

Heuristic Evaluation of Feast

1. Problem

Feast is an app that helps diabetics gain fast access to information of the carbohydrate profiles of different foods, facilitates tracking of blood sugar data and carb intake over time, and enables users to share their culinary adventures.

2. Violations Found

1. [H2-1 Visibility of Status] [Severity 3] [Found by: B, C]

After you finishing sharing your scan, the app takes you straight to Instagram. This is a little strange to me, because I did not intend to leave the Feast app and go onto Instagram. The app should not take the user to another app without them knowing that would happen. In other apps, such as Facebook, before you leave the app and go to another one, it would ask for your permission first. Instead of directly the user straight to Instagram, I suggest adding a confirmation note on the Feast app after the user posts. If you want to give users the option to view their post in the Instagram app, you could also add a button saying: "View your post in Instagram!" or something like that.

This also poses a lot of security issues when connecting to other apps.

2. [H2-1 Visibility of Status][Severity 2][Found by: B]

On the actual food-scanning screen aside from the mesh that incrementally covers the food as scanning occurs, a % completion bar that shows the progress of the scan might help the user know how much longer the scan will take.

3. [H2-2 Match Sys & World][Severity 4][Found by: A, B, C]

When viewing items on the logged items screen, "Blood Sugar" and "Carb" are displayed on the graph without any units. People who are trying to monitor their food intake so closely will want to know exactly what they are measuring. This is common throughout the app where measurements will not include any units (e.g. custom entry screen, on the graph, hours, etc)

4. [H2-2 Match Sys & World][Severity 4][Found by: A, B]

When viewing logged items, the user sees a graph where each food item has a specific blood sugar and carbohydrate level. However, if that's all they logged wouldn't the line graph only be between those dots, not in between? If not, what is it representing?

5. [H2-2 Match Sys & World][Severity 4][Found by: A, B]

The interface asks you to pinch to scale the portion. Unfortunately, there is nothing to compare it to so it would be almost impossible for somebody to know. Furthermore, even if there was a scale, nobody knows, for example, how deep the bowl is even if the system does.

6. [H2-3 User Control and Freedom][Severity 3][Found by: A, C]

After completing a scan, there is no way to return to the home screen or any other screen. This is a large problem, the user is effectively stuck. Eventually I realized I could get out of there by clicking an entry, but it's a lot of work to get out. If you press the scanning button by accident this could get really frustrating.

7. [H2-3 User Control and Freedom][Severity 3][Found by: A, B, C]

There are no back buttons. Each examiner recorded this as an issue in a different screen. This makes accidentally clicking, for example, scan, super time consuming and difficult. What if you click "the purist" by accident and then you have to completely rescan to use another option?

8. [H2-4 Consistency and Standards][Severity 2][Found by: A, B, C]

There were many general issues in consistency when presenting text. On the page after you scan the burger where it asks which item from the counter it is, the differing text size, non-centering of "The Bacon BBQ + fried egg", and differing fonts (Italicized and regular) is distracting for the user. It would help if you centered the bacon text even though it is longer, and used a smaller range of text sizes (maybe just one for large labels and another size for content) and the presence of the italics isn't obviously necessary. Also, the interface displaying the item from The Counter has a "Log this Item" option. However, the interface displaying the item from Sam's Chowder House does not have this.

9. [H2-4 Consistency and Standards][Severity 2][Found by: A, B, C]

On the home screen, the "View Log" button is a light grey, making it seem as though it was not clickable. For most applications or web pages, buttons that are greyed out usually signal that the button is disabled. To make your app more consistent with other apps that already exist and to make it easier for the user, consider making the "View Log" button on the home screen black. This will also make the text of that option as well as the text of another option on that page, "Rotate phone to scan" a consistent color.

10. [H2-4 Consistency and Standards][Severity 2][Found by: C]

On the top of the log, there is a small hamburger menu. Though this button is not functional in the prototype, I am not sure what this menu would be used for. Usually when a hamburger menu is used for navigation, the hamburger menu is prevalent throughout the app. However, navigation in this app is through the "X" buttons that are on the bottom corner of the pages. Therefore, it seems odd that a hamburger menu is on this page. I would suggest getting rid of it, since the app functions well without the hamburger menu anyways.

11. [H2-4 Consistency and Standards][Severity 2][Found by: C]

The settings page is a little confusing to me. When I click on settings, it indicates that only a couple pieces of information are supposed to be shown for nutrition info and log info and that the information displayed for these two things are different. However, all the log and nutrition info shown for the foods are the same and do not correspond to the settings at all. In addition, it is not clear to me the difference between "nutrition info display" and "log display" since they all show the same nutrition information. I would recommend making the distinction between nutrition information and log information more clear, and also making sure the settings page is consistent with the information actually shown in the log.

12. [H2-4 Consistency and Standards][Severity 2][Found by: A]

The interface displaying the item from The Counter has a “Log this Item” option. However, the interface displaying the item from Sam’s Chowder House does not have this. Or on the other hand, the log item button is still displayed after the item is logged.

13. [H2-4 Consistency and Standards][Severity 2][Found by: C]

When creating a custom entry, there is no place for the user to enter the location. In other entries, there is a space for this information (such as when they are scanning a food). To keep it consistent, there should be a text box allowing the user to enter the location that they are at.

14. [H2-4 Consistency and Standards][Severity 3][Found by: A]

The x button on the corner of some items navigates back to the log screen, whereas on other items it navigates back to the main screen. The continue button on the on the screen that asks if you want to see the scanning instructions in the future is very hard to find and inconsistent with the previous way of advancing to the next screen (pressing anywhere on the screen)

15. [H2-5 Error Prevention][Severity 2][Found by: A, B]

On the hamburger screen, The “drag image to rotate” is not very clear in terms of how the action should be performed. It would be helpful if it instead said something like tap or pinch to zoom or view or whatever the intended result was suppose to be.

16.[H2-5 Error Prevention][Severity 2][Found by: B]

With the chain of screens for sharing a scan, you first prompt for which social media site to post it on then lead to the post-editing screen, which would maybe make more sense in the opposite order. If you decide after making your post it wouldn’t be appropriate for one social media site anymore, it would be easier for the user to choose the medium of social media after they complete the post.

17.[H2-6 Recognition vs. Recall][Severity 3][Found by: B]

On the blood sugar/carb log screen, the time number line is not clear that is in units of time, a label that it’s the hours in a day would be more intuitive and not need the user to recall that the range of numbers correlates to hours in a day.

18.[H2-7 Flexibility and Efficiency of Use][Severity 2][Found by: A]

After showing the scan instructions, the interface lets you slide a button in order not to show the scan instructions again. However, if somebody had not slid this button, they would have to go through the whole process again in order to do it. This is especially confusing because you consolidate all other settings somewhere else.

19.[H2-7 Flexibility and Efficiency of Use][Severity 2][Found by: B]

For custom entry, there are empty boxes before you even enter a food, which will be later populated, but it kind of just takes up empty space and doesn’t serve an immediate purpose before entering a food. It would be more efficient to have it pop up and display only after a food was entered.

20.[H2-7 Flexibility and Efficiency of Use][Severity 2][Found by: C]

From the home screen, it seems like the only way for people to make a scan of their food is to flip the phone. Though I like this idea because it allows for some efficiency, I do think it makes the app less flexible and inefficient in some aspects: many people (myself included) lock the orientation of my screen, so flipping the phone would actually not work for bringing up the scanner. I would have to undo the orientation lock, and then flip my phone. In addition, does this flip mean that the user cannot scan food when their phone is oriented as a portrait? I would suggest creating a button on the homepage so that users have an option to flip to scan or to press a button a scan in portrait orientation.

21.[H2-7 Flexibility and Efficiency of Use][Severity 3][Found by: C]

When viewing the log, there does not seem to be a way to delete or edit items from the log. I see in settings that there is a button to clear the log, but there is no way to delete or edit an individual item. Users might want to do that in case they enter in something wrong. Consider adding an edit button to the items on the page where you display the food's nutrition information.

22.[H2-8 Aesthetic and Minimalist Design][Severity 4][Found by:A, B,C]

The gradient in all interfaces makes the bottom half of the screen a bit difficult to read. B suggests using a gradient to white or the light blue color. C suggests using a white background.

23.[H2-8 Aesthetic and Minimalist Design][Severity 2][Found by: A, B]

The share button inside the image is hard to see and I actually did not even notice it at first. The location of it can also be annoying to some users since it obstructs some of the image. I would consider moving it outside the image to a place that is more visible. A did not see it at all and thought the sharing aspect was eliminated. It should at least be white on the picture.

24.[H2-9 Help Users with Errors][Severity 2][Found by: B]

The mesh scanning screen, even though you're somewhat briefed on how to scan the food, having a surface for reference in the instructions to see how high to hold your phone, from what angle to point would be helpful. These could even be in the mesh-scanning screen, a notification like "point your camera lower" would help the user get a proper scan.

25.[H2-9 Help Users with Errors][Severity 3][Found by: A]

Once a scan is complete, if the item wasn't identified correctly, it says "keep hunting". However, since this came from a scan, it is unclear what exactly this entails. Are you supposed to scan the item?

25.[H2-10 Help and Documentation][Severity 3][Found by: C]

When creating a custom entry, there is a search icon at the top with no instructions about what you are searching for. In the example on the prototype, "Spaghetti" is what was entered in that box. However, to me, at first I thought I should have entered a location since in the the page before, the search icon indicated a location. I would suggest adding in a title saying "food" or something like that so people know what they should be typing in that box.

25.[H2-10 Help and Documentation][Severity 3][Found by: B]

For the food info after you click the thumbnail on the log page, there is no indication of what the food was named except for a picture and the location that it was consumed. Adding the specific name of the food you ate can help the user avoid or choose that food in the future.

3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
[H2-1: Visibility of Status]			1	1		2
[H2-2: Match Sys & World]					3	3
[H2-3: User Control]				2		2
[H2-4: Consistency]			6	1		7
[H2-5: Error Prevention]			2			2
[H2-6: Recognition not Recall]				1		1
[H2-7: Efficiency of Use]			3	1		4
[H2-8: Minimalist Design]			1		1	2
[H2-9: Help Users with Errors]			1	1		2
[H2-10: Documentation]				2		2
Total Violations by Severity			14	9	4	27
Note: check your answer for the green box by making sure the sum of the last column is equal to the sum of the last row (not including the green box)						

4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
sev. 0					
sev. 1					
sev. 2	8	8	6		
sev. 3	3	4	4		
sev. 4	4	4	3		
total (sev. 3 & 4)	7	8	7		
total (all severity levels)	15	16	13		

5. Summary Recommendations

As a general recommendation, I would suggest grouping different tasks on the app by the purpose of each feature. For example, keep all settings in the settings section, including viewing the scanning mechanism. Another, more important, example is that all food entry should be grouped in the same place. When a person sits down to eat, they should be able to go to the same place if they want to scan an item or enter it by themselves. C suggests that to fix this, you could add “Share Custom Entry” to the home button.

The text presented in this app is not at all standardized. Text expressing the same thing will use different fonts, sizes, margins, and alignment. It makes some aspects of the app confusing and visually unappealing.

Navigating this app was also very difficult. There should be back buttons on every page in case people make a mistake, as well as an “x” button with some sort of escape. It was inconsistent on where the “x” buttons are. A huge issue is that there is no way to navigate from the share screen to any other screen, and the user is completely stuck. It’s also important to make sure that all of the same type of screens go to the same screen when you click the “x” or the back button (if you implement it).

To echo the difficulty of navigation without back buttons, within a task flow or switching to other tasks, C had most difficulty with sharing and would recommend finding a more intuitive location for the share button. As is, the share button is hard to find and also obstructs the image. I also think taking the user straight to another app without them knowing beforehand is odd. I would highly recommend changing this aspect of your app.

On a final note, having clear metrics for crucial measurements like blood sugar and carbohydrate content and time of consumption is extremely important for a diabetic user whose health is dependent on the accuracy and time sensitivity of these metrics. So to have clear units and accurate scales would be crucial to accomplishing the apps main task. It may seem extreme to have 3 Severity 4 regulations related to H2-2 (Match Sys and World), but without units or a clear definition of the graph, the graph became almost meaningless because we did not understand it.

Since the app relies on the idea that people will be able to refer to and trust the tracking system, we thought this posed a big issue.

Severity Ratings

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

Heuristics

[H2-1: Visibility of System Status]

- keep users informed about what is going on

[H2-2: Match Between System & Real World]

- speak the users' language
- follow real world conventions

[H2-3: User Control & Freedom]

- "exits" for mistaken choices, undo, redo
- don't force down fixed paths

[H2-4: Consistency & Standards]

[H2-5: Error Prevention]

[H2-6: Recognition Rather Than Recall]

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

[H2-7: Flexibility & Efficiency of Use]

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

[H2-8: Aesthetic & Minimalist Design]

- no irrelevant information in dialogues

[H2-9: Help Users Recognize, Diagnose, & Recover from Errors]

- error messages in plain language
- precisely indicate the problem
- constructively suggest a solution

[H2-10: Help & Documentation]

- easy to search
- focused on the user's task
- list concrete steps to carry out
- not too large

