

## Heuristic Evaluation of [Ox]

### 1. Problem

OX is an app designed to combat the difficulty of choosing music that will please all members of a group by curating playlists based on shared music tastes among group members.

### 2. Violations Found

1. **H10 Help and documentation -- Severity: 4 -- Found by: A/B/C/D**

The chart on the Common Ground page is unclear. I know it is probably not developed, but even if it had meaning, I still have absolutely no idea as the user what that meaning could be. There is no documentation on what the coordinates or colors mean.

Fix: Add at least a title to the chart and then add a modal or something when the chart is clicked on that includes a labeled grid and a color key code

2. **H6 Recognition rather than recall -- Severity: 2 -- Found by: D**

On the Common Ground page, the two people are shown at the top. However, if a person does not have a profile picture or the user can't recognize someone from just the picture, there is no name label or anything else explicitly reminding the user whose common ground page they are looking at.

Fix: Add name labels

3. **H3 User control and freedom -- Severity: 3 -- Found by: B/D**

When creating a new group, it is very clear how to add members but there is no way to remove them.

Fix: Add an (x) button on each person

4. **H4 Consistency and standards -- Severity: 2 -- Found by: A/B/C/D**

The colors used in Common Ground starkly contrast the colors used in the rest of the app. Feels unmotivated and inconsistent.

Fix: Use the same color scheme

5. **H3 User control and freedom -- Severity: 4 -- Found by: A/B/C/D**

In general, there are no back buttons. This was mentioned in the slides, but even non-functional back buttons would have been beneficial to give the impression that the functionality would be added later.

Fix: Add back buttons, remember screen/state stack

6. **H3 User control and freedom -- Severity: 2 -- Found by: D**

There is no log out button. In this app I think it is rare someone would want to log out or deactivate their account, but it should be an option.

Fix: Add a logout button in the upper left or in a hamburger menu

7. **H4 Consistency and standards -- Severity: 1 -- Found by: D**

Hexagon shapes appear to be used both for vibes in the listening party section and for song attributes in the profile section. Because shape choices seem deliberate, the fact that the same shape means different things is potentially confusing.

Fix: Use a different shape
8. **H1 Visibility of system status -- Severity: 2 -- Found by: C/D**

“Shake it up” does not clearly represent what the app is about to do when finding overlapping music tastes.

Fix: Perhaps add a “find overlap” or something
9. **H2 Match between system and the real world -- Severity: 1 -- Found by: B/D**

In a music app, most people associate a search icon with searching music. The search icon does not do this but actually searches people.

Fix: Change the icon, perhaps have the magnifying glass contain the person silhouette.
10. **H5 Error prevention -- Severity: 2 -- Found by: D**

Now because of Wizard of Oz automatic input filling, they couldn't have had a possibility for error in their med-fi prototype. However, when adding a friend to a group, some of the people who were already in the group appeared in the search. There could have been duplicate members.

Fix: Filter out friends already in the group.
11. **H10 Help and documentation -- Severity: 3 -- Found by: B/D**

On the primary page, the one with the “Hop on the OX” button, there are six people listed at the top. Perhaps an experienced user has learned that the app picks the people nearby, but the app itself provides no way to understand why these are the six people being seen.

Fix: Add a label saying “nearby OXers” or whatever cute thing you call your users
12. **H4 Consistency and standards -- Severity: 1 -- Found by: D**

Three of the four main pages have a title on the top bar but the page with the search icon has a search bar.

Fix: Add a title to the page with the search bar.
13. **H1 Visibility of system status -- Severity: 2 -- Found by: D**

In the page with the search bar, it is not clear what the point of the searching is. There is nothing on the screen reminding you that you are searching through users.

Fix: Add an informative title to the top bar. Something like “Find Common Ground” but catchier.
14. **H3. User Control and Freedom -- Severity: 3 -- Found by: A**

On the first page, titled “Build Your Group”, there is no option to search for a profile or a certain vibe. In addition, once clicking on a user to add to a group, there is no way to

remove them from the suggested “Build Your Group” page.

Fix: Add a search option and undo/redo option for the “Build Your Group” page.

**15. H7. Flexibility and Efficiency of Use -- Severity: 2 -- Found by: A**

There is no back button or restart button for the current song that is playing. This bar features a play button, forward skip button, and the song name but no back or restart button. This layout implies that the user will have to relocate the song in the playlist in order to play it again or restart it.

Fix: Add a back option for the user to replay a song to allow more efficient interaction with the current song playing.

**16. H8. Aesthetic and Minimalist Design -- Severity: 3 -- Found by: A/B**

The shared screen “You and \_\_\_\_\_” features a wide variety of songs or artists that both of the users listen to. However, all of this information is very cluttered and hard to digest.

Fix: Perhaps organize all the different shapes into a grid format or more organized fashion. By doing so, the user may be able to more easily see shared or different music preferences.

**17. H8. Aesthetic and Minimalist Design -- Severity: 2 -- Found by: A**

The shared screen “You and \_\_\_\_\_”, it is titled “You and \_\_\_\_\_” as well as labeling the profile pictures.

Fix: Either pick the top label “You and \_\_\_\_\_” or just label the profile pictures.

**18. H4. Consistency and Standards -- Severity: 2 -- Found by: A**

In the shared screen “You and \_\_\_\_\_”, there isn’t a distinction between the circles that represent artists versus the circles that represent the personal profiles.

Fix: Perhaps bold the profile circles and name labels or utilize a different shape in order to provide that extra level of distinction.

**19. H6. Recognition rather than Recall -- Severity: 3 -- Found by: A**

In the user’s profile, there is a section labeled “Past listening parties”. In this section, there are the profile icons and albums related to each listening party. However, there are no labels indicating which listening party is involved.. This can be confusing if the user is familiar with the groups that they have made.

Fix: Add names to the icons and listening parties in this section so the user does not have to recall each listening party

**20. H2. Match between System and Real World -- Severity: 2 -- Found by: A**

Throughout the application there are “listening parties” versus “groups”. However, it can be confusing if “listening parties” symbolize playlists or groups.

Fix: Perhaps change the terminology so that it is consistent throughout the app or find a way to represent the difference between a “listening party” and a “group”.

**21. H4. Consistency and Standards -- Severity: 2 -- Found by: A**

In the “Groups” section under “the ladiessss”, there are the different categories of vibes

and a discover button. Like the home page, I tried to click on a vibe and press discover. However, only pressing discover was allowed.

Fix: Make sure to keep this feature consistent across the home page and group pages.

**22. H3. User Control and Freedom -- Severity: 3 -- Found by: A**

In this demo, there was no way to interact with the song. For example, moving to a different part of the song. You can see how much of the song is being played, but there isn't a way to interact with it.

Fix: Add a way to interact with the song bar in order to add more user flexibility. Perhaps draw inspiration from the spotify view of the current song playing.

**23. H8 Aesthetic and minimalist design -- Severity: 1 -- Found by: A/C**

When reading the songs on the "Discover" page of the "Groups" portion of the app, it was a bit confusing to have the song and artist name be the exact same font and only separated by a vertical line. May reach into the design principles of the class but users may experience difficulty or minor frustration parsing the strings.

Fix: Differentiate the song title and artist even more.

**24. H4 Consistency and Standards -- Severity: 2 -- Found by: B/C**

This was also mentioned in studio but the music playbar takes different positions on the screen, depending on where in the app the user is. Within the "Groups" portion, it was on the bottom. In the music overlap screen, it is on the top. Users may find this disorienting, as some may expect the bar to maintain its position and appearance throughout the app.

Fix: Have the playbar in the same position across the app.

**25. H3 User Control & Freedom -- Severity: 4 -- Found by: C**

When in the music overlap screen, I was unable to tap on the profile icon. However, from anywhere else on the app, I was. This seems like a perfectly reasonable navigation pattern from a user.

Fix: Allow the icons to be pressable from anywhere on the app.

**26. H8 Aesthetic and minimalist design -- Severity: 1 -- Found by: C**

It is unclear as of now what the different colors of hexagons refer to on the profile screen. For example, why is "valence" darker than "tempo"? Some communication as to the purpose of these shades would be nice.

**27. H2 Match between system and the real world -- Severity: 2 -- Found by: B/C**

It is pretty opaque as to what different percentages refer to with regard to someone's music taste. What does it mean for someone to have 30% energy in their music taste? Is that mutually exclusive from "tempo" or "loudness" as it seems to take away from those categories. It is a very interesting and powerful portion of the app, though the current number system may confuse users.

Fix: Revise the music taste portion, or at least the percentages, to be more meaningful to users.

**28. H4 Consistency and Standards -- Severity: 1 -- Found by: C**

I noticed on many screens that there were no borders on artist, album or user images. However, there are some on the profile screen, such as with the “Your top picks” images. It gives the app an inconsistent feel.

Fix: Decide if images will or will not have borders or a consistent pattern of them, such as borders for albums but not listening parties. Though the latter may still feel inconsistent.

**29. H3 User control and freedom -- Severity: 2 -- Found by: B**

When viewing the list of songs generated from the group, I was looking for a button to add or delete songs as well. I think it would be helpful to allow users to have flexibility to add songs that they may have not included in their own profile originally.

### 3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status	0	0	2	0	0	<b>2</b>
H2: Match Sys & World	0	1	2	0	0	<b>3</b>
H3: User Control	0	1	1	3	2	<b>7</b>
H4: Consistency	0	3	4	0	0	<b>7</b>
H5: Error Prevention	0	0	1	0	0	<b>1</b>
H6: Recognition not Recall	0	0	1	1	0	<b>2</b>
H7: Efficiency of Use	0	0	1	0	0	<b>1</b>
H8: Minimalist Design	0	2	1	1	0	<b>4</b>
H9: Help Users with Errors	0	0	0	0	0	<b>0</b>
H10: Documentation	0	0	0	1	1	<b>2</b>
<b>Total Violations by Severity</b>	<b>0</b>	<b>6</b>	<b>13</b>	<b>6</b>	<b>3</b>	<b>29</b>
<b>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)</b>						

#### 4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
sev. 0	0	0	0	0	-
sev. 1	1	1	3	3	-
sev. 2	6	4	4	6	-
sev. 3	4	3	0	2	-
sev. 4	2	2	3	2	-
<b>total (sev. 3 &amp; 4)</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>5</b>	-
<b>total (all severity levels)</b>	<b>13</b>	<b>10</b>	<b>10</b>	<b>13</b>	-

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

#### 5. Summary Recommendations

The majority of violations found dealt with limitations and inconsistencies of the current design. Since this is still a medium fidelity prototype, issues regarding system status and error prevention are not yet as relevant as aesthetic and consistency.

The team already mentioned in their slides that they need back buttons, so I won't spend any time talking about that. Instead, I think the primary thing OX needs to improve on is making sure the user understands what they are looking at. While OX certainly has no violations of H8, their minimalism occasionally comes with loss of clarity. This falls under visibility of system status, match between system and the real world, and help and documentation. To choose a primary pain point: I find the search page particularly confusing.

The search icon is incredibly common and is featured in every app that has a database. As I mentioned above, as a user of music apps myself, I assumed search would be for searching through songs rather than for people. First, OX needs to make it clear what this search is looking through. I believe they can do this by changing the icon to be more clear. Second, OX needs to make it clear what the search is looking for. I think adding a title to the top bar and adding the search bar below will both restore consistency with the rest of the app and give OX an opportunity to remind the user what this feature does. The end goal is, it seems to me, to get to a Common Ground page, so perhaps that is the title.

One more improvement regarding clarity that OX can make is just making sure every shape has meaning and consistency. Circles are used for profiles of users and artists and hexagons are used for vibes and music qualities (profile page). I'd say this is less important as I was still able to understand the meanings, but it is something to keep in mind.

In addition, some of the information displayed was confusing and could be improved on. The breakdown of personal music interest was confusing because it was uncertain what the sliding scale was based on. It would be helpful if there was something that denoted exactly what each % meant.

Product identity, particularly with the icons, phrases and color is strong, save for the loud teal background of the music discover page. With those phrases, however, the meaning may be lost to some users, particularly with the phrase “Shake it up.”

Finally, there is a lot of potential with the color graph and music taste profiling that has not been done successfully as of yet. Their current iterations seem to be placeholders, yet I am very excited to see where they go.

### ***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