

Heuristic Evaluation of IUDY

For a more in-depth overview of A9, please refer to the [A9 assignment spec](#).

1. Problem/Prototype Description

IUDY is a personal health application that incorporates user feedback to help menstruators who use some form of contraception or birth control receive new contraceptive recommendations and track their symptoms regarding their current contraceptive, in addition to being a helpful resource also for finding where their contraceptive is currently in stock.

2. Violations Found

Simple Task: Please log your symptoms

1. H1: Visibility of System Status / Severity: 2 / Found by: D

Task: 1 - Daily logging of symptoms

Description: There is no lasting confirmation or reminder that I have completed my daily log-in of symptoms besides the “successful submission” page.

Rationale: A user might forget whether or not they have completed their daily log-in task due to the lack of a symbol communicating its completion for the day. Having a symbol like a “check” or an “X” would act as a visual reminder of their task completion. This can be especially helpful in cases where users have memory issues or are impaired due to their current symptoms.

Fix: Add a check, “X”, or another icon that can communicate the status of their daily log.

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

Description: On check in page, the “submit” button reads “continue”, but goes to the screen that says that the check-in has been completed.

Rationale: Users might think that the button will lead to more check-in/symptom questions.

Fix: Maybe using a different word like “save” or “submit” would be helpful!

3. H2: Match between system and real world / Severity: 1 / Found by: A

Description: On the check-in page, there’s a button that reads “Check earlier symptoms” - not super sure if earlier refers to previous history of symptoms or if it refers to the symptoms from that day.

Rationale: The calendar icon is helpful to note that they are “previous” symptoms, but as a user, I’m not sure what information (and from which timeline) I would get it from.

Fix: If it is a earlier today symptoms page, then maybe instead have it say “Check today’s symptoms”, or a “Check previous symptoms” (if it’s the user’s entire history).

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

Description: On the check-in screen, the buttons next to the symptoms are circles.

Rationale: (this just might be me) I think seeing circles for something implies that you should only choose one, rather than something like boxes, where you could choose more than one option.

Fix: Change the circle selected shape to a box shape.

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

Description: There's a repeat of the toolbar icon next to the button that reads "Check earlier symptoms," which might allude that the button "Check earlier symptoms" and the toolbar button will lead to the same place.

Rationale: Users might get confused about why the same button is in two places (if they lead to the same place).

Fix: Maybe changing the check-in icon on the toolbar or changing/removing the calendar image next to the "Check earlier symptoms" altogether.

6. (related to the previous heuristic) H4: Consistency and standards / Severity: 1 / Found by: A

Description: The "Check earlier symptoms" on the completion screen does not have the same calendar icon as the "Check earlier symptoms" did on the previous page

Rationale: It might appear as two different buttons because one is missing a logo

Fix: Either adding a calendar button to both or removing from both

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

Description: The "Select Your Symptoms" and "Symptoms you've selected" are repeating the same information.

Rationale: Even though it's helpful to have everything summed up in one section, I'm worried that the screen might get too cluttered if a user chooses too many.

Fix: Make the "Symptoms you've selected" something you can scroll through or highlight the ones that the user selects in the Select Your Symptoms section.

8. H12: Value alignment and inclusion / Severity: 3 / Found by: A, C

Description: There's no option for users to input their own symptoms on the check-in page, and they can only choose from a certain list of options.

Rationale: Not all symptoms a user experiences will fall under one of these buckets (even if these are the most common).

Fix: Maybe provide an [text here] field for users to put information into

9. H12: Value alignment and inclusion / Severity: 3 / Found by: B

SubTask: Navigate app to log symptoms

Description: One of the main app colors is pink, including the logo which is representative of the brand.

Rationale: The use of a more "feminine" color like pink as one of the main colors may cause certain gender demographics to feel uncomfortable using the app

Fix: Consider more neutral colors

10. H11: Accessible design / Severity: 2 / Found by: B

Description: all the navigation buttons at the bottom are very small compared to the large text and buttons in the main part of the screen.

Rationale: A user may not be able to see the bottom screen navigation buttons due to their small size and other content on the screen distracting them. They may not recognize the icon for calendar

Fix: Make bottom navigation bar icons bigger and choose more recognizable icons

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

Task: Task 1

Description: No indication of the last time symptoms were logged.

Rationale: After visual confirmation of submitting symptoms, there is no way for a user to easily tell when the last time they logged their symptoms was. This could cause confusion if a user opens their app later in the day than they did their check-in.

Fix: Add an indicator of the last time symptoms were successfully logged and submitted.

12. H4: Consistency and Standards / Severity: 1 / Found by: C

Task: Task 1

Description: "Symptoms you've selected" icons on the logging symptoms page is more left-aligned than any elements on that page except the back button.

Rationale: Although a cosmetic issue, it is inconsistent to see text elements farther left than the rest of the page.

Fix: Move the icons to the right and possibly allow for scrolling or more icon population underneath if a user logs more symptoms

13. H2: Match Between System and the Real World / Severity: 2 / Found by: C

Task: Task 1

Description: Calendar icon for logging symptoms does not match.

Rationale: Usually when people look at calendars, they associate dates and times instead of symptoms, so the use of a calendar for the logging symptoms screen is confusing.

Fix: Change the icon to one more connected to logging, like check boxes or writing notes icons

14. H7: Flexibility and Efficiency of Use / Severity: 2 / Found by: C

Task: Task 1

Description: A user who is frequently checking the app has no indication of if they can update their symptoms or if submitting is final

Rationale: If a user is frequently using IUDiy, they may be using the symptoms feature a lot to track trends of the day rather than how they are feeling at a particular moment.

There is no clear way to update symptoms, only to continue submitting one daily check-in

Fix: Have ability to update symptoms if they change within the day or indicate that it is a one-time check up for symptoms

15. H10: Help and Documentation / Severity: 2 / Found by: C

Task: Task 1

Description: There is no description of what the different symptoms look like and not all users know these terms

Rationale: Without a short description of a symptom, a user may have difficulty knowing what medical terms align with their symptoms

Fix: Flesh out help menu with short description of symptoms

16. H4: Consistency and Standards / Severity: 1 / Found by: D

Task: 1 - Dismiss daily check-in page

Description: After successfully logging symptoms, the inclusion of an actionable button is inconsistent with the lack of a button on the “dismiss successful login page” despite the mutual inclusion of an “X” at the top right corner.

Rationale: A common task should have multiple ways of completing it; in this case, a user can press the home icon on the bottom bar navigation menu or an actionable button. A user’s first intuition may be to press the button as a means to dismiss the page which may confuse them when it directs them elsewhere.

Fix: Add an actionable button to go to the homepage and/or a “dismiss” button to take you to the previous screen (log symptoms).

17. H5: Flexibility and Efficiency of Use / Severity: 2 / Found by: D

Task: 1 - Dismiss daily check-in page

Description: After logging symptoms, the “check earlier symptoms” button acts as a first read although someone’s intention may be to return to the home screen to get an overview of their next medication. However, if they press the attention-grabbing button, they will be sent to their logging history.

Rationale: After logging symptoms, a user may have a goal (get an overview of their medications to be wary of what may worsen symptoms) which differs from the main option given (see symptom history)

Fix: Include an additional attention-grabbing actionable button that directs users to the homepage.

18. H2: Match Between System and the Real World / Severity: 2 / Found by: D

Task: 1 - Selecting symptoms

Description: To communicate the level of spotting, there are currently only two, semi-ambiguous options: heavy spotting and slight spotting. The same issue can be seen in the “energetic” and “lethargic” descriptions of energy levels.

Rationale: Levels of spotting can vary greatly among individuals. “Heavy” and “slight” spotting have different meanings to different people. A more intuitive form of measurement may be via a spectrum or scale with visual icons to denote the severity of spotting and energy.

Fix: Implement a scale/spectrum/slider with visual indicators of the scale being used to measure spotting and energy.

Moderate Task: Find a pharmacy that carries your current prescription

1. H6: Recognition rather than recall / Severity: 2 / Found by: A, C

Description: There is no way to see current recommendation mile radius/see my location in relation to all the pins

Rationale: This way the user can be able to decide if they want to change the recommendation mile radius, and see how visually far their location is from different places (They know where they live, but seeing it on a map will help)

Fix: Adding a section on the side for the current mileage and a different color pin for the user’s location

2. H8: Aesthetic and minimalist design / Severity: 1 / Found by: A, D, B

Description: Finding locations that carry your prescription is pretty intuitive, but the button itself is formatted differently than other buttons on the screen

Rationale: Users might be confused as to if this is another clickable button because it’s also put off to the side

Fix: Maybe aligning the buttons with each other/matching the format or color of all the buttons

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

Description: Font on the screen is a bit small and close together

Rationale: There’s a lot to process on this screen especially with the map, the pins, and then reading the text

Fix: If you remove the logo from the screen, then you can put “Locations for Prescription” on the top, with a “filter” button for the user to change location or recommendation mile radius.

4. H8: Aesthetic and minimalist design / Severity: 2 / Found by: A, C

Description: no button for the “Change Location or Recommendation Mile Radius”

Rationale: I’m not sure how much room that button should take up, but it blends in with all the other text on the screen, so as the user, I don’t know that that’s a feature I can use

Fix: Maybe using a similar format that the app uses on other buttons, and applying that here

5. H11: Accessible design / Severity: 2 / Found by: A

Description: The map has quite a few colors going on, in addition to the pins

Rationale: As a user, it's hard for me to process the map, read the text, and decide on which pin to click - if someone has red-green blindness, the red pins on the green parts of the map is difficult to process visually

Fix: maybe choosing a map that only includes the names of cities that pharmacies in + whichever place the user lives in

6. **H8: Aesthetic and minimal design / Severity: 1 / Found by: B**

Task: See locations where you can pick up your medication

Description: When you click on a location in the map, there is a pindrop image that is both in the center of the screen and taking up as much space as the actual location information

Rationale: This image is not necessary and may distract the user/ draw their eye before the intended information

Fix: Make the image smaller/ less distracting

7. **H6: Recognition vs. Recall / Severity: 1 / Found by: B**

Task: See locations where you can pick up your medication

Description: When you click on a location in the map, in the information popup there is a line that says Slynd: In-Stock

Rationale: I don't understand what this means alone. "Slynd" being a medication is information that is accessible on another screen but must be remembered if you are to understand what is instock

Fix: Have information from the other page that Slynd is your medication to clarify what is being indicated as In-stock

8. **H2: Match between system and the real world / Severity: 2 / found by: B, C**

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

Description: The button to see the map of where to pick up treatments is called "where to find treatment"

Rationale: Users may be confused if these locations are places to pick up prescriptions or medical facilities to undergo treatment. Additionally this wording isn't consistent with location search features on other apps using language like "Search by location/Search Nearby"

Fix: Clarify wording on this button perhaps to "Search Near Me"

9. **H11: Accessible design / Severity: 2 / Found by: B, D**

Task: See locations where you can pick up your medication

Description: The button to see the map of where to pick up treatments is much smaller than any other buttons on the screen and off to the side

Rationale: It may be harder for users to see and therefore access this button

Fix: Make the button bigger/more visible

10. **H6: Recognition not Recall / Severity: 2 / Found by: C**

Task: Task 2

Description: When on the map page, a user cannot see what prescription they are searching the location for

Rationale: A user has to remember their current prescription

Fix: Indicate on the page what prescription they are finding pharmacies for

11. H6: Recognition not Recall / Severity: 2 / Found by: D

Task: 2 - Comparing pharmacy locations

Description: The current implementation removes the user's view of the map in favor of expanding details on a single pharmacy's address, distance from the user, and stock availability.

Rationale: It is reasonable to expect a user of this app to use this feature to compare and contrast different pharmacies. In this case, a user needs to remember information about a pharmacy that they are currently not viewing as a previous pharmacy's information is no longer available without additional steps.

Fix: Display a selected pharmacy's information as a popup that comes up from the bottom, similar to Google Maps' implementation, so that the map is still in view. An alternative would be to include filters for each metric (stock availability) to let the app handle these comparisons.

Complex Task: Change your current contraceptive recommendation

1. H2: Match between system and the real world / Severity: 3 / Found by: A

Description: The questions that are provided as a part of the "Get New Recommendation" don't seem comprehensive enough, maybe another layer for after the user answers yes to "Have you been on any contraceptives" for them to input the name of their prescription (so that they don't get prescribed the same thing). Any other preferences also seems too broad (I know that I prefer a more structured set of questions to answer, so I would also feel more confident in the prescription recommended)

Rationale: The process of receiving a new recommendation should be similar if not identical to the questions that an actual doctor would ask the user

Fix: Maybe this is just a more research/more information needed section (also could be helpful to add another page for more questions, so information is not overcrowded)

2. H2: Match between system and the real world / Severity: 1 / Found by: A, C, B

Description: Once the user submits their recommendation survey, they can click either a "X" or a "Cancel" button.

Rationale: I'm not entirely sure why there needs to be two buttons - both the "X" and the "Cancel" (unless the "Cancel" button does something different). Also, maybe a different word instead of "Cancel" would work better (such as "Go Back")

Fix: Either keeping the "X" button or the "Cancel" button, or changing the verbage of the "Cancel" button

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

Description: The “X” button doesn’t lead back to the recommendation survey section (there’s also an additional “Cancel” button that doesn’t lead back to the survey section)

Rationale: If someone isn’t happy with recommendation, maybe there’s a way they can provide more information about their experience

Fix: Making sure that the “x” and “cancel” buttons are linked/rephrase “X” or “Cancel”

4. H3: User Control and Freedom / Severity: 3 / Found by: A

Description: User cannot access the third button on the toolbar without completing the check-in.

Rationale: If the user just wants to view their current prescription/change their prescription, they should be able to without having to complete a daily check-in.

Fix: Have the toolbar accessible at every step

5. H4: Consistency and standards / Severity: 1 / Found by: A, C

Description: The button on the prescription screen reads “Current Recommendation” but when you click on the button, the screen reads as “Current Prescription”

Rationale: The verbage should be consistent, as if a user just joins the app perhaps “Current Recommendation” isn’t super accurate (because the app hasn’t recommended anything quite yet)

Fix: Change both to “Current Prescription” , and then maybe after the app recommends something, it can read as “Current Recommended Prescription” (too wordy)

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

Description: Similar to the one above, when you click on “Current Recommendation,” the shortcut to go to the new recommendation screen reads “Get A New Prescription” rather than what the prescription screen reads as “Get A New Recommendation”

Rationale: The words “prescription” and “recommendation” can have very different implications, especially if the user wants to remember which is prescribed by a doctor and which is recommended by the app

Fix: Change both to “Recommendation”(?)

7. H8: Aesthetic and minimalist design / Severity: 1 / Found by: A, C

Description: When you click on my current recommendation, the screen gets significantly darker.

Rationale: This could be an issue with accessibility/gives off the impression that this is a past recommendation (which is why the screen has dimmed)

Fix: If there’s any way to make this screen the same brightness as the rest

8. H8: Aesthetic and minimalist design / Severity: 1 / Found by: A, C

Description: (similar to the one above) When you click on “Get Recommendation” (after submitting all of your information), the screen gets significantly darker.

Rationale: This could be an issue with accessibility/gives off the impression that this is a past recommendation (which is why the screen has dimmed)

Fix: If there's any way to make this screen the same brightness as the rest

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

Description: The screen that contains Yazmin: once daily + Get a New Recommendation has the exact same layout as the home screen

Rationale: This is a bit confusing as the user, as both appear like they could be the home screen, especially because this screen also has the logo on it

Fix: Remove the logo

10. H8: Aesthetic and minimalist design / Severity: 2 / Found by: A, B

Description: There's a button shaped item that reads "Yazmin: once daily" which you can't click on, but then an additional button to find out about your current recommendation

Rationale: The flow of the screen is a bit more broken up, especially because current recommendation also mentions Yazmin again (the information seems like it can be more clearly parsed)

Fix: You could have the text on the screen read as "My Current Recommendation: Yazmin" with a button for more information, a button for where to find treatment, and then a button for get a new recommendation

11. H8: Aesthetic and minimalist design / Severity: 2 / Found by: A, C, B

Description: The colors and formatting of the buttons are all slightly different (and some you can't click on) - fonts, sizes, colors are all different

Rationale: As a user, I'm most drawn to the "Yazmin: once daily" square, but that isn't clickable and "where to find treatment" does not match all the other buttons, so I would assume that it isn't clickable (if not for the font, purely talking about the format of the button).

Fix: Standardize what is clickable and what isn't through format of the buttons

12. H9: Help users recognize, diagnose, and recover from errors / Severity: 2 / Found by: A

Description: For the recommendation survey, it is unclear if every question is required - the user is able to submit an uncompleted survey (any other preferences maybe is not a necessary question to answer)

Rationale: If the app helps with the accessibility of getting a new recommendation, then maybe users would like a quicker but still accurate way of doing so

Fix: Maybe adding asterisks (the same Google Forms do) to signify what is required

13. H10: Help and documentation / Severity: 1 / Found by: A

Description: The icon that the user would need to click on to reach the new recommendation button isn't super clear - not sure that I would have needed to click there, would have thought that I would click on the little profile button

Rationale: The app itself is super sleek and simple, so iconography should be super clear as where each button leads

Fix: It could be helpful to add wording next to each button (also would need to consider size of the font) or change the iconography

14. H1: Visibility of system status / Severity: 2 / Found by: B, C

Description: When a new recommendation popup enters the screen and the user clicks "Set as my current prescription" the box simply closes

Rationale: While the button makes it pretty clear, the user is not given feedback informing them of what has happened and may not know if their results were saved

Fix: Add indicate that prescription has been saved, perhaps with another popup that says "Your prescription change has been saved" or something of that nature

15. H6: Recognition vs. Recall / Severity: 2 / Found by: B

Task: Get a new recommendation

Description: When a new recommendation popup enters the screen there are three buttons "set as my current prescription", "cancel" and "X" but there is no way to access information about current prescription

Rationale: User has to remember information about their current prescription before making an important decision of changing to a new prescription

Fix: Add a way to easily view info about current prescription from this screen

16. H6: Recognition vs. Recall / Severity: 2 / Found by: B

Description: User is asked to type in symptoms of current medication but cannot access past logs of symptoms from this part of the app

Rationale: User may have to recall information from another part of the app, versus having it readily available to them

Fix: Allow user to access past logs from this screen

17. H5: Error Prevention / Severity: 2 / Found by: C

Task: Task 3

Description: No checking to make sure user wishes to change prescription before action.

Rationale: The cancel and set new prescription buttons are close to each other, and there is no option to not change your prescription if a user clicks the wrong button

Fix: Add a confirmation option before a user commits to changing their prescription

18. H10: Help and Documentation / Severity: 2 / Found by: C

Task: Task 3

Description: When filling out preferences for a new recommendation, it is unclear if the typed menus are open-ended or drop down

Rationale: Without knowing what to expect from the interaction, a user may have a few errors in looking for their recommendation

Fix: Change wording to reflect either way. "Select any side effects you had" or "Type any other preferences" for example

19. H4: Consistency and standards / Severity: 2 / Found by: B

Description: When a current prescription popup enters the screen, there are two buttons "return to homepage!" and "X".

Rationale: Here the "X" button closes the popup whereas on the get new prescription button "X" takes you to homepage. User may find it hard to learn what "X" button means if it is used inconsistently around the app

Fix: Rephrase "X" as return to home or home button

20. H6: Recognition rather than Recall / Severity: 2 / Found by: D

Task: 3 - Describing side effects on "change recommendations" form

Description: The current interface asks the user to manually type in any side effects that they may be experiencing.

Rationale: Making a checklist full of examples of side effects that they can choose might help patients recognize their symptoms from a list rather than have them recall and potentially submit an incomplete symptom list, decreasing recommendation accuracy. Moreover, this can help standardize parameters used for prescription recommendations, as less text parsing and error-checking would be required to extract their text-based entries. From an accessibility perspective, it can also help those with dexterity problems minimize the strain of having to type in their side effects.

Fix: Have a dropdown menu or checklist of side effects from which the user may choose from.

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

Task: 3 - Listing side effects on the "change recommendation" form.

Description: The current interface has users type in any side effects they may be feeling from their current prescription when filling out the questionnaire used to recommend a new prescription.

Rationale: The user most likely already noted many side effects and symptoms in their daily log. To help users not forget any previously listed symptom/side effect, the app itself may be able to import user data from their logs to fill in this information automatically. In this way, the form gets pre-filled with responses that the user can confirm or edit before submitting the form.

Fix: Automatically import data, prefill side effects from previous symptoms logs, and wait for user confirmation.

22. H3: User Control & Freedom / Severity: 3 / Found by: D

Task: 3 - Go to the prescription page after completing task 3 (changing recommendations).

Description: After changing a user's prescription recommendation, the option to return to the prescription page is lost as there is no longer an active link in the navigation bar to the prescriptions page.

Rationale: Users should be able to view their prescriptions following a change in their recommendations. This is a critical time period where a user may want to search for a nearby pharmacy that carries the new medication which is only accessible through the now inaccessible prescription page.

Fix: Add "map" option to the navigation menu or re-establish the link to the prescription page.

23. H11: Accessible Design / Severity: 3 / Found by: D

Task: 3 - View the current prescription

Description: The screen became dim when viewing a user's current prescription on the prescriptions page, making it comparatively difficult to view the information being displayed.

Rationale: Lower brightness results in lower contrast ratios that make text and information less visible. This makes it very difficult to read outdoors, in bright areas, and on dim displays.

Fix: Increase page brightness or change colors.

Additional Violations:

1. H3: User control and freedom / Severity: 1 / Found by: A

Description: Sign up page includes a short cut to the log in page, but not vice versa

Rationale: The user could easily go back to the first page and then go to the sign up page, but might be nice for consistency purposes

Fix: Add a shortcut to the sign up page on the log in page

2. H3: User control and freedom / Severity: 0 / Found by: A, C

Description: There is no place to input which contraceptive the user is on, for the sign up page (I also recognize that this is a med-fi prototype, but just thinking ahead!)

Rationale: The user should be able to put in information about their contraceptive

Fix: (this is definitely something that you know) Add a section for the user to input information about their medication - could go on a second page, depending on how much information is needed

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

Description: The back button in some cases (especially if you've just clicked on a toolbar button) isn't super clear as to where it leads. Also the back button on the "Select Your Symptoms" page does not lead anywhere. Sometimes the button leads to the home screen, which is a bit confusing since the home button on the toolbar also leads there.

Rationale: The toolbar itself is very clear, so some of the back buttons seem a bit repetitive.

Fix: Re-evaluate where back buttons are necessary.

4. H6: Recognition rather than recall / Severity: 2 / Found by: A

Description: There are two different orange buttons with “Yazmin”, one that says 34 minutes left, and the other which says “Once Daily,” on two different screens

Rationale: This might confuse a user who only uses one screen (versus the other), especially if they just see the “Current Recommendation” screen.

Fix: If both pieces of text are on the same screen, then the user can easily see when they need to take their medication and look ahead if there’s another time they need to take the medication

5. H8: Aesthetic and minimalist design / Severity: 2 / Found by: A, C, B

Description: The logo is present on certain screens but not on all/This information is not necessary across multiple screens and takes up a lot of user’s focus

Rationale: This may make some screens look more important than others

Fix: Should the logo be on every screen or just the home screen?

6. H1: Visibility of system status / Severity: 2 / Found by: B

Description: When a new recommendation popup enters the screen and the user clicks “Set as my current prescription” the box simply closes

Rationale: While the button makes it pretty clear, the user is not given feedback informing them of what has happened and may not know if their results were saved

Fix: Add indicate that prescription has been saved, perhaps with another popup that says “Your prescription change has been saved” or something of that nature

7. H4: Consistency and standards / Severity: 2 / Found by: B

Description: When a new recommendation popup enters the screen there are three buttons “set as my current prescription”, “cancel” and “X”.

Rationale: It is unclear the difference between Cancel and X, and user may not expect it to go to the home page. This can cause increased cognitive load by the user

Fix: Rephrase “X” as return to home or home button

8. H6: Recognition vs. Recall / Severity: 2 / Found by: B

Task: Get a new recommendation

Description: When a new recommendation popup enters the screen there are three buttons “set as my current prescription”, “cancel” and “X” but there is no way to access information about current prescription

Rationale: User has to remember information about their current prescription before making an important decision of changing to a new prescription

Fix: Add a way to easily view info about current prescription from this screen

9. H4: Consistency and standards / Severity: 2 / Found by: B

Task: Get a new recommendation from current presc

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Rationale: Here the "X" button closes the popup whereas

Fix: Rephrase "X" as return to home or home button

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11. H6: Recognition vs. Recall / Severity: 2 / Found by: B

Description: User is asked to type in symptoms of current medication but cannot access past logs of symptoms from this part of the app

Rationale: User may have to recall information from another part of the app, versus having it readily available to them

Fix: Allow user to access past logs from this screen

12. H4: Consistency and Standards / Severity: 1 / Found by: C

Task: No specific task, help button on a few pages

Description: The help button is not as right-aligned as other elements and shifts position when it appears on different pages, which can lead to a first or second read even when it is not necessary

Rationale: The alignment should be consistent for clarity

Fix: Shift the button a little to the right and make it consistent across pages

13. H5: Error Prevention / Severity: 2 / Found by: C

Task: No specific task, general violation on logging symptoms page

Description: It is unclear if a user still have access to logging their symptoms even if they have done it for the day. If they cannot, there is no way to access past symptoms.

Rationale: Users should be able to easily see their past interactions with the app

Fix: Have another way to access past symptoms, like adding a button on the home screen or changing the calendar tab to past symptoms with some way to log today's symptoms.

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

Task: All - Exit the login success page.

Description: The interface uses an "X" button on the top right corner to exit the successful login page, which may disrupt the previous data entry flow that used a central button.

Rationale: Users may need clarification about where to proceed based on their previous button placement.

Fix: Keep the “X” and add a button as an alternative way to dismiss the page.

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

Task: All - Using the navigation menu bar

Description: The navigation menu relies on icon recognition for users to use it effectively.

Rationale: Visually impaired users may have difficulty distinguishing the icons on a smaller screen or from a distance. Users may not fully understand what each icon represents upon their first attempt. Users may forget what a given icon represents over time.

Fix: Include text labels under each menu icon.

16. H4: Consistency and Standards / Severity: 2 / Found By: D

Task: Extra - Home page, log symptoms, prescriptions, and map

Description: The brand logo, navigation menu buttons, and phone information at the top of the display are misaligned when switching screens. Specifically, the brand logo moves down when switching from the home screen to the prescriptions page, and back up when navigating to the map. The spacing between the menu buttons changes when switching from the home page to the prescriptions page. The time of the device, at the top left corner, shifts in the northeast direction when switching from the home page to the prescriptions page.

Fix: Implement a grid system and establish standardized margin spacing to help keep buttons and information aligned throughout the prototype.

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	0	5	0	0	5
H2: Match Sys & World	0	4	3	1	0	8
H3: User Control	1	1	2	2	0	6
H4: Consistency & Standards	0	6	6	0	0	12
H5: Error Prevention	0	0	4	0	0	4
H6: Recognition not Recall	0	2	9	0	0	11
H7: Efficiency of Use	0	1	1	0	0	2
H8: Minimalist Design	0	5	6	0	0	11
H9: Help Users with Errors	0	0	1	0	0	1
H10: Help & Documentation	0	1	2	0	0	3
H11: Accessible	0	0	3	1	0	4
H12: Value Alignment & Inclusion	0	0	0	2	0	2
Total Violations by Severity	1	20	42	6	0	69

4. Evaluation Statistics (in %)

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D
Sev. 0	100%	0%	0%	0%
Sev. 1	65%	10%	10%	15%
Sev. 2	30.95%	33.33%	19.05%	16.67%
Sev. 3	50%	16.67%	0%	33.33%
Sev. 4	0%	0%	0%	0%
Total (sevs. 3 & 4)	3	1	0	2
Total (all severity levels)	30	17	10	12

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

*Values given for first person to put heuristic, duplicates not included

5. Summary Recommendations

Summary of combined recommendations

Great job on the prototype! You have clearly put a lot of effort into making sure IUDIY has a clear vision and thoughtful features for its users. One thing we noticed when doing the Heuristics Evaluation, though, was design inconsistencies. Moving forward, it could be helpful to use a grid system to better align elements, since we noticed a bit of shifting from page to page while going through your Medium Fidelity Prototype. In addition, it would be useful to stay more consistent with theming and clickable elements; you can run user tests to see what kinds of layouts work best with your audience. A few of our suggestions are looking at button styling, as there are a few instances of differing looks in the buttons, and readability on the map page, since the variations in colors and large amounts of text can cause a user difficulty reading the page.

Additionally, we noticed that there are a few possible limitations in inclusionary design so I would make sure that there is enough flexibility to allow a diverse group of users to enjoy your app! If the goal is to be a resource for any menstruator, design choices play a large role in how comfortable a person may be with an app. More “feminine” colors like pink may turn away some demographics of menstruators. In addition, the symptom logging feature does not have a lot of flexibility in what symptoms are available to log. It could be helpful for users to type in their own symptoms or have some way to see what to do if their symptoms are outside the list of options.

Overall, you did a great job and we are excited to see where you go from here! Each member’s individual recommendations can be found below.

Individual recommendations

Evaluator A: Thank you for sharing your app! I'm really excited by the prospect of this app - I absolutely love the name of the app as well (I think it's very creative). The majority of my heuristics that I found had to do with design - i.e. making sure that buttons + verbiage is consistent, also making sure that important information is featured prominently on the screen. For my recommendation, I would suggest creating a standardized formatting style and also seeing how users may react to different layouts and iconography. For my team's app, we are also doing a great deal of research for something as sensitive as healthcare and medications - so I'm curious to see how you all are going about creating the recommendations as well. Many of the heuristics I pointed out were more or less nit-picky, but my main concerns had to do with making sure that there is ample room for users to input information to receive a recommendation and enough representation for users to input information about their symptoms. One of IUDIY's main values is to be representative and supportive for all users (regardless of how traditional their experience with contraceptive has been), so I'm interested in how you plan on balancing how much efficiently a user can receive a new recommendation and how much information they need to input (which is a very interesting tension).

On an unrelated note, I'm excited to also see where each of the question marks (for more information, I'm assuming) will lead to! This has the potential to be a very useful and important tool for many period havers/contraceptive users out there, so I'm looking forward to seeing the final product!

Evaluator B: Based on trends of my heuristic evaluation I have a few recommendations to improve IUDIY's usability. Overall, it seems like the app struggling to keep things consistent and relatable to users real-world expectations, tallying the most violations in heuristics H2. and H5. Trends identified across the evaluation include challenges in aesthetic and minimal design (H8) where the large IUDIY logo /large graphics on multiple screens distracts users from more important information, and the use of a potentially gender-biased color like pink (Problem #2) might alienate certain demographics. Navigation issues are evident in the small size of icons in the bottom navigation bar (Problem #4) and the unclear representation of clickable elements (Problem #6). Additionally, there are some consistency problems arise in wording choices (Problem #9) and the ambiguous use of terms like "recomendation" although some may just be some surface (such as Problem #8).

To improve upon an already great app, include refining the app's visual design by reducing unnecessary elements, clarifying color choices, and ensuring consistent navigation elements. Addressing errors and providing clearer feedback (Problem #3, Problem #11, Problem #15) is crucial for enhancing user confidence and preventing misunderstandings. Improving accessibility by considering screen reader compatibility and alternative data structures for the map feature is also recommended. When I got to the medications page, there was a lot of information or actions that were accessible in inconsistent ways which could cause a lot of confusion so addressing consistency would be a game changer in making your app flow together(Problem #9, Problem #12, Problem #14). Similarly I felt there were a few places where you could provide information from

the past logs instead of having the user recall that information (Problem #13, Problem #16). It was also a major issue to me that due to a combination of violations, it was very unclear to me if the “current recommendation” was a legitimate user prescription or a recommendation so I think that should be clarified. Additionally I think it should be noted that I was able to identify “exit” points all throughout the app(No H3. violations) and was impressed by the amount of additional popups there were to tell the user what was going on in the app (H1). Still if you want to be extra thorough I would recommend you to double check these heuristics to make sure no usability issues under these heuristics were missed! Something I flagged outside of the heuristic would be to try to make the app a bit prettier by making text font/size/color more consistent throughout the different pages on the app and to use different stylization of text to signify certain things, as I wasn’t able to pick up a pattern between text format changes. Overall though this app looks great and has improved a ton from the earlier models! I had a tough time finding violations at first because you have a lot of thoughtful features!

Evaluator C: Great job with your medium fidelity prototype! You had a clear vision for your design and user interactions, and I appreciated how much you included your values throughout the application set up. I think you have a really great framework for your application. From my Heuristic Evaluation, I want to point out a few overarching things I noticed. The largest violation category was Consistency and Standards, and that is because I noticed that although you have a great idea for what the feel of the app is, some of the elements within the app were not consistent. I think you have a really great, simple to use app, but some of these elements make it more difficult for users to interact, such as the different check box markers.

Aside from Heuristics, I have some feedback about my user experience in the app. I was a bit confused on how, when, and where I could input my contraceptive information and schedule for when to take it. I feel like your app could benefit from taking users through that process step-by-step. If the intention is to be a source of information for users, a walkthrough could be very helpful. As a user myself, I felt a bit thrown in the deep end without that context.

Overall, I really enjoyed going through your prototype and am excited to see what’s next. Great job!

Evaluator D: Great job on the medium-fidelity prototype! The brand logo and theme did an excellent job of building a positive, welcoming experience for the user. The application overall did a good job at keeping the user informed about the system status through pop-up windows and “success” screens after submitting a task like logging symptoms. However, the formatting of these popup screens is inconsistent as button size, position, and brightness vary with each screen. Making sure small details across all screens are consistent can go a long way in reducing the amount of violations. Standardizing the button layout, screen brightness, and popup window shape of these pages may help improve the user’s efficiency of use and cognitive strain. In a similar vein, standardizing margin spacing and aligning the interface to a grid would help avoid the inconsistent

placing of buttons, logos, and text that results in a visible shift when switching windows. Apart from the aesthetics, this may slow a user down as they notice the movement in their peripheral and have to refocus on where the buttons may have moved. Many of my other recommendations rely on thinking of different ways to reduce the amount of data a user needs to input, making the most of existing data, and building intuitive data points that are quantifiable but readable to a new user. In this way, IUDIY can help users with limited dexterity, vision, and memory to most effectively use the app to benefit their health.

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.