

Heuristic Evaluation of [Kandi]

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

1. Problem/Prototype Description

Kandi aims to make it fun, smooth, and accessible to onboard newcomers to the festival scene.

2. Violations Found

Task 1: Add and connect with other members of the community

1. H11: Accessibility / Severity 2 / Found by B, D, C
 - a. Task 1
 - b. Problem Description: The font size for “no events ... to go to some” is really small
 - c. Rationale: Users with mild visual impairment may find it difficult to read.
 - d. Fix: Increase the font size

2. H7: Flexibility and Efficiency of Use / Severity 3 / Found by B, D
 - a. Task 1
 - b. Problem description: In later tasks, there is an option to create groups. However, there is no option to create or view groups that you are a part of in the community section
 - c. Rationale: A user’s mental model may assume that groups belong in the community section, and advanced users may want to create groups preemptively, or while they’re adding friends.
 - d. Fix: Create a tab for groups within the ‘friends’ part of community

3. H5: Error Prevention / Severity 2 / Found by B, D, A, C
 - a. Task 1
 - b. Problem description: The event that I add to my calendar doesn’t show up under upcoming events
 - c. Rationale: I understand that this section is for your friends’ events, and your events are separate, but users might assume that ‘upcoming events’ should include their own events, especially since it isn’t directly under the friends tab.
 - d. Fix: Include a user’s own events in upcoming events.

4. H7: Flexibility and Efficiency of Use: / Severity 2 / Found by B, D, C
 - a. Task 1

- b. Problem description: Events are displayed differently in the “add events” tab and the “events your friends are going to” section.
 - c. Rationale: Users may want to directly add events that they find in the ‘events your friends are going to’ section
 - d. Fix: Have an ‘add’ button on events in this section, consistent with the add button in the other tab.
5. H3 User Control & Freedom / Severity: 2 / Found by A, D
 - a. Description: “add events” screen lacks escape hatch back to “community” screen
 - b. Rationale: Switching to a different task flow may be tedious e.g. going from “add event” to “add friends”.
 - c. Fix: “add event” screen should have both “back a screen” and “take me back to community page” buttons
6. H4 Consistency and Standards/ Severity: 1 / Found by D
 - a. Description: “add friends” screen has header “added me” instead of more common “friend requests”
 - b. Rationale: Unfamiliar language may confuse users who are expecting conventional language
 - c. Fix: Change to something like “pending friend requests”
7. H7 Flexibility and efficiency of use / Severity: 3 / Found by D
 - a. Description: Can only discover new events in my area from “my events” screen
 - b. Rationale: Advanced users may not want to click through so many screens to look for events in their area
 - c. Fix: Add option to search for events by geographic location to the “community” screen
8. H8 Aesthetic and minimalist design / Severity: 1 / Found by D
 - a. Description: “My events” redundant with “events you’re going to”
 - b. Rationale: “My events” header on the “my events” screen already implies “events I have added to my calendar”, and the redundant header “events you’re going to” may unnecessarily clutter up the screen. Additionally, “events you’re going to” is a bit too wordy for my taste
 - c. Fix: Remove “events you’re going to” header, or condense to something like “your upcoming events”
9. H9 Help users recognize, diagnose, and recover from errors / Severity: 2 / Found by D, A
 - a. Description: No suggested fix for “no friends :(“ error msg
 - b. Rationale: A new user may need some additional guidance through your interface, especially if they’re new enough that they haven’t added any friends yet
 - c. Fix: Change to smth like “no friends :(, find some by tapping Add Friends above”
10. H12 Value alignment and inclusion / Severity: 3 / Found by D
 - a. Description: “Add events” screen only visibly presents events that are in my area

- b. Rationale: Users who live in areas without much of a festival scene may find it harder to discover events outside of their area they may otherwise want to travel to. Additionally, because where one lives is highly correlated with race, suggesting primarily events in one's local area may, under a mass-adoption scenario, lead to decreased diversity at festivals.
 - i. *“The direct information about race is not given to the system, but zip code is strongly correlated with race since many neighborhoods are still segregated. By using zip code, the system would be indirectly making decisions based on race.”* from [this news article](#) by Alexandra George of Carnegie Mellon
 - c. Fix: Add quick filtering option other than location, or allow users to specify their own area instead of only using location services
11. H4: Consistency and Standards / Severity: 2 / Found by A
- a. Task: Find & view friends
 - b. Description: I thought the ‘find friends’ search bar was to search for a specific friend to add
 - c. Rationale: The ‘find friends’ search bar could be confused with the ‘add friends’ -> ‘search’ functionality. Users might think they can search for a specific user through the ‘find friends’ search bar instead of going to ‘add friends’ first.
 - d. Fix: Make the title of the search bar more specific, e.g. ‘search my friends’
12. H10: Help & documentation / Severity: 2 / Found by A
- a. Task: Adding friends
 - b. Description: On community page, if no friends then the page says ‘no events, convince your friends to go to some’
 - c. Rationale: This description may be confusing for some users who aren't as tech-savvy and won't immediately intuit that they have to go to ‘my friends’ in order to add new friends, since they might think the tab only shows existing friends
 - d. Fix: A more detailed description that points the user to the ‘my friends’ tab if they don't have friends yet

Task 2: View and complete individual tasks

13. H11: Accessibility / Severity 2 / Found by B, D, C
- a. Problem Description: The font size for “click on the + to get started” is really small
 - b. Rationale: Users with mild visual impairment may find it difficult to read.

- c. Fix: Increase the font size
14. H5: Error prevention / Severity 2 / Found by B, A
- a. Problem Description: I thought that I had to click on the circle that says “you have pending tasks”
 - b. Rationale: Since the font size below is small, users may assume that the text that points out the problem is also a button to fix the problem
 - c. Fix: Maybe an arrow that points towards the plus button? It’s possible that changing the font size is enough.
15. H1: Visibility of system status / Severity 3 / Found by B
- a. Problem Description: The “you have pending tasks” disappears after I complete 1 task, but there are still tasks pending.
 - b. Rationale: Users may be confused and not realize that there are more tasks for them to complete.
 - c. Fix: Either remove the text entirely or make it a consistent status that users can always see.
16. H2: Match between system and real world / Severity 1 / Found by B, A, C
- a. Problem Description: There is no definition for the term ‘rails’, and also no explanation for the caption about matching fits
 - b. Rationale: I really liked that you included definitions for some words! It would be great to see this for all potentially unfamiliar terms.
 - c. Fix: Add more definitions
17. H4: Consistency and Standards / Severity 1 / Found by B, C
- a. Task 2
 - b. Problem Description: It’s hard to tell whether the colors of the beads signify something or are just random
 - c. Rationale: Users may think that the colors represent what category the task that the bead was earned for falls into.
 - d. Fix: One option would be to have different colors for different types of tasks. Could even allow users to change bead colors.
18. H11: Accessibility / Severity 2 / Found by B, C
- a. Problem Description: The “group task” font is really small
 - b. Rationale: Users with mild visual impairment may find it difficult to read.
 - c. Fix: Increase the font size

19. H12: Inclusion / Severity 3 / Found by B, A
 - a. Problem Description: It seems as though you can only do certain tasks if you are in a group of 3 or more
 - b. Rationale: There may be users who want to complete tasks and have shared experiences with just one other person.
 - c. Fix: Allow groups to have 2 people

20. H5: Error Prevention / Severity 3 / Found by B
 - a. Problem Description: There is no way for users to view/delete photos they previously uploaded for a task.
 - b. Rationale: Users may change their mind about what photos they want on the app.
 - c. Fix: Allow users to view/delete their task related photos.

21. H7: Flexibility and Efficiency of Use / Severity 2 / Found by B, C
 - a. Problem Description: There is no way to filter tasks by level of difficulty/prior festival experience
 - b. Rationale: There may be some tasks that seem trivial to more experienced festival goers, that they want to skip past
 - c. Fix: Allow for filtering based on the type of task

22. H7: Flexibility and efficiency of use / Severity 2 / Found by B
 - a. Problem Description: There is no way to filter only individual or only group tasks
 - b. Rationale: People in a group may want to do tasks together, and people alone may not want to see group tasks
 - c. Fix: Consider adding this filtering option

23. H7: Flexibility and efficiency of use / Severity 1 / Found by B, A, C
 - a. Problem Description: Right now, I had to do the two tasks in a particular order
 - b. Rationale: We're not sure if this is because of constraints from figma, or if it was an intentional design choice, but Users may want to switch around the order in which they complete tasks.
 - c. Fix: Allow users to do tasks / collect beads in any order.

24. H11: Accessibility / Severity: 1 / Found by A
 - a. Description: The '+' symbol on the bracelet is black on a dark background while every other element of text is white
 - b. Rationale: Even though the '+' symbol is important for viewing the tasks, it doesn't stand out as much because of the color
 - c. Fix: Change the color of the '+'

25. H3 User Control & Freedom / Severity: 2 / Found by D
 - a. Description: “confirm image selection” and “confirm video selection” screens have a back button but no “escape hatch” out of the current task
 - b. Rationale: Users who want to cancel out near the end of a task may feel frustrated by having to back out screen-by-screen.
 - c. Fix: “confirm image selection” and “confirm video selection” screens should have separate “back/exit” and “retake image/video” buttons

26. H6 Recognition rather than recall / Severity: 2 / Found by D
 - a. Description: Task not visible on “confirm image selection” screen
 - b. Rationale: Users may forget what task they’re trying to complete and need to know what they need to take a picture/video of in order to confirm that they’re satisfied with their photo/video
 - c. Fix: Remind users of their current task on the image/video confirmation screen

27. H8 Aesthetic and minimalist design / Severity: 1 / Found by D
 - a. Description: “Tasks” screen has a redundant “available tasks” section header
 - b. Rationale: The user doesn’t gain anything additional from the second, smaller “available tasks” header
 - c. Fix: Remove “available tasks” header, optionally change the “tasks” header to “available tasks”

28. H8 Aesthetic and minimalist design / Severity: 2 / Found by D
 - a. Description: “My stats” displays redundant information
 - b. Rationale: “My stats” implies there are multiple stats, but only “x beads collected” is ever shown. A header may be unnecessary in this case. Additionally, number of beads is something you display prominently on the home screen. A user may be frustrated by having to click through to the “new tasks” screen to see their total number of beads collected, if they collect enough that it’s not easily countable on the homescreen.
 - c. Fix: Remove “My stats” section header and just show “x beads collected”, and/or move “x beads collected” stat to home screen.

29. H8 Aesthetic and Minimalist Design / Severity: 2/ Found by C
 - a. Description: The '+' symbol in the circle where presumably the user's picture should go does not clearly indicate its purpose.
 - b. Rationale: Users may not realize that this is the place to add a profile picture due to the minimalist design not conveying enough information.

- c. Fix: Add text such as "Add Profile Picture" or change the icon to a camera symbol to more clearly indicate the action required.
30. H5: Error prevention / Severity: 3 / Found by A
- a. Description: After getting 3 beads, nothing is clickable anymore
 - b. Rationale: unable to access any other pages, so had to go back to beginning
 - c. Fix: Make sure pages are accessible from one another, even after completing tasks
31. H4: Consistency and Standards / Severity: 2 / Found by A
- a. Description: The stats on the tasks page says '0 bead(s) collected', but the user has already collected 1 bead by creating an account
 - b. Rationale: Could be confusing for a first-time user who thinks they've already earned a bead
 - c. Fix: Update to '1 bead collected' or somehow differentiate between your 'free onboarding bead' and the rest of the bead
32. H1: Visibility of system status / Severity: 1 / Found by A
- a. Description: After completing a task, user is taken back to the 'tasks' page but aren't automatically shown their updated bracelet with their new bead
 - b. Rationale: It might make it a little more intuitive that the bracelet is gaining beads after each task if the user was taken directly back to the home page to see their bracelet update, or if they were given the option to either see their bracelet or go back to the tasks page
 - c. Fix: A notification or button to give the user the option to see their updated bracelet directly after completing a task

Task 3: Join or create a group to complete community tasks

33. H6: Recognition rather than recall / Severity 3 / Found by B
- a. Description: Users will have to remember that the way to create a group is to try to complete a group task
 - b. Rationale: Users may want to create a group even when they are not currently completing a task
 - c. Fix: Allow users to create a group elsewhere
34. H1: Visibility of system status / Severity 4 / Found by B

- a. Description: There is no way to control or view the groups to which you have been added by other users
 - b. Rationale: Users may want the option to exit a group. Additionally, malicious users could abuse this for harassment
 - c. Fix: Make it visible when users are added to a group, and allow them to opt out
35. H9: Help users recognize, diagnose, and recover from error / Severity 2 / Found by B
- a. Description: On the create group page, I cannot hit the confirm button until I have created a valid group, but I am not sure what I have to do to make the confirm button clickable
 - b. Rationale: Users may not realize why they cannot confirm the group – the name, the number of users, or the photo.
 - c. Fix: Provide an error message telling users why they cannot create this group yet.
36. H9: Help users recognize, diagnose, and recover from error / Severity 2 / Found by B,C
- a. Description: On the select group page, I cannot hit the confirm button until I have completed the task on the page. However, the confirm button is still there to press, which is confusing
 - b. Rationale: Users may not be confused by the presence of the confirm button when it is not yet clickable.
 - c. Fix: Have a way to signal that users cannot hit the confirm button yet
37. H5: Error prevention: / Severity 1 / Found by B
- a. Problem Description: Previously completed tasks are listed under available tasks
 - b. Rationale: This may confuse users and cause errors like attempting to redo tasks
 - c. Fix: List previously completed tasks elsewhere
38. H11: Accessibility / Severity 2 / Found by B, D, C
- a. Description: The font for usernames and “select 2+ friends” is very small
 - b. Rationale: Users with mild visual impairment may find it difficult to read.
 - c. Fix: Increase the font size

Extra violations:

39. H3: User control and freedom / Severity 3 / Found by B
- a. Description: Users cannot move to sign in if they accidentally hit create new profile while having an existing account
 - b. Rationale: Users may hit create new profile accidentally
 - c. Fix: Add a back button on the create new profile page

40. H3: User control and freedom / Severity 2 / Found by B
 - a. Description: There is no way to go back to a previous screen during the onboarding tutorial
 - b. Rationale: Users may skip past a page unintentionally
 - c. Fix: Create back buttons during the tutorial

41. H10: Help and documentation / Severity 3 / Found by B
 - a. Description: There is no way to access to tutorial/explanation about beads and strings after initially signing up
 - b. Rationale: Users may want a refresher on how to use the app
 - c. Fix: Add a help button that takes users to this tutorial

42. H12: Inclusion / Severity 3 / Found by B
 - a. Description: It is compulsory for users to link to other social media profiles
 - b. Rationale: There may be users who are not on other social media who feel excluded. Additionally, requiring social media encroaches on users' privacy
 - c. Fix: Make this feature optional

43. H11: Accessibility / Severity 2 / Found by B, D
 - a. Description: The username and email id font (on the create your profile page) is very small
 - b. Rationale: Users with mild visual impairment may find it difficult to read.
 - c. Fix: Increase the font size

44. H3: User control and freedom / Severity 2 / Found by B
 - a. Description: Users can view, but not edit, their profiles
 - b. Rationale: Users may want to change their preferences
 - c. Fix: Give users the freedom to edit their profiles

45. H3: User control and freedom / Severity 3 / Found by B, D
 - a. Description: There seems to be no way to remove friends once they are added
 - b. Rationale: Users may want to remove certain friends
 - c. Fix: Create a remove friends option on the friends tab

46. H4. Consistency and standards/ Severity: 3 / Found by C
 - a. Description: The "accept" button when a friend adds you does not match the usual "accept/decline" pattern found in similar platforms.
 - b. Rationale: Inconsistent use of action buttons may confuse users who are accustomed to standardized friend request interfaces.

- c. Recommendation: Include both "accept" and "decline" options for friend requests.
47. H4 Consistency and Standards / Severity: 1 / Found by D
- a. Description: "sign in" button takes you to "login" screen
 - b. Rationale: Inconsistent language may mean users have to wonder whether they're doing what they mean to and therefore increases cognitive load
 - c. Fix: Pick either "sign in" or "login"
48. H4 Consistency and Standards/ Severity: 1 / Found by D
- a. Description: Welcome screen has "register" button but login screen has option to "sign up"
 - b. Rationale: Inconsistent language may mean users have to wonder whether they're doing what they mean to and therefore increases cognitive load
 - c. Fix: Pick either "sign up" or "register"
49. H8 Aesthetic and minimalist design / Severity: 2 / Found by D
- a. Description: Unclear what function of "music interests" in a users' profile is
 - b. Rationale: I would expect "music interests" to allow me to search for friends or for events by music genre, but there's not indication from the current interface that they do anything
 - c. Fix: Draw more attention to where in the interface "music interests" serve a purpose
50. H4 Consistency and Standards / Severity: 1 / Found by D
- a. Description: Jarring transition from "create profile", which is an overall dark screen, to "confirm profile", which is an overall light screen
 - b. Rationale: "confirm profile" breaks from established theme, which before this point had been exclusively dark background colors. Not an inherently bad choice, but breaking from the visual theme in this way doesn't communicate anything significant to the user.
 - c. Fix: Change the "confirm profile" screen to fit established theme
51. H11 Accessible Design / Severity: 2 / Found by D
- a. Description: "Spotify", "Instagram", and "add your current favorite track" icons hard to see b/c of black text against dark gray background
 - b. Rationale: Hard-to-read icons may lead to unnecessary errors, especially for visually-impaired users
 - c. Fix: Lighten button background color or text color

52. H11 Accessible Design / Severity: 2 / Found by D

- a. Description: “confirm profile” has hard-to-read white text on light background
- b. Rationale: Hard-to-read text makes it harder for visually impaired users to use the app. This may lead to additional errors for visually impaired users, especially so on a confirmation screen that is meant to prevent errors
- c. Fix: Change background of “confirm profile” to match established theme, or make text color darker

All Tasks

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

- a. Description: Confirmation screens sometimes use “confirm” button (e.g. confirm profile) and sometimes use forward arrow (e.g. confirm image selection)
- b. Rationale: Inconsistent language may confuse users
- c. Fix: Pick Forward arrow for all interactions or use “confirm” button for all confirmation screens

54. H11 Accessible Design / Severity: 2 / Found by D

- a. Description: smallest font size is too small
- b. Rationale: Most of the small text takes place in error messages, which will make it harder for users with impaired sight to correct mistakes
- c. Fix: Increase font size for
 - i. Error messages (see problem #18)
 - ii. My Profile: user’s email and username
 - iii. Add Friends: search bar, “added me”, name and username on friend cards, “accept”, “add friends”, “add”
 - iv. Community: Location, date, “x friends are going” in event cards
 - v. Add events: location, date in event card

55. H9 Help users recognize, diagnose, and recover from errors / Severity: 2 / Found by D, C
- a. Description: Font size for error messages is too small
 - b. Rationale: Error messages should draw users eyes so they can quickly diagnose and begin fixing issues
 - c. Fix: Increase font size + optionally change font color for
 - i. Login Screen: “Don’t have account? Sign up”
 - ii. My Friends: “no friends :(“
 - iii. My Events: “no events, add some to get started”

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	0	1	1	3
H2: Match Sys & World	0	1	0	0	0	1
H3: User Control	0	0	4	2	0	6
H4: Consistency & Standards	0	6	2	1	0	9
H5: Error Prevention	0	1	2	2	0	5
H6: Recognition not Recall	0	0	1	1	0	2
H7: Efficiency of Use	0	1	3	2	0	6
H8: Minimalist Design	0	2	3	0	0	5
H9: Help Users with Errors	0	0	4	0	0	4
H10: Help & Documentation	0	0	1	1	0	2
H11: Accessible	0	1	8	0	0	9
H12: Value Alignment & Inclusion	0	0	0	3	0	3
Total Violations by Severity	0	13	28	13	1	55

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	100%	100%	100%	100%
Sev. 1	30.77%	30.77%	23.08	53.84615385

Ex: Eval A count / total sevs 1 in table #3				
Sev. 2 Ex: Eval A count / total sevs 2 in table #3	21.43%	50%	39.28	57.14285714
Sev. 3 Ex: Eval A count / total sevs 3 in table #3	15.38%	69.23%	30.76	38.46153846
Sev. 4 Ex: Eval A count / total sevs 4 in table #3	0%	100%	0%	100%
Total (sevs. 3 & 4) Ex: Eval A = sum(sev 3: sev 4 counts) / sum(sev 3: sev 4 in table #3)	14.29%	71.43%	28.57	35.71428571
Total (all severity levels) Ex: Eval A total sev count / total sevs (green cell) in table #3	21.82%	50.91%	32.73	50.90909091

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

5. Summary Recommendations

[merge the general recommendations you made here]

Great job with the medium fi prototype! We like the aesthetic design, layout, and color palette of your app – it feels true to the product and user base, without being super loud, and draws the user’s eye to important elements. We also think the overall design is really effective – the visualization of beads on a string as motivation to complete your task is great, and super on-theme for a festival app. Nothing was too text-heavy and overall the functionality felt pretty clear. We liked how you added pop-ups for some of the descriptions and felt like this could be utilized even more to make the app more intuitive and accessible for all users.

We have some high-level feedback from the heuristic evaluation. First, we think there are quite a few areas where the font size is too small to read – we’ve pointed out specific instances in the list above. We also think that the ways in which friends and groups are created and maintained may get a little confusing – specifically, we think it should be possible to view and create groups from the ‘community’ tab. There were also some navigation issues, mostly in relation to being unable to click certain tabs in the ‘Community’ page. We also think that there could be some more clear ‘flags’ to guide the user, for instance telling them where to add friends, consolidating the “events” pages so there are fewer pages, and indicating more clearly to a user when a task flow has been completed (e.g. a done button on the “add friends” page).

For some more general comments, I think it gets confusing that I can only do tasks on the prototype in a specific order. For example, I can't log on and just do the group task. It also isn't possible to re-do a task without reloading and completing the sign in process again. Also, for people who aren't too immersed in rave culture, you could take it a step further when it comes to explaining rave terminology– for example, we liked the idea of having the pop-ups explaining what different tasks mean, and think that this could have been utilized even more.

Overall, I think this is a great prototype, and I'm excited to see the next stage!

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.