clicks Search or Filter on the community page, all buttons have a light blue background. When clicked, the buttons change from a light blue to a gradient blue, which is a very subtle change that may be difficult for users with low vision to notice. This violation is repeated in numerous portions of the app.

b. Fix: Change the unclicked buttons to be white with a colored border. When clicked, fill the buttons in with color and change their text to white.

64. H12. Fairness and Inclusion / Severity 4 / Found by A

a. The community forum lacks a way for users to report or delete comments on a thread that might be misleading or hurtful to the rest of the community. Since it's a community forum, it should be assumed that there are people who don't conform to general community standards.

b. Fix: Include an option for users to delete certain replies to their threads and report responses that are offensive or inappropriate.

65. H12. Fairness and Inclusion / Severity 1 / Found by A

a. On the "Community" page, it has the description of Dr. Martha Greene as "LCSW". Clearly she is an expert, but acronyms such as "LCSW" may seem like jargon to parents who are new to the space.

b. Fix: Instead of using acronyms, list out the full job title of experts.

66. H12. Fairness and Inclusion / Severity 2 / Found by B

a. The interface used for filters may exclude some groups. For example, there are more genders, types of parents, and family dynamics. While the options available do feel inclusive to most groups, I feel that some groups are still missed/not included (ie. agender).

b. Fix: Add an "Other" option where the user can input their own answer if they do not see an existing answer that they resonate with.

67. H12. Fairness and Inclusion / Severity 2 / Found by A, C

a. At the top of the screen, it says "Be the parent you needed when you were younger." This language can imply that the parents using this app were not raised with parents who filled their needs, due to the typical connotations of this expression. This can make parents who feel that their parents fulfilled their needs feel excluded from the app. This can also trigger parents to think about the shortcomings of their own parents and thus worsen relationships among family members.

b. Fix: Change to a more inclusive language, like "Grow together with your child."

68. H13. Value Alignment / Severity 2 / Found by B

a. The purpose of the app is to improve relationships between parents and children, but on the resolution history page, there is a resolution mentioning "Mom & Dad will have date nights on Fridays". This is a little confusing because it seems the relationship to be monitored here is between the parents, and the child is not included. It seems that instead of monitoring just child and parent, it is interactions within the whole family, which may deter focusing on the relationship of the child and parent(s).

b. Fix: Make conflict resolutions always include at least one parent(s) or kid(s).

69. H13. Value Alignment / Severity 3 / Found by D

a. On the community search page, there does not seem to be a way for users to adjust the topics recommended to them. Assuming that the system decides and updates the topics it recommends to users, users might appreciate a way to select topics they want to see more content on, and deselect topics they don't want to see content on. Doing so will more closely align the recommendations with the user's values.

> **b.** Fix: Include a way to manually add new tags and deselect existing recommended tags.

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	0	2	1	1	0	**4**
H2: Match Sys & World	0	2	4	1	0	**7**
H3: User Control	0	0	1	1	0	**2**
H4: Consistency & Standards	1	11	6	2	2	**22**
H5: Error Prevention	0	1	2	2	0	**5**
H6: Recognition not Recall	0	1	2	0	0	**3**
H7: Efficiency of Use	0	0	5	3	2	**10**
H8: Minimalist Design	0	0	3	1	1	**5**
H9: Help Users with Errors	0	0	0	0	0	**0**
H10: Help & Documentation	0	0	1	0	0	**1**
H11: Accessible	0	0	3	1	0	**4**
H12: Fairness & Inclusion	0	1	2	0	1	**4**
H13: Value Alignment	0	0	1	1	0	**2**
Total Violations by Severity	**1**	**18**	**31**	**13**	**6**	**69**

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

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D
Sev. 0	100%	0%	0%	0%
Sev. 1	44%	17%	17%	28%
Sev. 2	36%	32%	36%	29%
Sev. 3	38%	38%	38%	15%
Sev. 4	67%	33%	0%	0%
Total (sevs. 3 & 4)	48%	37%	26%	11%
Total (all severity levels)	42%	29%	28%	23%

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

5. Summary Recommendations

Overall, you did an excellent job on the med-fi prototype! The navigation bar clearly leads into each of your simple, medium, and complex tasks. The design of your app is clean, user-friendly, and aesthetically pleasing. We enjoyed exploring the features you had in your prototype.

In terms of heuristics, the biggest areas of improvement we see for the Nurture app are consistency and standards, flexibility and efficiency of use, and match between system and the real world.

For "consistency and standards", we encourage the Nurtue team to be as consistent as possible with the form, color, and location of the icons and buttons in their interface. When icons and buttons need to be differentiated, this should also be done in a consistent manner. In addition, we encourage the team to have a consistent and accessible interface for displaying an already clicked button or icon.

For "flexibility and efficiency of use", we encourage the Nurtue team to include more searching capabilities, especially in the Practice section, as well as more intelligent sorting and filtering of information. This will improve the app's efficiency of usage for all of its users. Furthermore, there seems to be a lot of rigidity with the conflict resolution setup–we encourage more user customization when it comes to making a new agreement, such as customizing the timer.

Another area for improvement is designing for recurring users. Given that there is a tracker for how many consecutive days of the week a user is on Nurture, we think there are many simple implementations that could speed up the interactions between frequent users and Nurture, such as saving preferences and autofilling certain repetitive behaviors. Furthermore, users can be empowered if they have control over certain aspects of the app, such as adding or deleting recommended tags on the search page to customize their experience. These will benefit new users who aren't familiar with the app, but also users who will use this app very frequently.

For "match between system and the real world", we encourage the Nurtue team to think about what their prompts and the language on their buttons are implying and what needs to be stated explicitly. We also encourage them to be more intentional about which tips are appropriate for each page and whether the user knows whom the tips are being directed towards.

In terms of general recommendations, we make the following suggestions.

Have more selections for user background and for responses, since parenting can be a really broad topic.

Reconsider the often-academic tone that is present in the app's features. Users come from all walks of life, and may find it uncomfortable or hard to relate to instructions and suggestions that are academically worded (e.g. "succinctly justify your reasoning", "discipline, rather than punishment, allows us to validate our kids' feelings …"). Consider rewording some of the instructions so the app sounds more like a mentor or a friend instead of an instructor.

Cater the app's content towards the age of the user's children. The practice modules for a teenager's parents are likely very different from those of a five year old's parents. The practice modules can include a target audience, so that parents can know which modules are applicable to them. Similarly, the academic tone of the conflict resolution module makes it seem designed for children at the middle

school age and older. You can create a more inclusive experience for all by being more thoughtful about this.

The prototype didn't go over a profile page, even though there is an icon on the top right hand corner in the community forum page. It would be helpful outlining what the profile page would look like and what information a user can put on their profile page.

Keep up the good work!

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.

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- Purely visual or auditory content has text-based alternatives for users with low vision and low hearing.

H12: Fairness and Inclusion
- Users shouldn't feel that the design is not made for them.
- The design should meet all users' needs equally and prevent the reproduction of pre-existing inequities.
- It should not create additional burdens for members of disadvantaged populations.

H13: Value Alignment
- The design should encode values that users can understand and relate to.
- Conflicting collateral values should not emerge when the user interacts with the product.
- Encoded values should match users' values in a broad set of use-contexts.