

Heuristic Evaluation of FoodDex

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

1. Problem/Prototype Description

FoodDex is a recipe app that incentivises users to learn new recipes stratified by culture/countries and share their cooking journey with their friends via an instagram-like posting feature.

2. Violations Found

Task - 1 (16)

1. H7: Flexibility and efficiency of use / Severity: 3 / Found by A, B, C

- Task 2
- Problem description: Photo required to earn badge
- Rationale: A photo of a cooked dish is required in order to earn a badge, but, if the photo isn't shared with friends and there is no longer a food journal feature, this seems unnecessary — users could just mark the dish as completed.
- Suggested fix: Instead of requiring a photo of the dish, perhaps just run a timer for the estimated cooking time of a recipe; after the timer is up, ask the user to confirm that they have finished the recipe

2. H10: Help and Documentation / Severity: 2 Found by A

- Description: No description of what defines easy, medium and hard dishes
- Rationale: This may dissuade users that may actually be capable of cooking a 'hard' dish because they don't really know what hard is -> how will you define hard?
- Fix: Maybe a dish can be defined as hard by aggregated user reviews as opposed to the developers -> as a result a user can infer that the average person finds this dish hard

3. H8: Aesthetic and Minimalist Design / Severity: 3 Found by A, B

- Description: When looking for a new culture to pick cuisine from, my eyes are drawn to the "New Cultures for You" as opposed to the dishes above
- Rationale: Users may feel like both windows on the home screen might be suggesting the same thing, and may be confused on how to choose from a new culture -> intuitively most people will pick a country then a dish
- Fix: In the Trending bar, have the food title name first then the country. And leave the "new cultures for you" as is and maybe add how many dishes are available for a new culture

4. H5, H7: Flexibility and Efficiency of Use / Severity: 4 Found by B, C, D

- Description: A user is unable to save a particular recipe and will have to remember how to get there and also the name of the dish
- Rationale: A user will be using a recipe to go shopping then cook, therefore if the dish is no longer featured or they forget the name -> will be an issue
- Fix: Make sure a user can save a recipe for when they are planning on making it for error prevention and making the app more efficient

5. H6 Recognition Rather than Recall / Severity 2 Found by A, B, C

- Description: On the actual Beef Birria Tacos recipe we no longer see what culture this dish is coming from, which kinda detracts from the clarity of the simple Task
- Rationale: A user has to remember that Beef Birria Tacos is Mexican cuisine
- Fix: Include the flag of the country a dish comes from in the recipe

6. H4, H6 Consistency and Standard + Recognition Rather Than Recall / Severity 2 Found by A, B, C

- Description: Although characteristics like spicy, gluten-free and shareable are displayed on the home screen, once you open the recipe they are no longer there
- Rationale: Users may forget about what characteristics a dish has
- Fix: Include dish characteristics within a recipe that follows the same consistent color coding we see in the home screen so person doesn't have to remember

7. H7 Flexibility and Efficiency in Use/ Severity: 1 Found by B

- Description: Someone may want to cook a dish for 2 people, instead of 8
- Rationale: A user may not cook a dish or know how to adjust the amount of ingredients based on number of people they want to serve
- Fix: Have the option to change the amount of servings which waterfalls down into the ingredient amounts and cooking time etc.

8. H8 Aesthetics and Minimalist Design / Severity: 1: Found by C

- Simple Task
- Description: Trending Bar has too much white space on the left when you scroll all the way to the front.
- Rationale: Frames and padding are not uniform throughout the screen (grid layout)
- Fix: Less left-side padding on the frame for the trending horizontal scroll.

9. H7 Flexibility and Efficiency of Use / Severity: 3: Found by A, C

- Simple Task
- Description: It seems that the only way to discover a new recipe to cook is by horizontally scrolling through the trending section. (I see that you have a search bar above trending, but it does not work at the moment.)
- Rationale: While I appreciate the idea of a trending section, I wish that there was a way to look at all the recipes at once (including old, non-trending ones). Based on the task description, I would have intuitively clicked search first if I was trying to discover a new recipe from a specific culture.

- Fix: I would love to see a pseudo-functioning version of the search bar where I am able to search for a culture. It would also be cool to search for something like “bread” and be able to filter for different types of bread throughout different cultures via some sort of filtering section.

10. H7 Flexibility and Efficiency of Use / Severity: 2: Found by A, B, C

- Simple Task
- Description: I see that all the recipes have tags like “spicy” or “shareable,” but I can't search for these tags or filter for them. Also, these tags aren't consistent with the filters used in the Mexico screen, where you can specify “difficulty,” “preference,” and “other.”
- Rationale: Generally, in websites that display items/entities with some tag association, there is an ability to search for tags or filter through them.
- Fix: Add this feature to your search bar, or create a section in the home page that categorizes the tags in a similar way as “trending” and “new cultures for you.” Would also love to see more consistency between recipe tags and recipe filters.

11. H6: Recognition rather than recall / Severity: 2 Found by B, C

- Task 1
- Problem description: Recipes do not indicate what filters the dish matches
- Rationale: On the Birria Tacos page, there is no indication of this particular recipe being “Gluten-free” or a “Fan favorite,” even though this recipe fits these filters/tags. If the user found this recipe by using these filters, they might forget what filters they selected.
- Suggested fix: Include a list of tags/filters satisfied by the recipe below the recipe name

12. H11: Accessible design / Severity: 3 Found by B, C, D

- Task 1
- Problem description: Complicated recipe has very small font
- Rationale: The tiny font used for recipes may not be legible to all users.
- Suggested fix: Make font size adjustable; have an audio version of a recipe if possible for the visually impaired

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

- Task 1
- Problem description: Search bar on Mexico page says “Search for a Mexican cuisine”
- Rationale: The page is not so much a list of cuisines as a list of dishes/recipes that belong to a particular cuisine — “cuisine” is typically not used like this.
- Suggested fix: Change “cuisine” to “dish” or “recipe”

14. H8: Aesthetic and minimalist design / H4. Consistency and standards Severity: [2] Found by D

- Description: Arrows on the food selection screen are cumbersome
- Rationale: I feel like the arrows on this page are unnecessary and the elimination of them could allow for more simplicity and minimalism. This also violates heuristic 4 because there are no

arrows on the home screen. The boxes are also formatted pretty similarly to the home screen so i think that it is pretty obvious that they are pressible

- Fix: delete the arrow

15. H4 Consistency and standards / Severity: [3] Found by D

- Description: confusing gray color usage
- Rationale: Gray on the empty badge is indicating that you haven't completed the task whereas gray in the filter indicates that something IS pressed
- Fix: make the filter buttons gray when not in use

16. H1 Visibility of system status / Severity: [3] Found by D

- Description: The status of where you are in the instructions is not recorded
- Rationale: The huge block of text and small font make the instructions hard to read and follow and there is no way to mark where you are in the instructions, making following them very difficult
- Fix: create step by step instructions on different screens and allow the app to save your place

Task - 2 (8)

1. H10 Help and Documentation / Severity: 2 Found by A, C

- Description: On the earned badge screen, the bottom icons are a little unclear for using it for the first time
- Rationale: Users may not know the difference between the checkmark and arrow and get confused
- Fix: When a user is using the app for the first time perhaps provide an explanation of what the checkmark does and what the post button does

2. H10 Help and Documentation / Severity: 2 Found by A, B, C, D

- Description: The badges are not clearly explained in terms of what they mean and how to level up
- Rationale: Users may not know what the badges mean, therefore it might be viewed as more/less of an accomplishment than it is
- Fix: Explanation of the bronze below when you actually get it e.g. you completed two dishes, four dishes to get silver when u receive the badge as opposed to just having it on the home screen may be more helpful

3. H7 Flexibility & Efficiency of Use / Severity: 2 Found by A, C

- Description: Be able to access the passport or specific badge by tapping the badge on the top right
- Rationale: Users may get frustrated that they have to open the passport then go to the Mexico badge instead of just tapping on the most recent badge on the top right
- Fix: Ensure that there is a link from the badge in the top right corner that can take you straight to the badge

4. H3, H5 User Control and Freedom / Severity: 2 Found by A, C

- Description: After going into a particular country badge via the passport, the back button takes me back to the homescreen
- Rationale: Users may get frustrated as they might want to go back to the passport not the homescreen again
- Fix: Ensure back button in country dishes screen when accessed via the passport go back to the passport screen not the home screen

5. H3: User control and freedom / Severity: 3 Found by A, B

- Problem description: No way to view all badges from profile
- Rationale: Since the user is able to click on the number above “Friends” on their profile to view their friends, they should also be able to click on the number above “Badges” to view their badges, but this is currently not supported.
- Suggested fix: Make clicking on the number above “Badges” redirect to the badges page

6. H7: Flexibility and efficiency of use / Severity: 2 Found by B

- Task 2
- Problem description: Photo required to earn badge
- Rationale: A photo of a cooked dish is required in order to earn a badge, but, if the photo isn’t shared with friends and there is no longer a food journal feature, this seems unnecessary — users could just mark the dish as completed.
- Suggested fix: Instead of requiring a photo of the dish, perhaps just run a timer for the estimated cooking time of a recipe; after the timer is up, ask the user to confirm that they have finished the recipe

7. H10 Help and Documentation / Severity: 2 Found by B, C

- Description: When users have the Mexico page open, they can see that they cooked 0 recipes and that they need to cook 1 until their next badge. Once the user has uploaded a photo, these numbers change to 1 and 3, respectively.
- Rationale: Would love to have a screen where users can see what the badges are, and how many recipes they have to cook for each of the badges. Additionally, I’m curious as to what the next badge will be once they have earned the country flag, will it just be another country flag?
- Fix: When users click on “0 cooked, 1 until next badge” at the top of the Mexico page, it leads to a screen that details the upcoming badges and how many recipes you need for each.

8. H3 User Control and Freedom / Severity: 1 Found by C, D

- Description: After a user takes a picture and clicks check, they are led to the “You’ve Earned a Badge!” page. There is no back button here, or the option to delete the picture later.
- Rationale: Users may want to delete pictures of past dishes they made for whatever reason, but there doesn’t seem to be the option to do this.
- Fix: Add a screen where maybe users can see all their past cooked recipes/pictures of dishes and allow for deletion.

Task 3 (15)

1. H7 Flexibility & Efficiency of Use / Severity: 4 Found by A, C
 - Description: If someone is trying to upload an old photo that they didn't share previously there is no functionality that supports this
 - Rationale: Users may become annoyed that they have to choose whether or not to post as soon as they take a photo of their new dish as opposed to being able to do it retroactively
 - Fix: Have option to post old photos that weren't shared before

2. H8 Aesthetic and Minimalist Design / Severity: 2 Found by A
 - Description: In the post creation screen there is a lot of white space that is unused + the writing is hard to read on the post
 - Rationale: User may need to strain eyes to see photo and caption
 - Fix: Make the caption darker and photo bigger here

3. H7 Flexibility & Efficiency of Use / Severity: 1 Found by A, C, D
 - Description: In the post section it seems as if you have to add a badge to post?
 - Rationale: This limits user autonomy as they may want to post without using a badge
 - Fix: Have option to post photos that don't need a badge

4. H8 Aesthetic and Minimalist Design / Severity: 3 Found by A, B
 - Description: On the actual posts themselves, the text is hard to read as it might be too light of a gray + the comments also do not look clean as they are not aligned
 - Rationale: Just nitpicky, but this may reduce user engagement and enjoyment with the app
 - Fix: Make the comments aligned and also the text a darker shade of gray

5. H4 Consistency and Standards / Severity: 2 Found by A, C
 - Description: It looks like one cannot comment on their own posts, or are one's own post not supposed to be consistent with how other posts are presented?
 - Rationale: User would appreciate to have the functionality to comment on their own posts
 - Fix: Allow users to comment on their own posts

6. H1 [Visibility of System Status / Severity: 1 Found by A, C
 - Description: When a post is made, the new status update that it has been completed is not obvious to the user - they have to check on their own home screen
 - Rationale: This might be frustrating as users won't be able to tell if a post is new especially if they have many posts
 - Fix: Add a disclaimer on the grid that says a certain post is new or just a check that pops on the screen momentarily that says "successfully shared" or something

7. H8 Aesthetics and Minimalist Design / Severity: 1 Found by B, C
 - Description: On the profile page for James Landay, there is a grid selection option as if to change the feed from a user's feed to their tags (reminiscent of Instagram).

- Rationale: This grid selection option doesn't necessarily make sense to me as there is no other option to select. As of now, it doesn't seem that you guys have a "tags" tab. I also noticed that Kevin Song's profile page does not have the same grid selection option.
- Fix: Get rid of this icon above Landay's feed, or create a tags page.

8. H1: Visibility of system status / Severity: 3 Found by B, C

- Description: Taken photo and posted photo are different
- Rationale: The photo that's posted is a cropped version of the photos that's taken. It would be helpful to be able to edit/prevent this crop, or at least view what the crop will be before posting the photo.
- Suggested fix: Allow photo cropping or preview the crop before post is made

9. H8: Accessible and minimalist design / Severity: 1 Found by A, B, C

- Problem description: Purpose of tagging people is unclear
- Rationale: Not entirely convinced of the purpose of tagging people in posts — maybe to show that the recipe was cooked with a friend? But in that case, it might be better to allow collaboration on posts (i.e. two people both make the same post).
- Suggested fix: Exchange tagging for collaboration on posts, or make purpose/use case of tagging more clear

10. H3: User control and freedom / Severity: 3 Found by A, B

- Problem description: Cannot post more than one comment on a picture
- Rationale: After posting the first comment on a picture, no further comments can be added.
- Suggested fix: Support multiple comments per post

11. H8 Aesthetic and Minimalist Design / Severity: 2 Found by A, B

- Description: The friends button in the top right corner is not obviously a button
- Rationale: Might be difficult to check up on recent posts and activity of their friends if the button is unclear
- Fix: Make the button clearer and also include notification number on it to show if a friend has posted

12. H3 User Control and Freedom / Severity: 2 Found by B, C, D

- Description: There seems to be no option to edit/delete one's own post in case they make a mistake
- Rationale: Everyone makes mistakes, and users will need an emergency failsafe if a post or comment goes wrong for whatever reason
- Fix: Add this functionality to support user control and freedom

13. H4 Consistency and Standards / Severity: 4 Found by A, C

- Description: Kevin Song’s profile page does not have a functioning “comment” button. I navigated there via the suggested pathway in the slides.
 - Rationale: I cannot perform the complex task if the “comment” button does not work, as there appears to be no other way to comment. (I can only like the post)
 - Fix: Enable the comment button.
14. H4 Consistency and Standards / Severity 4 Found by B, C
- (continuation of last heuristic)
 - Description: When I navigate to Kevin Song’s profile via the “my feed” tab, I can indeed click “comment.”
 - Rationale: You’re likely linking to different versions of Kevin Song’s Kalbi post since one of them allows for commenting and the other one doesn’t.
 - Fix: All pathways that lead to someone else’s post, whether via scrolling through friends or clicking on posts through feed, should navigate to the same, functioning page.
15. H8 Aesthetics and Minimalist Design / Severity: 1 Found by C
- Description: Sometimes when the screen changes it slides in, whereas other times it just appears instantly. (e.g. Clicking passport on nav bar via clicking my feed.)
 - Rationale: The different transitions may be confusing to users as they are unsure of which part of the app they are navigating to.
 - Fix: Have all screen changes happen in the same way.
16. H8 Aesthetic and minimalist design / Severity: [3] Found by D
- Description: Commenting is unnecessary
 - Rationale: I’m not really sure what adding a comment on someone's post adds to your interface. For the sake of minimalism, I would consider not having comments
 - Fix: remove comment feature
17. H1 Visibility of system status / Severity: [2] Found by D
- Description: status of shared items unclear
 - Rationale: Have no idea where the share button on someone else’s post sends to post or who it sends it to
 - Fix: get rid of this feature

All tasks (2)

1. H9 Help Users Recognize, Diagnose, and Recover from Errors / Severity 3 Found by B, C
- Description: General lack of error messages throughout the app.
 - Rationale: Although I understand that not all of your buttons/features are fleshed out, I would have loved to see some screens narrating edge cases or predictable errors that a user can commit.
 - Fix: For example, what if I search for a cuisine or dietary restriction that yields no results? What if I cooked a dish, but it was a failure?
2. H12 Value Alignment and Inclusion / Severity 1 Found by A, C

- Description: It seems like users can only earn badges for recipes that are listed on the app. What if a certain culture has significantly less recipes than another culture simply due to the fact that less are in the app's database.
- Rationale: Users may end up cooking less, say, Kenyan food because there are little to no Kenyan recipes on the app.
- Fix: Maybe allow for users to cook from their own family/heritage recipes that they can upload onto the app and share with friends. Friends can then see the recipes as well and be inspired to also try cooking. This may also diversify the recipe selection.

Extra Violations

1. H12 Value alignment and inclusion / Severity: [4] Found by D

- Description: equating flags with cuisines could be problematic
- Rationale: Associating a flag with a specific type of cuisine could be a bit tricky due to the volatility of borders and cuisines being associated with an ethnic group rather than a country. For example, in Africa, the country borders were not based on ethnic groups; rather, Europeans arbitrarily created the borders.
- Fix: maybe have different icons instead of flags for your badges so that there is more flexibility of what you call a cuisine

2. H12 Value alignment and inclusion / Severity: [4] Found by D

- Description: lack of forum to share unique recipes
- Rationale: I feel like since this app is centered around cultural foods there should be an opportunity to share your own recipes in order to promote the creation of authentic food
- Fix: create a forum

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		1		2		3
H2: Match Sys & World			1			1
H3: User Control		1	2	2		5
H4: Consistency & Standards			2	3	2	7
H5: Error Prevention			1		1	2
H6: Recognition not Recall			3			3
H7: Efficiency of Use		2	3	2	2	9
H8: Minimalist Design		4	3	3		10
H9: Help Users with Errors				1		1
H10: Help & Documentation			4			4
H11: Accessible				1		1
H12: Value Alignment & Inclusion		1			2	3
Total Violations by Severity	0	9	19	14	7	49

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	[e.g. 10%]			
Sev. 1 7 Ex: Eval A count / total sevs 1 in table #3	33%	22%	77%	44%
Sev. 2 16 Ex: Eval A count / total sevs 2 in table #3	58%	53%	58%	26%
Sev. 3 11, 5 Ex: Eval A count / total sevs 3 in table #3	43%	50%	36%	36% 5
Sev. 4 5 Ex: Eval A count / total sevs 4 in table #3	43%	43%	71%	43% 3
Total (sevs. 3 & 4) Ex: Eval A = sum(sev 3: sev 4 counts) / sum(sev 3: sev 4 in table #3)	48%	52%	52%	38%
Total (all severity levels) Ex: Eval A total sev count / total sevs (green cell) in table #3	51%	51%	55%	26%

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

5. Summary Recommendations

You did a wonderful job with the medium-fidelity prototype. The organic color scheme is attractive and fits well with the idea of a food-sharing application, and I like the inspiration from Instagram — the app is overall well-organized and easy to navigate.

In terms of general trends, a relatively frequent violation is in user control and freedom. With most of these violations, the problem lies in the lack of implementation of certain duplicated endpoints. For example, the passport page ought to be accessible not only by clicking the middle button of the task bar, but also from the user profile and the recipe pages. We also noticed various inconsistencies between screens of the same type, or exact same screens that were reached via different pathways.

Another group of issues, though not necessarily grouped by a common heuristic, is the posting and commenting system — we think in some places it has too much functionality (e.g. including badges in

posts), and other times it has too little functionality (e.g. unable to comment twice on post). We also think that commenting may be unnecessary, especially from a simplicity lens. Although we're sure some of these shortcomings were due to the limitations of the medium-fi prototype itself, I wish that more of the buttons and features were fleshed out, so I could see the vision of the app comprehensively.

A key area for improvement centers on cultural sensitivity. We would suggest reassessing the use of flags to represent cuisines, expand cultural options, and establish a forum for sharing diverse recipes, fostering a more inclusive environment.

As for feedback that is not directly related to heuristic violations, we had a few questions. First, the implementation and purpose of the picture-taking in the app didn't make much sense to me. It seems to me it would be sensible (and easier to implement) to simply allow the user to upload pictures from their camera roll if they desire — this also has the benefit of allowing users to edit and crop photos to their liking before posting them for their friends to see. We also had an inquiry regarding the organization of the "Trending" cards. These cards display the name and a picture of a specific dish from a cuisine, and so we think they ought to redirect to the dish's recipe itself instead of to the recipe list of the cuisine; the cuisines can be accessible from elsewhere (e.g. from the badges page).

Other than these nitpicks, the app feels intuitive and pleasant to use, and I look forward to seeing the final prototype. I think the app is shaping up to be great and it is moving in a great direction. Outside of heuristics, I think leaning even more into the social aspect of the app may make it even more sticky in terms of user retention. For example, including user reviews and photos from non-friends on all recipes available may better foster a stronger sense of community within the app. Moreover giving the ability for users to add their own recipes would be a cool touch. And it will make the app much more inclusive of lesser known cultures and dishes. I am very excited to see the Hi-Fi prototype for this app!

Severity Ratings

- 0 - not a usability problem
- 1 - cosmetic problem
- 2 - minor usability problem
- 3 - major usability problem; important to fix
- 4 - usability catastrophe; imperative to fix

Heuristics

H1: Visibility of System Status

- Keep users informed about what is going on

H2: Match Between System & Real World

- Speak the users' language
- Follow real world conventions

H3: User Control & Freedom

- "Exits" for mistaken choices, undo, redo
- Don't force down fixed paths

H4: Consistency & Standards

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

H5: Error Prevention

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

H6: Recognition Rather Than Recall

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

H7: Flexibility & Efficiency of Use

- Accelerators for experts (e.g., gestures, keyboard shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

H8: Aesthetic & Minimalist Design

- No irrelevant information. Focus on the essentials.

H9: Help Users Recognize, Diagnose, & Recover from Errors

- Error messages in plain language
- Precisely indicate the problem
- Constructively suggest a solution

H10: Help & Documentation

- Easy to search
- Focused on the user's task
- List concrete steps to carry out
- Not too large

H11: Accessible

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

H12: Value Alignment and Inclusion

- The design should encode values that users can understand and relate to.

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