Heuristic Evaluation of FitCast

For a more in-depth overview of A9, please refer to the .

1. Problem/Prototype Description

FitCast is a daily outfit suggestion app that recommends outfits to users based on the day's weather, any forecasted fluctuations, user preferences for temperature, and personal style, while continually learning from user feedback to provide increasingly personalized and improved suggestions.

2. Violations Found

1. **H1. Visibility of system status / Severity 3 / Found By: A**
   - Description
     - i. The "FitCast is getting smarter" page from the weather log and location pinner needs to be exited out of
   - Rationale
     - i. Users shouldn't have to manually exit this page. The text makes it seem like something is loading or happening behind the scenes and that I need to let it happen, and my first instinct isn't to press the "X" because I assume it would disrupt the process. This leads me to wait for the screen to change for a significant amount of time waiting for the text to change or for some indicator of success before I realize that I need to exit the page manually.
   - Fix:
     - i. Have the page disappear after a couple of seconds or have some sort of modal or notification pop up instead of an entire page
   - Task:
     - i. No specific task
2. **H1: Visibility of system status / Severity 1 / Found By: D**
   - Description
     - i. When viewing a specific part of the weather timeline, only the time is displayed, not the date.
   - Rationale:
     - i. It can become confusing when only viewing times of day, with no reminder of the date in question. Even if the app can only depict the current day, other weather apps may differ, so it would be valuable to remind the user of which day is being displayed.
   - Fix:
     - i. Add the current date above the time displayed.
   - Task
     - i. Task 1: What to Wear

3. **H1: Visibility of system status / Severity 2 / Found By: D**
    ○ Description:
        i. When a user goes from the home screen to a specific part of the weather timeline, it can be confusing what exactly the user is looking at.
    ○ Rationale:
        i. It is not clear what the user is looking at when viewing a certain part of the weather timeline. It is clear that they are viewing a small part of a larger whole, due to the arrows, but what they are viewing is not clear due to a lack of system status visibility.
    ○ Fix:
        i. Display the words "Weather Timeline" at the top of the page.
    ○ Task:
        i. Task 1: What to Wear
4. **H1: Visibility of system status / Severity 2 / Found By: D**
    ○ Description:
        i. Users may not remember whether or not they have already submitted their location pinner for a given location.
    ○ Rationale:
        i. There is no visible system status reminder that tells the user whether or not a location pinner has already been submitted for a certain location.
    ○ Fix:
        i. Make visible the date/time of the most recently submitted location pinner.
    ○ Task:
        i. Task 2: Preparing for different locations
5. **H1 Visibility of System Status / Severity 2 / Found By: B, C, D**
    ○ Description:
        i. Once the user pins a location or submits the feeling log, there is no clear confirmation screen— there is a graphic that says "FitCast is getting smarter."
    ○ Rationale:
        i. The user has no confirmation that explicitly indicates the action was successful, so they don't know if they can close the screen and they are not exactly sure what FitCast has learned from the user's input.
    ○ Fix:
        i. Add in text that says "you have successfully pinned this location!" or "you have successfully logged your feelings!"
        ii. Explain what has been learned (ex: "This location is warm!")
    ○ Task:

i. Task 2: Preparing for different locations and Task 3: Providing information for adapting clothing suggestions

6. **H1: Visibility of system status / Severity 2 / Found By: D**
   ○ Description:
      i. Users may not remember whether or not they have already submitted their feelings log for a given outfit/day/time.
   ○ Rationale:
      i. There is no visible system status reminder that tells the user whether or not a feelings log has already been submitted recently.
   ○ Fix:
      i. Make visible the date/time of the most recently submitted feelings log.
   ○ Task:
      i. Task 3 - Providing information for adapting clothing suggestions

7. **H2: Match between system and the real world / Severity 2 / Found By: C**
   ○ Problem Description:
      i. The location pinner page where they ask what you are wearing looks like a loading page.
   ○ Rationale:
      i. The word "Wearing…" with the three ellipses following it makes it look like it is calculating or loading something for the user. It does not prompt a user to select what they are wearing.
   ○ Suggested Fix:
      i. Change wording to "Select the clothing garments you are wearing at this location"
   ○ Task:
      i. Task 2: Preparing for different locations

8. **H2: Match between system and the real world / Severity 2 / Found By: A**
   ○ Description
      i. There is no affordance for clickability for the orange boxes
   ○ Rationale
      i. Users should be able to easily tell that something is clickable. Rather than looking like a button, the orange boxes look like they are just flat containers that display information. This is especially true of the timeline orange boxes.
   ○ Fix:
      i. Create some visual affordance that allows users to recognize that the orange boxes are meant to be clicked
   ○ Task:
      i. Task 1: What to Wear

9. **H2. Match between system and the real world / Severity 3 / Found By: A, C**
   ○ Description:

- i. Timeline only depicts the next four hours
  - ○ Rationale:
    - i. Most people are rarely getting dressed just for the next 4 hours if they're leaving their house. They usually leave for at least 8 hours (for school or work), if not for the whole day. Some people also like to prepare their outfits the night before.
  - ○ Fix:
    - i. Extend the timeline to include up to either the next 12 or 24 hours
  - ○ Task:
    - i. Task 1: What to Wear

10. **H2. Match between system and the real world / Severity 2 / Found By: A, C**
    - ○ Description:
      - i. Users are asked "What clothing items do you not wear?" and are led to select clothing items
    - ○ Rationale:
      - i. Selecting an option implies to users that this is an additive action. Instinct is to select something I do wear, not that I don't.
    - ○ Fix:
      - i. I understand that you probably don't want users to select all the clothing that they wear because there's more likely to be fewer items that they don't wear. To both accommodate that and fix the confusing language, change the question to "What clothing items do you wear?" , have all items default checked off and selected, and have users deselect anything they don't wear
    - ○ Task:
      - i. Task 1: What to Wear

11. **H2. Match between system and the real world / Severity 2 / Found By: A**
    - ○ Description:
      - i. Anytime the "X" icon appears at the top right on every screen except the home screen
    - ○ Rationale:
      - i. Conventionally, "X" icons are used to escape from modals
    - ○ Fix:
      - i. For any screens that aren't a "pop-up" aka modal, instead of using an "X" icon, use a home icon instead
    - ○ Task:
      - i. Task 1: What to Wear

12. **H2. Match between system and the real world / Severity 2 / Found By: A, C**
    - ○ Description:
      - i. The "X" icon appears at the top right on the zoomed in timeline takes users back to the home screen
    - ○ Rationale:

<ol type="i" start="1">
Conventionally, "X" icons are used to escape from modals and take users back to the most recent screen. Although it was explained in the README that the "zoom-out" icon takes users back to the full timeline screen and the "X" icon takes users back to the home screen, my instinct would be to use the "X" to take me back to the full timeline screen (the most recent page) from the zoomed in timeline screen almost like an "undo" or "back" button, and I would ignore the "zoom-out" icon. Instead, it takes me back to the home screen.

- Fix:
  <ol type="i" start="1">
  Either change the "X" icon on that page to a home icon, remove the option to go back to the home screen from that page entirely, move the "zoom-out" icon next to the "X" icon to make it more visible, or get rid of all icons and just add a "back" button

- Task:
  <ol type="i" start="1">
  Task 1: What to Wear

13. H2. Match between system and the real world / Severity 3 / Found By: A, C, D

- Description:
  <ol type="i" start="1">
  Clicking any of the boxes on the main page- the temperature forecast, the "Your Fitcast" and the "What to bring"- all bring you to the temperature timeline

- Rationale:
  <ol type="i" start="1">
  While it would be expected that clicking the temperature forecast box takes you to the temperature timeline, it is unintuitive that clicking "Your Fitcast" and "What to bring" would bring you to the timeline as well. Having so many pathways to a screen that isn't the home page is confusing, and it is more intuitive for each of the boxes to take you to either more information about your outfit or more information about what to bring. I see that the "What to bring" brings you to the first time you would need to use that item- but where would that box go if you didn't need any items that day?

- Fix:
  <ol type="i" start="1">
  Either change the "Your Fitcast" and "What to bring" to be not clickable and change the designs to indicate that they're not clickable like the temperature whereas or add more appropriate screens for those boxes to lead to

- Task:
  <ol type="i" start="1">
  Task 1: What to Wear

14. H2. Match between system and the real world / Severity 1 / Found By: A

- Description:
  <ol type="i" start="1">
  Location Pinner has a room number field

- Rationale

         i.   Not all rooms have numbers (kitchen, cafeteria, etc.)
- ○ Fix:
  - i. Change it to just say room
- ○ Task:
  - i. Task 2: Preparing for different locations

15. H2. Match between system and the real world / Severity 3 / Found By: A, C
- ○ Description:
  - i. Room number field is mandatory to fill out
- ○ Rationale:
  - i. Not all buildings have rooms, sometimes it's just a building (ex: Starbucks), and users shouldn't be forced to input something nonsense to proceed. Users may be encouraged to input nonsense into the field just to move onto the next page, but this could confuse the algorithm that calculates the recommendations if the user inputs the same location as different nonsense inputs each time.
- ○ Fix:
  - i. Make this field optional
- ○ Task:
  - i. Task 2: Preparing for different locations

16. H2. Match between system and the real world / Severity 2 / Found By: A, C
- ○ Description:
  - i. Tapping the map on the location pinner flow takes users back to the home screen
- ○ Rationale:
  - i. Clicking on a map in most apps conventionally either does nothing or opens up the map in a bigger view- having it take users back to the home screen is unintuitive and could frustrate users by unexpectedly setting them back in their progress of filling out the Location Pinner
- ○ Fix:
  - i. Make the map not clickable or make it so that when it is clicked, it opens up in a bigger view or links to something more map related
- ○ Task:
  - i. Task 2: Preparing for different locations

17. H2. Match between system and the real world / Severity 2 / Found By: A
- ○ Description:
  - i. When you enter the log or the location pinner from the hamburger drawer, the "X" icon that appears at the top right of those screens takes users back to the home screen
- ○ Rationale:

      i.   Conventionally, "X" icons take users back to the most recent screen. Although it was explained in the README that the "X" icon takes users back to the home screen, my instinct would be to use the "X" to take me back to the hamburger drawer, almost like an "undo" or "back" button.

- ○ Fix:
    - i. Either change the "X" icon on that page to a home icon or change the behavior of the button such that it leads back to the hamburger drawer
- ○ Task:
    - i. Extra Task

18. **H2: Match between system and the real world / Severity 2 / Found By: B, C**
    - ○ Description:
        - i. Using "Enter" as a button instead of "Next" in the onboarding and location pinner.
    - ○ Rationale:
        - i. Using the word "Enter" for a button usually means one is submitting information or entering a new page, however in this case it refers to going to the next question which can be very confusing for a user.
    - ○ Fix:
        - i. Use "Next" keyword instead of "Enter" for buttons in the location pinner questionnaire.
    - ○ Task:
        - i. Task 1: What to wear and Task 2: Preparing for different locations

19. **H3. User control and freedom / Severity 2 / Found By: A, B, C, D**
    - ○ Description:
        - i. Users cannot go back to questions they have already answered during the onboarding/login process
    - ○ Rationale:
        - i. Users should be given the opportunity change their answers in case they accidentally click something incorrectly
    - ○ Fix:
        - i. Add a back button on the relevant onboarding pages so that users can go back and change their answers
    - ○ Task:
        - i. Task 1: What to Wear

20. **H3: User control and freedom / Severity 3 / Found By: C**
    - ○ Description:
        - i. There is no option to sign up for the app if a user doesn't have an account.
    - ○ Rationale:

   i. Users have no way of signing up for the app without having an account, limiting their freedom and preventing users from moving forward and straight up using the app.

  ○ Fix:
   i. Add a signup feature in the sign in page that is clear enough for users to see it.

  ○ Task:
   i. Task 1: What to Wear

21. H4: Consistency and standards / Severity 1 / Found By: C
  ○ Problem Description:
   i. The "no thanks!" the button in the location pinner is redundant.

  ○ Rationale:
   i. Users can use the "no thanks!" button and the X at the top right of the location pinner page to go back to the home screen. They are pretty close to each other and lead to the same place. If a user wants to leave the location pinner, then they should just use the X sign instead of being confused with two buttons.

  ○ Suggested Fix:
   i. Remove the "no thanks!" button and the "Pin this location?" question.

  ○ Task:
   i. Task 2: Preparing for different locations

22. H4: Consistency and standards / Severity 2 / Found By: C
  ○ Description:
   i. After finishing the "getting to know you" survey, the user is told to connect their Apple Watch or enter more data to help FitCast get smarter when there is nowhere to do so on that screen.

  ○ Rationale:
   i. Telling users to connect their Apple Watch or enter more data on page a where they can't enter any of that data is confusing. Users might look at the page to see where they can sync their Apple Watch or answer more questions.

  ○ Fix:
   i. Remove that sentence at the end of the questionnaire and instead guide users to where they can input more information or connect their Apple Watch after they press 'Enter' to go to the app. This could be like one of those intro tutorials in websites that highlight certain features and give you a little explanation of what they do.

  ○ Task:
   i. Task 1: What to Wear

23. H4. Consistency and standards / Severity 1 / Found By: A, C
  ○ Description:

i. The text on the zoomed in timeline pages is user-focused for some pages and general for others, ex: "You usually feel hot in this weather" vs "Although it is cloudy, the humidity will keep it warm."
- ○ Rationale:
  - i. Language should be consistent across pages to reflect either general temperatures or user-predicted temperatures. Since the app focuses on tailoring clothing choices to user-calibrated temperatures, user-focused language would be better.
- ○ Fix:
  - i. Adjust general language on these pages to be user focused (ex: "Although it is cloudy, the humidity will keep it warm." vs "Although it is cloudy, you'll still be warm due to the humidity.")
- ○ Task:
  - i. Task 1: What to Wear

24. H4. Consistency and standards / Severity 2 / Found By: A, C, D
- ○ Description:
  - i. Clicking any of the boxes on the main page- the temperature forecast, the "Your Fitcast" and the "What to bring"- don't just all bring you to the temperature timeline, but to different screens within the temperature timeline. Clicking the temperature forecast box takes you to the zoomed out temperature timeline, clicking the "Your Fitcast" box takes you to the zoomed in temperature timeline at the current time, and clicking the "What to bring" box takes you to the first time you'd need the items mentioned in "What to bring".
- ○ Rationale:
  - i. While I would suggest changing the flow of where the "Your Fitcast" and the "What to bring" boxes lead altogether, as I noted in Violation #6, if you plan to preserve the flow from those boxes to the temperature timeline, they should at least map them to the same screen so that users are not confused. It seems especially unintuitive that users would be led straight into the zoomed-in versions of the timeline without actually taking the "zoom-in" action themselves, and it wasn't understandable from first run-through that the "What to bring" box took me to the first time I needed the item, it seemed like a glitch at first as the screen doesn't really indicate that it intentionally led me to a different spot in the timeline.
- ○ Fix:
  - i. Map all of the homescreen boxes to the "zoomed-out" temperature timeline or make the reasoning for why you map to certain screens more clear to the user

- ○ Task:
  - i. Task 1: What to Wear

25. H4: Consistency and standards / Severity 1 / Found By: A, C
- ○ Description:
  - i. Text is lowercase in buttons.
- ○ Rationale:
  - i. Text should be cased consistently across an app unless there is a specific reasoning behind lowercasing things (like when they complete a sentence)
- ○ Fix:
  - i. Correct the casing of text within buttons
- ○ Task:
  - i. Task 2: Preparing for different locations

26. H4. Consistency and standards / Severity 1 / Found By: A, C
- ○ Description:
  - i. One page of the location pinner flow is titled "Wearing" while another is titled "I am feeling"
- ○ Rationale:
  - i. The language should be consistent across the flow so as to not confuse the user.
- ○ Fix:
  - i. Change "Wearing.." to "I am wearing…" or "I am feeling" to "Feeling…"
- ○ Task:
  - i. Task 2: Preparing for different locations

27. H4. Consistency and standards / Severity 1 / Found By: A, B, C
- ○ Description:
  - i. The "Pin this location?" page has a "no thanks" option but no option to select yes, instead, users are given the choice of selecting inside or outside on the same page
- ○ Rationale:
  - i. If there is a "no" option, there should be a "yes" option to be consistent, rather than giving users options to select from that aren't answering the same question. The inside or outside options don't answer "Pin this location?"
- ○ Fix:
  - i. Remove the "Pin this location?" title and related options and just have user exit flow via "X" icon or add a yes option to "Pin this location?" and move the inside and outside selection to another page after this one
- ○ Task:
  - i. Task 2: Preparing for different locations

28. H4. Consistency and standards / Severity 3 / Found By: A, C
- ○ Description:
  - i. The "Suggestions Followed" doesn't give options that directly correspond with the suggestions given for what to wear. (ex: the suggestions were to wear a t-shirt and shorts and to pack an umbrella, but the options under "Suggestions Followed" are "dress light" and "umbrella")
- ○ Rationale:
  - i. Users could be confused- what if they wore a t-shirt but not shorts? Should they still check off "dress light"? "Dress light" can be interpreted many different ways by both the app creators and the app users, and there should be no room for interpretation when information like this is used to calibrate recommendations
- ○ Fix:
  - i. Make the options correspond one-to-one with the suggestions
- ○ Task:
  - i. Task 3: Providing information for adapting clothing suggestions

29. H4. Consistency and standards / Severity 1 / Found By: A
- ○ Description:
  - i. Buttons of the same color style (ex: green text with white background and green outline) are different sizes from page to page (ex: the button sizes of the "Pin this location" page are different from the button sizes of the weather log page
- ○ Rationale:
  - i. Buttons of the same type/style being different sizes is sloppy looking and inconsistent
- ○ Fix:
  - i. Make all of the buttons of the same type/style the same width
- ○ Task:
  - i. No specific task

30. H4. Consistency and standards / Severity 2 / Found By: A, C
- ○ Description:
  - i. Whereas the Location Pinner flow has users select each item of clothing they're wearing, the Weather Log asks users what suggestions they followed
- ○ Rationale:
  - i. Both flows have the goal of asking the user how they're feeling based on the clothing that they are wearing. Why have multiple interactions aimed at gleaning the same thing- that's another thing for the user to remember to get used to.
- ○ Fix:

- i. Change the flows to ask the user how they're feeling based on the clothing that they are wearing in the same way
  - ○ Task:
    - i. No specific task

31. H4 Consistency & Standards / Severity 3 / Found By: B, D
- ○ Description:
  - i. Typically, "pinning" a location would mean that you are saving it on a map to be able to view it later — this is not what it does on FitCast.
- ○ Rationale:
  - i. The user will be a bit confused by the wording of "location pinner" if the location is not saved for them to see later.
- ○ Fix:
  - i. Change the name of the location pinning feature to something more specific to its actual function.
- ○ Task:
  - i. Task 2: Preparing for different locations

32. H4: Consistency and standards / Severity 1 / Found By: C
- ○ Description:
  - i. The "Your FitCast" square/section in the home page has two clothing icons where one is at different opacity than the other.
- ○ Rationale:
  - i. A user might find it confusing as to why only the shirt is at a solid shade (100%) full of color whereas the shorts are at like 60% opacity. They might think that they should not wear shorts and just a t-shirt.
- ○ Fix:
  - i. Bold/make both icons a solid color.
- ○ Task:
  - i. No specific task

33. H4 Consistency & Standards / Severity 1 / Found By: B
- ○ Description:
  - i. In the location pinner, the "no thanks" was above the map widget, but the "inside" and "outside" buttons were below it.
- ○ Rationale:
  - i. Typically, all the buttons that are used to answer a specific question or make selections are grouped together. The buttons being separated by the map that shows your location is different from what users would expect, and it makes it seem like the buttons are unrelated.
- ○ Fix:
  - i. Group all the buttons together.

- ○ Task:
  - i. Task 2: Preparing for different locations

34. H4. Consistency and standards / Severity 2 / Found By: A
- ○ Description:
  - i. The log is titled "Weather Log" in the actual flow but the button to get to the same log from the settings is titled "Feelings Log"
- ○ Rationale:
  - i. The flow should be referenced using the same title each time so as to not confuse users
- ○ Fix:
  - i. Change the titles to match each other
- ○ Task:
  - i. Extra Task

35. H5. Error prevention / Severity 4 / Found By: A, B, C, D
- ○ Description:
  - i. Users can exit the onboarding flow by clicking the logo or the "X" at the top right of the screen
- ○ Rationale:
  - i. Users should not be given the opportunity to exit the onboarding process as the information provided during onboarding is critical to app functions (How warm they typically run, what clothing items they typically wear, etc.)
- ○ Fix:
  - i. Unlink the logo from navigating to any pages during the onboarding flow and remove the "X" icon from onboarding screens
- ○ Task:
  - i. Task 1: What to Wear

36. H5. Error Prevention / Severity 3 / Found By: A, B, C, D
- ○ Description:
  - i. None of the pages in the location pinning flow that come after a page where you enter information have a back button
- ○ Rationale:
  - i. Users might accidentally input the wrong information such as being inside instead of outside and shouldn't have to completely exit and restart the flow to correct it
- ○ Fix:
  - i. Add a back button on all of the relevant pages of the flow
- ○ Task:
  - i. Task 2: Preparing for different locations

37. H5. Error prevention / Severity 4 / Found By: A, C
- ○ Description:

- i. Users can proceed to the "How I was feeling" without selecting any clothes that they were wearing
  - ○ Rationale:
    - i. This information is key to tailoring recommendations and should not be optional for users to fill in
  - ○ Fix:
    - i. Make it such that selecting at least one article of clothing is mandatory before being able to proceed in the flow
  - ○ Task:
    - i. Task 2: Preparing for different locations

38. H6 Recognition not Recall / Severity 3 / Found By: B, C
- ○ Description:
  - i. Users cannot see their FitCast for multiple hours at the same time. In the timeline, they can only see one hour at a time and would have to remember or go back to previous hours.
- ○ Rationale:
  - i. If a user will be gone for multiple hours, it would be nice to be able to see what the recommendations are for those hours without having to swipe between times and remember what the recommendation was previously.
- ○ Fix:
  - i. Create a vertical timeline that shows the hours on the left side and the associated recommendation for each hour of the day.
- ○ Task:
  - i. Task 1: What to wear

39. H6: Recognition rather than recall / Severity 2 / Found By: C
- ○ Description:
  - i. The Weather Log page's "suggestions followed" question prompts a user to go back and check what their original suggestions were.
- ○ Rationale:
  - i. A user might not remember what suggestions were given to them, so they have to go back to the home screen to check if what they were suggested is an option. However, this might also be confusing because the same language isn't used in the app's suggestions.
- ○ Fix:
  - i. Add a line (italicized) that says "You were suggested the following, select what suggestions you followed".
- ○ Task:
  - i. Task 3: Providing information for adapting clothing suggestions

40. H6: Recognition rather than recall / Severity 3 / Found By: D, C
- ○ Description:

i. When users see a button labeled "Location Pinner," they may not know what it refers to without a visual aid.
- ○ Rationale:
  - i. Users may not recognize the name "Location Pinner." There are no symbols or visuals on the "Location Pinner" button that may help the user recognize where the button leads.
- ○ Fix:
  - i. Modify the "Location Pinner" button to include a visual identifier/symbol to help users recognize the feature.
- ○ Task:
  - i. Task 2: Preparing for different locations

41. H6: Recognition rather than recall / Severity 3 / Found By: D
- ○ Description:
  - i. When users see a button labeled "Feelings Log," they may not know what it refers to without a visual aid.
- ○ Rationale:
  - i. Users may not recognize the name "Feelings Log." There are no symbols or visuals on the "Feelings Log" button that may help the user recognize where the button leads.
- ○ Fix:
  - i. Modify the "Feelings Log" button to include a visual identifier/symbol to help users recognize the feature.
- ○ Task:
  - i. Task 3: Providing information for adapting clothing suggestions

42. H6: Recognition rather than recall / Severity 2 / Found By: C, D
- ○ Description:
  - i. The location pinner is available from the menu in the top right corner, which is not immediately obvious.
- ○ Rationale:
  - i. The user may not instinctively remember where the location pinner is located or what options are available under the additional menu. There is no symbol to indicate that the location pinner would be located there.
- ○ Fix:
  - i. Add a button for the location pinner to the main menu/home screen.
- ○ Task:
  - i. Task 2: Preparing for different locations

43. H7: Flexibility and efficiency of use / Severity 2 / Found By: B, C, D
- ○ Problem Description:
  - i. There is no fast way of getting to the location pinner or the feelings log from the home page.

- ○ Rationale:
  - i. The home page only allows access to some FitCast pages, but a user who wants to go to their location pinner has to go to the menu bar and find it there so that they can pin a location. It might be frustrating for a frequent user who wants to update their fit information based on their location as fast as possible.
- ○ Suggested Fix:
  - i. Add a bottom navigation bar with the location pinner as an icon (could be a pin) so that a user has fast access to it.
- ○ Task:
  - i. Task 2: Preparing for different locations and Task 3: Providing information for adapting clothing suggestions

44. H7. Flexibility and efficiency of use / Severity 2 / Found By: A
- ○ Description:
  - i. Location pinner pops up every time the user is in a "significantly different location"
- ○ Rationale:
  - i. Although multiple logs are necessary to gather data and tailor recommendations, the users shouldn't be prompted for a log every time they frequent a regular location like their office or school, especially if it's an indoor
- ○ Fix:
  - i. Make this field optional
- ○ Task:
  - i. Task 2: Preparing for different locations

45. H8. Aesthetic and minimalist design / Severity 3 / Found By: A, D
- ○ Description:
  - i. The outfit recommendation is at small text at the bottom of the screen in written in light green with a semi-translucent background
- ○ Rationale:
  - i. The outfit recommendation (the "FitCast") should be the first read as it is the focal point of the app, but placing it at the bottom in small font in an inconspicuous color makes it such that it is naturally the last thing I read because without big font or strong colors to draw my attention, I just read top to bottom. Right now the first read is the temperature box, but the app is designed for outfits not for the weather.
- ○ Fix:
  - i. Move the FitCast to the top or make it more distinctive via font-size or color
- ○ Task:
  - i. Task 1: What to Wear

46. H8 Aesthetic & Minimalist Design / Severity 1 / Found By: B
- Description:
    i. The text, icons, and arrows for the weather forecasts for each hour were not all completely aligned.
- Rationale:
    i. Users can see that everything is not completely centered and aligned on the page, which is a bit distracting.
- Fix:
    i. Align all of the text, icons, and arrows on the page.
- Task:
    i. Task 1: What to wear

47. H8. Aesthetic and minimalist design / Severity 1 / Found By: A, C
- Description:
    i. Icons are in different styles on the zoomed-in weather timeline screens (filled in sun and clouds vs non-filled in sun and clouds)
- Rationale:
    i. Icons should be consistent in style in terms of filled vs unfilled unless the fill is used to indicate something else (like a filled icon is active)
- Fix:
    i. Change the icons to be either all filled or all unfilled on the weather timeline
- Task:
    i. Task 1: What to Wear

48. H8. Aesthetic and minimalist design / Severity 1 / Found By: A, C
- Description:
    i. Using semi-opaque images as backgrounds for the home screen and weather timeline
- Rationale:
    i. The background can be distracting from the content and the text, especially on pages like the zoomed-in current weather page
- Fix:
    i. Make the image more translucent, pick images such that the busy parts of the image never interfere with text, or have all content be backed by a bubble or background or some sort before layering the image behind that
- Task:
    i. Task 1: What to Wear

49. H8: Aesthetic and Minimalist Design / Severity 2 / Found By: A
- Description:

   i. The title of the flow ("Location Pinner") and the title of the page (ex: "Pin this location?") are styled using the same font size, font weight, and color
- ○ Rationale:
  - i. The styling of the title of the flow and the title of the page should be different as to better indicate visual hierarchy of the text
- ○ Fix:
  - i. Differentiate the titles with color, weight, or size
- ○ Task:
  - i. Task 2: Preparing for different locations

50. H8: Aesthetic and Minimalist Design / Severity 1 / Found By: A
- ○ Description:
  - i. On the "Wearing…" page, there is orange text on a green background
- ○ Rationale:
  - i. The orange almost appears red against the green background, and it associates the text with the color for error. The orange also bring a lot of attention to the labels since all other text is white or green, and they don't necessarily deserve to be emphasized, especially not more so than the title of the page
- ○ Fix:
  - i. Change the color of the orange text
- ○ Task:
  - i. Task 2: Preparing for different locations

51. H8: Aesthetic and Minimalist Design / Severity 1 / Found By: A, C
- ○ Description:
  - i. Spacing between things on the page (title, map, buttons, etc.) are all the same
- ○ Rationale:
  - i. Spacing should vary based on the sectioning of the page. For example, on the "Pin this location?" page- "Pin this location" is equally as close to the line separator above it as to the "no thanks" button. Since the "Pin this location" text and the "no thanks" button belong together, they should be closer together relative to the other items on the page in order to implicitly indicate this sectioning to users.
- ○ Fix:
  - i. Change spacing in the flow to more adequately reflect grouping of items
- ○ Task:
  - i. Task 2: Preparing for different locations

52. H8: Aesthetic and minimalist design / Severity 2 / Found By: C

- Description:
    - i. The location map in the location pinner is repeated in every questionnaire page.
- Rationale:
    - i. It can be overwhelming for a user to keep looking at the location map in every question when they already know what all these questions are referring to, especially since it takes up so much space on the screen.
- Fix:
    - i. Get rid of the location map after the second question or make the map smaller.
- Task:
    - i. Task 2: Preparing for different locations

53. **H8: Aesthetic and Minimalist Design / Severity 1 / Found By: A**
- Description:
    - i. Spacing between things on the page are all the same
- Rationale:
    - i. Spacing should vary based on the sectioning of the page. For example, the "I felt…" text is equally as close to the umbrella option above it as to the "too hot" button below it. Since "I felt…" corresponds to the "too hot" button, they should be closer together relative to the other items on the page as to indicate such.
- Fix:
    - i. Change spacing to more adequately reflect grouping of items
- Task:
    - i. Task 3: Providing information for adapting clothing suggestions

54. **H8: Aesthetic and Minimalist Design / Severity 1 / Found By: A, C**
- Description:
    - i. The text within the buttons barely fit within the boundaries
- Rationale:
    - i. Text should never look cramped inside of a container- it makes the screen look messy and unprofessional
- Fix:
    - i. Expand the button size to better fit the text
- Task:
    - i. Task 3: Providing information for adapting clothing suggestions

55. **H8: Aesthetic and minimalist design / Severity 1 / Found By: C**
- Description:
    - i. The suitcase with the umbrella is unnecessary in the "what to bring" section in the home page.
- Rationale:

- i. A user might get confused with what to bring: the suitcase, umbrella, or both? In addition, the words "What to bring" already state that a user should carry something around with them so the suitcase is not a necessary icon that should be there.
  - ○ Fix:
    - i. Remove the suitcase icon and just let the suggested carry-on item be there on its own.
  - ○ Task:
    - i. No specific task

56. **H8: Aesthetic and Minimalist Design / Severity 1 / Found By: A**
   - ○ Description:
     - i. The margins vary both from page to page (ex: from the home screen to the zoomed out weather timeline page) and within pages (ex: on the zoomed out weather timeline page, the logo is farther away from the edge than the timeline is)
   - ○ Rationale:
     - i. An inconsistent margin both across and within pages for a makes an app look sloppy
   - ○ Fix:
     - i. Make margins consistent across and within pages
   - ○ Task:
     - i. No specific task

57. **H8 Aesthetic & Minimalist Design / Severity 1 / Found By: B**
   - ○ Description:
     - i. It was a bit distracting that the green wave at the bottom of the screen would increase or decrease in height while you clicked through the pages.
   - ○ Rationale:
     - i. The background design elements should be consistent across all pages.
   - ○ Fix:
     - i. Pick one height for the green wave and keep it the same throughout.
   - ○ Task:
     - i. Task 2 Preparing for different locations

58. **H8 Aesthetic & Minimalist Design / Severity 1 / Found By: B**
   - ○ Description:
     - i. I noticed this while completing the complex task, but throughout the prototype the design does not reach the edges of the screen, so there are some gaps between the UI and the screen itself.
   - ○ Rationale:
     - i. The sizing of the UI should match the full size of the screen.

- ○ Fix:
    - i. Increase the size of the UI so there are no gaps.
- ○ Task:
    - i. No specific task

59. **H8: Aesthetic and minimalist design / Severity 1 / Found By: D**
   - ○ Description:
       - i. The menu in the top right contains a button for the weather timeline despite the largest button on the homescreen already leading to the weather timeline.
   - ○ Rationale:
       - i. The repetitive weather timeline button may take up unnecessary space and take attention away from the buttons that are available exclusively under the bonus menu.
   - ○ Fix:
       - i. Remove the second weather timeline button.
   - ○ Task:
       - i. No specific task

60. **H10: Help and documentation / Severity 1 / Found By: A**
   - ○ Description:
       - i. There's no example answer in the input field for Room Number
   - ○ Rationale:
       - i. Providing users with a sample answer for an input field can guide them to the format/type of answer wanted. For example, many name fields will come pre-filled with "Ex: Jane Doe" in light gray text
   - ○ Fix:
       - i. Provide a sample answer that disappears once users start typing
   - ○ Task:
       - i. Task 2: Preparing for different locations

61. **H11: Accessible design / Severity 1 / Found By: C**
   - ○ Description:
       - i. The selection circles in the "Wearing…" page clothing icons in the location pinner are the same color as the icons.
   - ○ Rationale:
       - i. The same green color being used for a selected state and the icon's base color can be confusing to users since both colors merge together when a clothing item is selected. This can also pose complications for users with poor vision that need highly contrasting colors.
   - ○ Fix:
       - i. Make the selected circle a different more contrasting color or change its opacity.

- ○ Task:
    - i. Task 2: Preparing for different locations

62. H11. Accessible design / Severity 1 / Found By: A, B, C
- ○ Description:
    - i. Zoom in and zoom out icons don't have labels
- ○ Rationale:
    - i. While most of the icons are intuitive ("X", arrows, etc.), the zoom-in and zoom-out icons have various options for what they are zooming in and out. Adding a text-based alternative to this visual content could make this more accessible for screen readers and users with low vision
- ○ Fix:
    - i. Add labels to the zoom-in and zoom-out icons
- ○ Task:
    - i. Task 1: What to Wear

63. H11. Accessible design / Severity 2 / Found By: A, B, C
- ○ Description:
    - i. Certain text lines on the home screen are really small
- ○ Rationale:
    - i. Even for someone like me who has normal vision, it's a little difficult to read things like the high and low temperatures of the day. The font size should never strain your eyes to read and at absolute minimum should be 12px for mobile, but people generally agree on 16px.
- ○ Fix:
    - i. Make the font size bigger on the home screen
- ○ Task:
    - i. Task 1: What to Wear

64. H11: Accessible design / Severity 2 / Found By: A, C
- ○ Description:
    - i. Orange text on a translucent light orange background and light green text on green background
- ○ Rationale:
    - i. The contrast of the orange on orange or green on green can make text hard to read, especially for those with worse vision
- ○ Fix:
    - i. Change the color of the text or background to increase contrast or make the backgrounds of the text more opaque
- ○ Task:
    - i. No specific task

65. H12: Value alignment and inclusion / Severity 2 / Found By: B, C
- ○ Description:

i. There are no culturally diverse garments in the location pinner when picking what clothes one wore today/is currently wearing
    ○ Rationale:
        i. Several cultures have different types of clothing that are not represented in the app, which might be disheartening to some users who feel like clothing is a valuable aspect of their culture.
    ○ Fix:
        i. Ask people for geographical location and give clothing suggestions based on that.
    ○ Task:
        i. Task 2: Preparing for different locations

3. Summary of Violations

A Google Sheet Template is provided here to help you calculate numbers.

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status	0	1	4	1	0	6
H2: Match Sys & World	0	1	8	3	0	12
H3: User Control	0	0	1	1	0	2
H4: Consistency & Standards	0	8	4	2	0	14
H5: Error Prevention	0	0	0	1	2	3
H6: Recognition not Recall	0	0	2	3	0	5
H7: Efficiency of Use	0	0	2	0	0	2
H8: Minimalist Design	0	12	2	1	0	15
H9: Help Users with Errors	0	0	0	0	0	0
H10: Help & Documentation	0	1	0	0	0	1
H11: Accessible	0	2	2	0	0	4
H12: Value Alignment & Inclusion	0	0	1	0	0	1
Total Violations by Severity	**0**	**25**	**26**	**12**	**2**	**65**

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	N / A	N / A	N / A	N / A
Sev. 1	60% (15/25)	24%	52% (13/25)	8%

Ex: Eval A count / total sevs 1 in table #3				
Sev. 2 Ex: Eval A count / total sevs 2 in table #3	53.84% (14/26)	23%	57.69% (15/26)	30%
Sev. 3 Ex: Eval A count / total sevs 3 in table #3	58.33% (7/12)	25%	66.7% (8/12)	50%
Sev. 4 Ex: Eval A count / total sevs 4 in table #3	100% (2/2)	50%	100% (2/2)	50%
Total (sevs. 3 & 4) Ex: Eval A = sum(sev 3: sev 4 counts) / sum(sev 3: sev 4 in table #3)	64.28% (9/14)	29%	71.43% (10/14)	50%
Total (all severity levels) Ex: Eval A total sev count / total sevs (green cell) in table #3	58.46% (38/65)	29%	58.46% (38/65)	26%

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

5. Summary Recommendations

Great job FitCast!

Upon closer examination, our main feedback regards the app's consistency. We observed instances of inconsistency both within the app itself and in comparison to common app design standards. While aiming for a straightforward navigation to the home page, it seems some compromises were made, impacting the overall intuitiveness. Several clicks on icons or buttons resulted in unexpected redirects to the home page. Streamlining pathways to avoid redundancy is a common practice in app design, and we recommend adhering to this convention, especially if it involves replacing a more intuitive route.

A considerable number of H2 violations stem from deviations from established app and design norms. Additionally, H4 and H8 violations highlight numerous small inconsistencies in style (such as button size, margin, and icon type) and content (language and labels). Addressing these issues will contribute to a cleaner and less confusing user experience.

Given the app's emphasis on accurate and specific information for tailored recommendations, rectifying H5 and H4 violations is crucial. Users should have the ability to correct any inaccuracies in their input, and language should be precise to eliminate ambiguity. Considering the significance of user-inputted information, we suggest exploring the option for users to edit past logs or inputs, providing flexibility after submission.

zSeverity 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.