Heuristic Evaluation of Jamalot

1. Problem:

Jamalot is a web-based platform for musicians to find, join, and host group jam sessions to practice their instruments together based on the users' locations and/or skill levels.

2. Violations Found:

1. **[H2-2 Match between system and the real world] [Severity 2] [A, D]**
   When creating a profile, it is not clear that the picture icon at the top of the page is a button. While users may recognize the symbol for an image, there is nothing indicating that they can click the image symbol to add their picture. Consider adding a "+" sign or some other text to help users understand what the icon is for.

2. **[H2-2 Match between system and the real world] [Severity 2] [A]**
   When creating a profile, there are checkmarks beside the typing boxes for YouTube, SoundCloud, and Vimeo. It's unclear what these checkmarks mean, especially since they're present before the user even starts typing. Consider showing these checkmarks in response to some action from the user (e.g. only after the user has entered a valid URL), or removing them if they don't have a true purpose. Consider also adding **+** buttons to input additional links

3. **[H2-2 Match between system and the real world] [Severity 2] [A, B]**
   On the page where users edit their profile, it is unclear how the "Home" button in the top right corner relates to the "Save" and "Skip" buttons at the bottom. Is clicking "Home" equivalent to clicking either "Save" or "Skip"? Currently, users don't know whether their profile changes will be saved when they click "Home". Furthermore, this button seems redundant because the buttons at the bottom already give users two clear options for advancing to the next screen. Consider removing the "Home" button from this screen.

4. **[H2-2 Match between system and the real world] [Severity 1] [A]**
   When entering details for a new jam, the "Submit" text on the button may be unclear in this context (i.e. where are we submitting to?). Change the text to something with a clearer call to action, like "Schedule my jam!" or "Post my jam!"

5. **[H2-2 Match between system and the real world] [Severity 1] [A]**
   Some timeframes for upcoming jams are phrased awkwardly (e.g. 7 day, 3 day 2 hr). These

don't match the conventions used in everyday language. Use correct pluralisation to make the language feel more colloquial (e.g. 7 days, 3 days 2 hrs).

6. **[H2-2 Match between system and the real world] [Severity 2] [A, D]**
The circles beside each jam on a user's Jam History appear clickable (like the circles inside the Reminders app on an iPhone). In addition, this same format is used to display past jams when the user is creating a new jam; in this context, the items are, in fact, clickable. As a result, users might be confused and attempt to click on past jams on the profile page. Unless this is a desired feature that hasn't yet been implemented, consider using a different icon so users don't attempt to click on past jams.

7. **[H2-3 User Control & Freedom] [Severity 3] [A, B, C]**
Some pages are missing the ability to navigate back to the previous page. In particular, there is no way to return to the Confirmation Page from the Group Chat, potentially leaving users stranded on a subpage. Cancelling a jam ejects you back to the map instead of 1 level back as it should. Include consistent back-navigation on every page.

8. **[H2-4 Consistency & Standards] [Severity 2] [B, C, D]**
There are multiple methods for navigating back to the previous page. Subpages one level down use the home button; subpages two levels down use the back arrow; and the Jam Sesh details page uses a purple "Back to Browse" dialogue button. Users may be confused by these different methods and symbols for the same function. Choose a single method of back-navigation, and include it on every page.

9. **[H2-4 Consistency & Standards] [Severity 2] [B, C, D]**
The "Jamalot" button in the upper-left is inactive on some pages, but has been activated on others as a link to return to the home page, which is possibly redundant with the home button in the upper-right corner of the screen. Users may be confused by having one button with two different functions and two buttons that share the same function. Unify the display and function of these navigation buttons to be consistent from page to page. Make the Jamalot button in the upper-left a little larger and make it link to the home screen from every page. Possibly move the back button next to it (and be sure to implement it on every page).

10. **[H2-8 Aesthetic and minimalist design] [Severity 2] [B]**
The big profile picture on the home page made me confused as to the function of the page at first. Maybe you could minimize the size of it and put it in the upper right corner along with the profile button. Put the profile image in the upper right corner (as the "go to profile" button, instead of the current icon), and implement it on every page

11. **[H2-4 Consistency & Standards] [Severity 3] [B, C]**
There is no way to access the messages from the direct messenger feature, and no easy way to navigate to the group chat. Add a messenger icon in the upper right corner next to the

profile photo on every page, and also add a group chat icon on the details page for each jam session.

12. **[H2-5 Error prevention] [Severity 3] [B, D]**
Users might accidentally click to delete or leave a jam. Rather than immediately taking them back to the home page, show a dialog box to confirm that they really want to delete/leave. If they say yes, then take them back one screen (rather than all the way back to the home page) and display a confirmation message.

13. **[H2-4 Consistency and standards] [Severity 2] [A, C, D]**
On a few different screens, there is one element that seems to unnecessarily use a different font colour. On the home screen, the "Go to Profile" label is in light grey while the rest of the text is black, blue, or white. This also makes it difficult to read because the background of the button is also light grey. Consider using the darker colour that's currently used for the drop-down menus (which have the same grey background) on the Browse Jams screen. Similarly, on the jam overview screen, the "Note from Kayla" is grey while the rest of the text on the screen is either black or white. Change this text to black, since the smaller font already distinguishes it from other text on the screen.

14. **[H2-4 Consistency and standards] [Severity 1] [A]**
Each musician's profile page uses a combination of first-person and third-person point of view. For example, John's profile page contains both "About Me" and "John's music". Choose one point of view and use it for all labels on the page.

15. **[H2-4 Consistency and standards] [Severity 2] [A, B, C]**
When users click on an upcoming jam vs. click on a new jam, the screens are different but should be displaying the same information. For example, when users click on an upcoming jam, the next screen has a button at the bottom saying "Not Attending Anymore". When users click to join a new jam, the button at the bottom says, "Cancel". These buttons are presumably meant for the same thing (i.e. to leave a jam that you previously joined), but users might be confused by the different terminology. Use "Not Attending Anymore" as the label for both buttons. More generally, use the same format/information on both pages.

16. **[H2-4 Consistency and standards] [Severity 2] [A]**
On the screen confirming that users have joined a jam, blue text appears to indicate clickable links while black text indicates static information. However, it's unclear why "5mi from your current location" is in blue while "Get directions" is not. As a result, users might be confused about what they can/cannot click on. Resolve this by making all clickable text blue and all other text black. Additionally, the calendar and notification icons have links beside them ("Add to calendar" and "Notify me via text", respectively), while the location icon does not. For consistency, considering putting "Get directions" beside the location icon, instead of in the middle of the screen.

17. **[H2-5 Error prevention] [Severity 2] [A, C]**
In a few places, the text in typing boxes could be used to indicate which format should be used to input information. When entering details for a new jam, for example, the "Time" box doesn't indicate which format to use (e.g. 12:00 vs. 12pm). The same issue could occur with URLs when users are creating their profile, or with phone numbers when users elect to be notified via text about upcoming jams. In each case, the sample text in the box could be used to illustrate the expected format (e.g. replace "Your phone number" with (111) 222-3333).

18. **[H2-5 Error prevention] [Severity 2] [A]**
The "Skip" button is right beside the "Save" button on the page where users edit their profile. This makes it easy for users to accidentally click "Skip" when they intended to click "Save". To avoid users inadvertently losing data they've entered into their profile, the application could present a dialog box alerting users of any unsaved changes when they click "Skip".

19. **[H2-5 Error prevention] [Severity 2] [A, D]**
When entering details for a new jam, mandatory fields are not marked. As a result, users don't know which fields are required and which are optional. We might expect the "Note to Jammers" to be optional, for example, but date and location would presumably be mandatory. Mark mandatory fields with an asterisk, or some other indicator, so users know which fields must be filled in before they click "Submit".

20. **[H2-7 Flexibility and efficiency of use] [Severity 3] [A]**
When creating a new jam based on a past jam, the interface goes straight to the jam overview screen. It does not allow users to select the date, time, or location of the new jam (you have to click "Edit" to go back and change these details). Experienced users are likely to want to replicate some information from a past jam (e.g. genre and experience level) while changing other information (e.g. location). Add a screen similar to the details screen for a brand-new jam, but with the fields pre-filled with information from the past jam.

21. **[H2-7 Flexibility and efficiency of use] [Severity 2] [A]**
When viewing nearby jams, the user's current location is automatically detected. Although the options at the top allow users to filter by distance, advanced users might want to look in an entirely different location. The interface could support this by allowing users to drag the "Your Location" pin to a different place on the map to view jams in other areas.

22. **[H2-8 Aesthetic and minimalist design] [Severity 2] [A, B, D]**
After users join a jam, the purple background on the "Confirmation" screen distracts from the information about the jam. It's also inconsistent with the colours used for the rest of the interface. Furthermore, the circle in the center seems out of place and breaks the grid structure of the page. Consider using a more subtle background (similar to that used on other screens).

23. **[H2-8 Aesthetic and minimalist design] [Severity 1] [A, B]**
On the screen for entering details about a new jam, some labels are beside the input boxes while other labels are on top. This makes it harder to scan the page because our eyes have to jump around on the page to find the different labels. This could be resolved by placing all labels in the same location relative to their respective input boxes. Alternatively, the label placement could be consistent within each column (i.e. for the last column, put both labels on top of the input).

24. **[H2-3 User control and freedom] [Severity 2] [B]**
It's not the best strategy to require a person to log in on the first screen they see. I would recommend that you put it off until it is absolutely vital and allow people to use the site without being logged in until they start hosting or joining a jam. Ask people to log in/sign up right after filling out Jam details when creating or when clicking join

25. **[H2-7 Flexibility and efficiency of use] [Severity 3] [B, C, D]**
The site does not fit onto a single landscape web page. Instead, users have to scroll down for each of the interactions on multiple pages. Adjust the size and spacing of items to fit onto a single landscape panel wherever possible, and test on multiple browsers.

26. **[H2-7 Flexibility & Efficiency of Use] [Severity 2] [C]**
The Confirmation Page has the convenient feature to notify participants via text, but asks them to input their phone number each time. This could lead to redundant work for users, since this is likely to be a frequent action while their phone number is unlikely to change. Instead, store their phone number in their profile (and keep it private if there are any such concerns).

27. **[H2-6. Recognition rather than recall] [Severity 1] [D]**
In the group chat every name is in gray and every bar of text is white, which makes it difficult to tell who is saying what in the group chat. It would be a lot easier if the group chat were color coordinated so that every message sent by Kayla was a different color than messages sent by Vey or other people. This way one can instantly recognize who sent each message rather than having to remember or having to look back through the messages

28. **[H2-7. Flexibility and efficiency of use] [Severity 1] [D]**
When I first launch the app and click sign up to create an account, there should be an option to sign in with Facebook or Google credentials. No one likes spending time typing in information, so this will make it a faster and easier process.

29. **[H2-4. Consistency and standards] [Severity 2] [D]**
On John's profile, there is a section of his Jam history, but on my profile (Kayla's profile) this section is missing. It should be consistent across the board, so that every user can also recall what jams they have been to.

30. **[H2-7 Flexibility and efficiency of use] [Severity 2] [B]**
   Supposing I see no other jams on the map around me, I might want to create my own jam immediately. Add a "Create your own" button below the "My location" pin on the map

31. **[H2-6 Recognition rather than recall] [Severity 1] [B]**
   On the songs interface, it's unclear how to play/pause songs since there are no buttons. Add interactivity buttons on the music player.

32. **[H2-2 Match System & World] [Severity 2] [B, C, D]**
   On the Confirmation Page, "Join the group chat" is an unclear and slightly misleading label. Change the button to simply read "Group Chat". That said, enrolling in an ongoing group chat is not necessarily a bad idea: consider adding a "Subscribe to text notifications" button or similar feature on the Group Chat page.

33. **[H2-3 User Control & Freedom] [Severity 4] [C, D]**
   There are no "logout" buttons on the site. Users may be concerned about privacy or security without this option. Place a logout button in the same place on each screen, probably at the upper-right next to the home and profile buttons.

34. **[H2-4 Consistency & Standards] [Severity 1] [C, D]**
   The "Join a Jam" and "Host a Jam" buttons display text in different font sizes. This inconsistency could be mildly distracting for users. Change them to both display in the same font size.

35. **[H2-4 Consistency & Standards] [Severity 2] [B, C]**
   The "Circle" of a jam session is a beautiful metaphor, but the **+person** button is redundant with the "Join" dialogue button. It may be confusing for users to have multiple buttons for the same function. Just eliminate the **+person** buttons and leave empty circles. Furthermore, it would help to differentiate the person who created the jam from others who simply joined.

36. **[H2-7 Flexibility & Efficiency of Use] [Severity 2] [C]**
   While I like your option to copy the details of a past jam for creating new events, it seems that this list could get quite long for a frequent user. A "Use Default Settings" option could save time and simplify the process for hosting new events.

37. **[H2-8 Aesthetic & Minimalist Design] [Severity 1] [C]**
   The lonely-looking solo accordion player on the signup page has the opposite implication of a group jam session. Reconsider images that do not speak to the motivations of the site and/or its users.

38. **[H2-8 Aesthetic & Minimalist Design] [Severity 1] [B]**
    The manual genre entry option on create new jam is too small to read. Make the font size bigger so it's easier to read.

39. **[H2-2 Match between system and the real world] [Severity 1] [D]**
    On the "create a jam" page, the skill level options are in order from experienced to beginner. This is counterintuitive and should be in order from beginner to experienced.

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]	0	0	0	0	0	**0**
[H2-2: Match Sys & World]	0	3	5	0	0	**8**
[H2-3: User Control]	0	0	1	1	1	**3**
[H2-4: Consistency]	0	2	7	1	0	**10**
[H2-5: Error Prevention]	0	0	3	1	0	**4**
[H2-6: Recognition not Recall]	0	2	0	0	0	**2**
[H2-7: Efficiency of Use]	0	1	4	2	0	**7**
[H2-8: Minimalist Design]	0	3	2	0	0	**5**
[H2-9: Help Users with Errors]	0	0	0	0	0	**0**
[H2-10: Documentation]	0	0	0	0	0	**0**
Total Violations by Severity	**0**	**11**	**22**	**5**	**1**	**39**

4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D
sev. 0	0	0	0	0
sev. 1	36%	27%	18%	36%
sev. 2	45%	45%	41%	41%
sev. 3	40%	80%	60%	40%
sev. 4	0	0	100%	100%
total (sev. 3 & 4)	33%	67%	67%	50%
total (all severity levels)	46%	44%	38%	41%

5. Summary Recommendations

Overall, the fonts, colours, and icons were quite consistent across all screens, which made it easy to explore the interface. In particular, the use of colour was extremely effective. Most backgrounds were grey, while most text was white or black. This made the coloured elements, like the purple buttons and blue link text, really stand out. Many of the violations noted above involve minor changes to further improve consistency of colours, icons, and layout.

Navigation was another major theme across the violations we found, such as difficulty returning to previous pages, exiting from windows without causing errors, etc. Thoughtful labels on dialogue buttons and consistent placement of navigation buttons on every screen will alleviate most of these problems. A particular issue is with the layout size, which requires laboriously scrolling up and down on pages that should fit into a single window and flow seamlessly from one to the next. Resizing this will be key to the ease of using the final prototype.

In addition to the changes mentioned above, we would recommend tweaking the background of some screens to make the content easier to read. We noticed that most screens had a circle in the middle, like the center of a record. Although we appreciated this ongoing motif, there were a few screens where the circle in the middle disrupted the grid structure and felt out of place. We would suggest either making the circle a bit more subtle or repositioning it relative to the rest of the content on the screen.

Overall, we think this group did a great job and can't wait to see their hi-fi prototype!

APPENDIX

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