

## Heuristic Evaluation of [Skillet]

### 1. Problem

Skillet is a mobile app that teaches people how to cook by facilitating friendly cooking competitions between friends in different areas. Users challenge other users to cooking battles on a certain recipe, and share the results with other users on the platform. Other users can then vote on the outcome of the battle, and ultimately one user is declared a winner.

### 2. Violations Found

#### 1. [H6: Recognition Rather Than Recall] / Severity 2 / C

On the opening screen, I like the idea of informing the user to “drag and drop” their desired friend in order to begin a game. However, I believe for some users, it might not be as intuitive as you’d think to drag their bitmoji into the actual pan. While your instruction is indeed visible, I think the wording could improve to better guide the user.

**Fix:** Perhaps make the instruction more clear, like, “Drag a friend into the pan to begin a game!”

#### 2. [H5: Error Prevention] Severity 2 / C

There is a large clutter of buttons in a small space on the “Freestyle or choose a meal” page. When many buttons exist in the same vicinity, it is hard for a user to specify which button they want to press. For example, if a user is attempting to ‘see more recipes’, it is highly possible they will on accident press the ‘veggie pasta’ or ‘tuna sushi’ buttons, or the buttons in the navigation bar below.

**Fix:** I think spacing these buttons out will prevent press errors by the user. If spacing them out is not feasible, then perhaps decreasing the font size of the ‘see more recipes’ button, and including more white space between it and the buttons around it would help.

#### 3. [H2: Match Between System and Real World] / B, C, A / 3

On the same page as my previous violation, there exists a large red, ‘Freestyle!’ button. While after using the app a couple times, it is likely a user would understand the function of this button, there exists no documentation or instruction on what its function is or what it accomplishes. I think for users who frequent the app less, it could cause confusion.

**Fix:** I like the Freestyle phrase, so I don't think that needs to be changed. That being said, I think a small, informative popup that appears directly adjacent to the button when this screen opens in the app could make a big difference

4. [H4: Consistency & Standards] / C / 1

When you choose to 'Freestyle' CJ and make Pizza, the top bar displays text that reads "You vs. CJ (logo) Teriyaki Chicken." I think this is an inconsistency error, and would definitely confuse a user, however is an easy fix.

**Fix:** Either eliminate the food being cooked from the top bar and just keep "You vs. CJ (logo)", or make sure to enter in the correct food that is being prepared.

5. [H4: Consistency & Standards] / A, C / 3

The user is very clearly prompted to move forward through a recipe, but moving backwards is not intuitive because the top back button seems to imply you might leave a challenge entirely.

**Fix:** Adding a 'Back' button that mirrors the 'Next' button could allow users to more intuitively go back and forth between different parts of a recipe.

6. [H4: Consistency & Standards] / B, C / 3

When viewing friends' past competitions, you start at a grid-like feed where you can then view images of winner's dish. However, once you press on this view button, there is no back button to return you to the feed. Instead, you are instructed (by the marvel app) to press on the side of the screen, which is not intuitive to a user and doesn't follow the platform's conventions.

**Fix:** Add a back button here.

7. [H4: Consistency & Standards] / B, C / 2

When you are on the profile viewing screen, there appears a top bar which allows you to switch from viewing your profile, to viewing a feed of your friends' past competitions. There are inconsistencies that need to be addressed here. One, when you click 'view' on your past competitions (which appear on this screen) the top navigation bar disappears, and a text description of the competition is given, along with a 'back' button. However, when you navigate to your friends' past competitions and attempt to 'view' them, the navigation bar that includes your bitmoji and your friends' bitmojis remains, and there is no description or a back button. Not sure if this is intentional, but wanted to address it.

**Fix:** When viewing your friends past competitions, instead of having the 'bitmoji' navigation bar, change it to a description and a 'back' button, like when viewing your own past competitions.

8. [H8: Aesthetic & Minimalist Design] / B, C / 4

While the aesthetic on the opening screen is uncluttered, were more bitmoji friends to be added the screen would definitely become cluttered quickly.

**Fix:** Consider making the bitmoji smaller, or making the pan smaller. If there became too many friends perhaps a list view would be necessary.

9. [H4: Consistency & Standards] C / 2

When on the “Choose a meal” page, the app offers “Featured **Dishes.**” If a user is looking for something else, they are instructed to “See more **Recipes.**” I think this could cause some confusion to lower level users.

**Fix:** Either change ‘Dishes’ to ‘Recipes’ or vice versa.

10. [H8: Aesthetic & Minimalist Design] / A, B, C / 3

On the screen where you choose a recipe, The spacing and formatting of the “Freestyle’ button and the text below it is a bit unorganized. I also feel like the hyphens on either side of the word “or” do not need to be included. Fixing this spacing could also provide more space for the lower buttons, which caused a violation (violation #2 above).

**Fix:** Perhaps center the Freestyle button; maybe even elongating it to fit the entire screen. I feel like “or” does not have to be on its own line either.

11. [H2: Match Between System and real World] / C / 1

I think that when viewing any screen with a description of the current “battle”, the wording could be improved. For example on one screen the text reads “Clare defeated Caillin in battle Seafood Stew! This doesn’t really follow real world conventions of proper grammar, and I think it could be improved. Another example is when voting, the text reads “tap to vote on battle Steak and Fries!” I think both of these could improved from a grammatical standpoint, but a small violation nonetheless!

**Fix:** Make wording follow real world conventions. Update them to form complete sentences.

12. [H4: Consistency & Standards] / C / 1

On several screens, there exists different types of buttons with different designs. For example, the ‘Freestyle!’ and ‘Tap to Begin’ buttons are in a red casing, while the ‘Take a pic’ and ‘See more Recipes’ buttons are simply words with no border, along with forwards arrows. I think it would be very helpful to fix this

inconsistency, as I think it is possible a user might think the buttons mean different things strictly because of how they are designed.

**Fix:** Make important buttons like the ones mentioned above all have the same design. This improves the UI a lot!

13. [H8: Aesthetic & Minimalist Design] / C / 1

Many screens in the app feel harsh due to the contrast of the background with the colors of buttons and images.

**Fix:** I think if you change your background color to something less bright, the app will have a more minimalist theme and not feel as 'homemade,' if you know what I mean?

14. [H1: Visibility of Status] / C / 1

Upon casting a vote, while the user is indeed provided with a confirmation that he or she voted, it is placed below the information about the "battle" going on, which I think is a little abnormal.

**Fix:** I think simply moving the confirmation above everything else on the screen so that it is the first thing that meets the user's eye would be a good fix.

15. [H4: Consistency & Standards] / A / 1

On the first page there is only a 'Sign In' button, making it ambiguous what to do if you do not yet have an account.

**Fix:** This could be changed to be more conventional by having a 'Log In' button with clickable text beneath saying 'Make an account' so it clear what to do in either case.

16. [H9: Recover from errors] / A / 1

After navigating away from the 'Sign In' it is not clear how to navigate back to this page if you would like to sign in with a different account.

**Fix:** There could be a button added to 'Settings' under your profile or to the Challenge screen allowing you to sign in with another account.

17. [H1: Visibility of system status] / A, B / 1

The status bar at the bottom does highlight the current task; however, until you click on the other icons, it's not clear that the present one is the one that's blackened. Regarding the bottom navigation bar, the "Vote" and "Challenge" icons are greyed-out when the respective view is not currently on the screen. However, the "Profile" icon with the chef always shows color, regardless of which view is currently on the screen. This may be nitpicky but it looks slightly asymmetrical if, for example, the user is in the voting screen and the lower-right profile icon still has color.

**Fix:** A slightly contrasting background could be added to the current task on the navigation bar to make it very clear which task is active.

18. [H7: Flexibility & efficiency of use] / A / 2

After signing in, the user is immediately prompted to challenge another user, but perhaps they want to vote or change their profile. These are accessible, but the user must actively go to these screens.

**Fix:** Perhaps upon signing in, a user could choose between challenging another user, voting, or visiting their Skillet feed. This may be an issue for first-time users, so you could have a brief tutorial.

19. [H10: Help & documentation] / A / 3

After challenging a person and selecting a dish, I'm not sure what happens with the other user. Do you wait until the other user consents to making the dish with you? Can you make the dish and potentially never have your challenger make the dish?

**Fix:** Adding some additional, brief information on what challenging another person means for first time users would be helpful. There may need to be some structural changes to how challenging works.

20. [H3: User control & freedom] / A / 2

Leaving a challenge or starting multiple challenges simultaneously is not intuitive.

**Fix:** There could be an option at the top right to exit a challenge, or to start a new challenge if you want to cook multiple dishes at once.

21. [H5: Error Prevention] / A / 3

After voting for a dish, there is no easy way to alter your vote, when you may have accidentally clicked on the wrong person.

**Fix:** After you click a message could appear asking 'Are you sure you want to vote for (insert name)?', or under the Vote tab, there could be two tabs, one being the challenges you haven't voted on and the other being challenges you've voted on but can still change your vote on.

22. [H3: User control & freedom] / A / 2

To retake a photo, a user must repeatedly click 'X' and then re-click 'Take a photo', which could lead to a very long loop of leaving the camera and returning to the camera until you are happy with the photo.

**Fix:** Like with Snapchat, the 'X' could allow you to retake the photo, and swiping right or clicking an arrow icon could bring you back to recipe pages.

23. [H6: Recognition rather than recall] / A / 3

After voting on a battle, a user must remember to go their profile, and then to their feed to see the results of that battle.

**Fix:** A user could get notifications on the outcomes of battles, or (as mentioned before) if there were a 'Voted on' tab added to the Vote section, a user could

then easily see the outcomes of what they've voted on.

24. [H4: Consistency & Standards] / A / 1

It is currently not clear who you share the results of a battle with. Is this with all of your mutual contacts, with everyone on the platform?

**Fix:** Adding options of who to share a battle with or indicating who it is being shared with would be helpful.

25. [H6: Recognition rather than recall] / B / 1

When viewing the results of a cook-off between two friends, it's unclear which bitmoji represents each respective player. While intuitively one can infer that the top bitmoji is the winner compared to the lower-right one, maybe you can make it clearer to the user exactly which bitmoji is the champion. It would also be helpful to clarify that the picture belongs to the top bitmoji.

**Fix:** clearly label bitmojis with names

26. [H4: Consistency and Standards] / B / 1

In the profile page, after clicking on the "Settings" icon next to "Past Dishes", you are taken to a new page. However, this new page still has the top navigation bar with the personal profile and friends options. A user might not know what happens when you move from your settings page and press the friends button on the top right.

**Fix:** when "Settings" is pressed, replace current top bar with a bar containing a "back" button along with a title labeled "Settings" or something similar

27. [H7: Flexibility and efficiency of use] / B / 2

If you have a lot of friends or have many instances of challenges in your feed of friendly competitions, it may be difficult to find a certain competition that happened previously. A user might have to scroll quite a bit to find the desired cookoff.

**Fix:** provide a search bar, or better yet filter bar to filter friend's cookoffs based on friends or recipes

28. [H8: Aesthetic and minimalist design] / B / 1

On the "Vote" page, every cell contains the same text except for the names of the / competitors. This extra text could distract the user from being able to more easily/quickly read the names of the competitors.

**Fix:** change the dynamic of each cell to be something like "Clare vs. Caillin", and let the user know every pair of people has competed at the top of the page.

29. [H5: Error Prevention] / B / 4

In "Challenge" mode when picking a Freestyle recipe, it's unclear whether the user types in their own recipe or they have to search to find a matching recipe. What if a user types in something that isn't really a recipe? This may be due to the limitations of Sketch and Marvel, but it's still unclear from the prototype.

**Fix:** Provide a description of exactly what happens when a user types in the search field, and what follows

30. [H4: Consistency and standards] / B / 2

When a user chooses Teriyaki Chicken, they are brought to a page that prompts the user “Tap to begin” to start the challenge. However, when a user decides which Freestyle meal to complete, they are brought to a page showing the same outline structure, however at the bottom instead of “Tap to begin” the user is prompted to “Take a pic”.

**Fix:** on the Freestyle challenge page, prompt a user to begin and take them to a new page that says something like “Take a pic” once they’ve started and finished the challenge.

31. [H1: Visibility of system status] / B / 2

On the Challenge page, after clicking “See More Recipes”, the user clicks on “Chicken”, and at the bottom of this new page there is another button that says “See More Recipes”. This seems like a bit of a rabbit hole, and once a user decides on “Chicken” it would be helpful if they could find their solution within the same page.

**Fix:** replace the “See more recipes” button with a different structure that allows the user to jump to different recipes based on cuisine, flavor, etc. Maybe a sidebar navigation pane

3. Summary of Violations (no number indicates zero violations)

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status		2	1			3
H2: Match Sys & World		1		1		2
H3: User Control			2			2
H4: Consistency		5	2	3		10
H5: Error Prevention			1	1	1	3
H6: Recognition not Recall		1	1	1		3
H7: Efficiency of Use			2			2
H8: Minimalist Design		2		1	1	4
H9: Help Users with Errors		1				1
H10: Documentation				1		1
<b>Total Violations by Severity</b>		<b>12</b>	<b>9</b>	<b>8</b>	<b>2</b>	<b>31</b>
<b>Note: check your answer for the green box by making sure the sum of the last column is</b>						

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**Instructor: James Landay**

<b>equal to the sum of the last row (not including the green box)</b>						
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**\*Note that the bottom rows are *not* calculated by adding the numbers above it.**



#### 4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
sev. 0	0%	0%	0%		
sev. 1	13%	13%	16%		
sev. 2	10%	13%	13%		
sev. 3	19%	10%	13%		
sev. 4	0%	6%	3%		
<b>total (sev. 3 &amp; 4)</b>	19%	23%	16%		
<b>total (all severity levels)</b>	42%	42%	45%		

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

#### 5. Summary Recommendations

We think this prototype was very well made, and are confident that it will be even better after implementing some of the revisions we have suggested above. First, improving the cosmetic errors of Skillet's user interface will vastly improve the app's user experience. When using the app in marvel, everything feels very amateur. I completely understand this is a first draft and that these things will be updated, but we think it is important for an app to have a beautiful UI. People are more inclined to use an app on their phone that is aesthetically pleasing, so fixing those up should add even more incentive to use your app.

We would also recommend rearranging the structure of choosing a dish for a competition - right now the user seems to go down a bit of a rabbit hole to get to a final decision. Once you have more recipes to choose from, it may be useful to have a structure that filters dishes based off of cuisine, like "Asian" or "Latin American". This would give a user fewer obstacles and pages to get through until they pick their dish. But overall we really like it and I'm excited to see where you go with it!

Decreasing ambiguity could be done by following conventions for Login used on most platforms, unifying the aesthetic on the recipe selection page, changing to wording of 'Freestyle!' to something more instructional, making the 'Next' and 'Back' button as the user progresses through a recipe mirror each other, making it clear what 'Share' means (i.e. with who?), and making it clear how challenging someone to a battle really works (i.e. does the other person need to agree? can you be in multiple battles at once?). The comment on not knowing what challenging means does not fall neatly in the heuristics, but is central to your app, so it would be good to make this very clear for your users. Another way to provide a smoother user experience would be to give users

the ability to quickly recover from errors, like accidentally voting on the wrong person, wanting to exit a challenge entirely, or quickly re-take a final image of their dish (instead of toggling back and forth between different buttons).

Some feedback that does not neatly fit into a violation is that the act of voting (and hopefully soon, being able to change a vote upon error) and seeing the feed of your friends' battles is currently kept separate, though these seem like they should be more unified. When we clicked on the Vote tab we also wanted to see the outcomes of my previous votes, but had to navigate away from the Vote tab to do so. Perhaps the feed of friends could be brought into the Vote tab rather than the Profile tab because the Profile tab feels more about you than about others (in contrast to the Vote tab). It would be great if you could filter your voting searches based off of both friends as well as dishes.

It might be a good idea to withhold the results of the competition until a user manually presses the 'view' button. Doing this will incentivize users even more to press the 'view' button, and perhaps add a little playful suspense to the user experience. Another improvement can be centered around the ranking system you have in place for how experienced someone is in the app. In your mission statement, you long for "all levels of learners to thrive." We think as is, Skillet is perfect for beginner/intermediate cooks. However, how are you going to appeal to the expert cooks, and what is their incentive to use the app? How are different levels of cooks using the app different? Is the only method of distinction between a chef's level a label placed next to their name in the app? Is that enough? It might be!

Overall, We think your interface is intuitive and easy to use. We really like your design and navigation structure, and loved how you incorporated the bitmojis. We are excited to see where this app goes. Good luck!

### 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

**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**

**H5: Error Prevention**

**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, kb shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

**H8: Aesthetic & Minimalist Design**

- No irrelevant information in dialogues

**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