

Heuristic Evaluation of [ChoreoLab]

1. Problem

We are evaluating ChoreoLab, a mobile application in which users contribute choreography snippets to create an entire dance composition.

2. Violations Found

1. **[H2-1 Visibility of System Status] [Severity 3] [Found by A, B, C, D]**
 - The globe tab is not highlighted as it is when the user is using other functions (as the “+” tab is highlighted when creating a project, for example). Users may be confused about where they are and how to get back to this screen when on another tab.
 - FIX: Highlight the globe icon tab when on the discover screen.
2. **[H2-2 Match between system and the real world] [Severity 3] [Found by B, D]**
 - The world icon in the lower left hand corner, when clicked, brings you back to home screen of the feed of videos from nearby and featured. The exact same world on Facebook is where notifications appear. This is very confusing for users who are also users of Facebook, since this world icon signifies something else in a very popular application.
 - FIX: Change globe icon to a house icon since it’s the home screen.
3. **[H2-4 Consistency and Standards] [Severity 3] [Found by A, B, C]**
 - The top bar says “ChoreoLab” on discovery tab when top bar says “Record” on the “+” tab. Users may be confused because they expect some sort of specific, didactic heading when on the discovery tab. (This is bad throughout all three tasks. Make the heading more specific!)
 - FIX: Replace “ChoreoLab” with “Discover.” (You’ll have to find a new place to write “ChoreoLab,” though. Perhaps a loading screen?)
4. **[H2-4 Consistency and Standards] [Severity 2] [Found by B]**
 - On the choosing song screen, the top bar is misleading with the “RECORD” caption at the center of the header. I feel like I can click it and it will start recording something because on other screens, the word “RECORD” is underneath clickable objects like the red dot that signifies recording the video.
 - FIX: It shouldn’t be clickable, so maybe the wording should be changed to “NEW PROJECT”
5. **[H2-8 Aesthetic and Minimalist Design] [Severity 2] [Found by A, C]**

- The info that pops up once I click a video to view in discovery is very small. Users may misclick “back” or “view” because they’re so close together. Users may also have difficulty reading the information on that small card.
 - FIX: Increase the size of the card when the video is clicked (this will allow you to not bring the user to a completely new screen yet).
- 6. [H2-8 Aesthetic and Minimalist Design] [Severity 1] [Found by A]**
- When viewing a video, the creator’s name is above and the contributors’ names are below. This takes up a lot of space that isn’t necessary for the amount of information given.
 - FIX: put the creator down with the contributors but put a * next to her profile photo to show her importance.
- 7. [H2-4 Consistency and Standards] [Severity 2] [Found by A]**
- The plus button, when clicked, only prompts the user to create a new project. But it is highlighted when contributing to an existing one. This may confuse users who want to *continue* contributing to a project that they’ve already worked on a bit when if they try to find their videos there.
 - FIX: Make the “+” icon into the dancer of a silhouette to make it not only a creation screen, but a contribution screen.
- 8. [H2-3 Error Prevention] [Severity 3] [Found by A, B, C]**
- While allowing users to freely navigate backward and forward during content creation allows for an “emergency exit” to leave the unwanted state, it’s worth considering how content will persist during these navigations. For example, suppose I’m attempting the Create task. I set the start time, click next, set the end time, click next. Then, I record and click next. However, instead of clicking next, I click back three times. Does the video that I recorded persist? Does the end time I selected persist?
 - FIX: To prevent this situation, you should display a warning stating that a recording might be lost.
- 9. [H2-3 User control and freedom] [Severity 2] [Found by A, B]**
- When creating videos, there is no save button. If it is actually saved, tell the user that the work will be safe.
 - FIX: Related to the previous violation, allowing data to persist across Create views would help in this task flow.
- 10. [H2-5 Error Prevention] [Severity 3] [Found by A]**
- If a user simply doesn’t contribute or pass on a video, the video is stuck with her and cannot move on. This being a collaborative app, one user can ruin the process for all others.
 - FIX: Give creator of video ability to track and control who is currently contributing.
- 11. [H2-7 Flexibility and Efficiency of Use] [Severity 1] [Found by A]**
- Once a video is bookmarked, a user that has bookmarked many videos will have no way of seeing all marked videos in one place. Users that use the app heavily will want a good way to quickly search through all marked videos. (Same thing goes for any videos liked with the “heart” button.)

- FIX: Include a list of bookmarked videos to one of the existing pages or give it its own screen.

12. [H2-6 Recognition rather than Recall] [Severity 2] [Found by A, C, D]

- On the “set end time” screen, the visual is not very helpful with information. It is difficult for the user to get a *feel* for where she is in the song.
- FIX: Put the video above the noise tracker to ground the user more in the song and choreography up till her contribution. The user will understand where she is better. In addition, a slider bar with a defined start/end would help.

13. [H2-5 Error Prevention] [Severity 2] [Found by A]

- When passing on or broadcasting a video, there is no way to undo the action. Users may accidentally press broadcast and then be unable to recover quickly from their mistake.
- FIX: Option to change the visibility settings on your project at any time for the creator.

14. [H2-10 Help and Documentation] [Severity 2] [Found by A, B, D]

- The “broadcast” button could mean many things. Users may be confused about what it does and what its consequences are.
- FIX: Provide a first time explanation of the “broadcast” button.

15. [H2-2 Match Between System and the Real World] [Severity 2] [Found by A, D]

- The notifications tab is the only place to find videos to which users wish to contribute. The bell icon isn’t somewhere that all users would readily look to find a video sent to them.
- FIX: Have videos open for contribution under the “+” tab as well as the notifications tab. OR potentially on the “discover” page there could be unfinished videos that you could contribute to.

16. [H2-1 Visibility of System Status] [Severity 3] [Found by A]

- There is no place for a user to view a video that she has passed on. The user cannot stay updated of the status of the video.
- FIX: Give the user notifications of videos on which she has worked and allow her to view them.

17. [H2-9 Help Users Recognize, Diagnose, and Recover from Errors] [Severity 1] [Found by A]

- The interface allows the user to share the video without editing the project description. Users may accidentally share projects that have no description/title.
- FIX: Throw an error message at the user if they try to share a project without giving it a project description.

18. [H2-6 Recognition rather than Recall] [Severity 1] [Found by A]

- There is no way to preview the music on the new project page. Users may not easily recall all the songs even though knowing the rhythm and sound is very important to choreography.
- FIX: Add in a button for each song that allows for a 10sec demo.

19. [H2-7 Flexibility and Efficiency of Use] [Severity: 1] [Found by A, B]

- When deciding who can see the video, the drop-down button to decide public/friends/friends of friends is the only clickable thing. Users who are working quickly may want to have a larger clickable field.
- FIX Make “*public*” clickable so that users can quickly change who can see the video (Fitt’s Law stuff!).

20. [H2-3 User Control and Freedom] [Severity 1] [Found by A]

- Users can only choose “broadcast” OR “pass it to a friend.” Therefore, users cannot do both if they want to both broadcast and share a video.
- FIX: Allow both fields to be clicked. (This may not actually be an issue. I just don’t know the details of what broadcast does with the video.)

21. [H2-3 User Control and Freedom] [Severity 1] [Found by A]

- Once the user sets the time for her portion, she must come back to that screen to edit the length of her portion even if she wants to do more once she begins dancing. Users may lose their videos or waste time and accuracy switching between the time-set screen and the video-editing screen.
- FIX: Allow the snippet length to be changed on the video-editing screen.

22. [H2-3 User Control and Freedom] [Severity 1] [Found by A]

- Creator can only choose the first person to whom they pass the video. Users won’t ever have control of who contributes to their video.
- FIX: Allow creators the option of assigning every section of the song or letting each person choose who gets it next.

23. [H2-8 Aesthetic and Minimalist Design] [Severity 0] [Found by A]

- On the “set start/end time” screens, the goal (set time) and the directions (double tap) are on separate lines. Users will have to read both lines, if they read the smaller text at all, which takes too much time and too much space on the screen.
- FIX: Have it say “double tap to set start/end time” instead.

24. [H2-2 Match Between System and the Real World] [Severity 0] [Found by B]

- In many applications and websites, clicking the “title” at the top header brings you back to the homepage or the first page that appears when you open the app. The ChoreoLab header with the ChoreoLab text is static and unclickable, but I think it’s important to let users click this to return to the home screen/feed page since this is how many other applications are used.

25. [H2-1 Visibility of System Status] [Severity 2] [Found by B]

- There is no description for the videos on the homepage for whether they are ones that can be added onto by the user or if they are just finished ones that you can watch, comment on, and like. A more clear description or way of telling the user that only finished projects are on the homepage (or maybe you can add to them, still not sure) are what appears there.

26. [H2-4 Consistency and Standards] [Severity 0] [Found by B]

- I wasn’t sure which category to put this in, but I do believe that it goes here. The 2nd from the left icon in the footer is very confusing. (The box with lines) What is that? I know that it has yet to be implemented, but it still doesn’t immediately signify something like the plus, person, and bell icon do. Granted, I don’t know

what this page will be, but I do not immediately know what it will be because the icon is not recognizable.

- FIX: Make is an icon that is recognizable.

27. [H2-8 Aesthetic & Minimalist Design] [Severity 1] [Found by B]

- The “or” on the song-choosing screen is a poor color choice. It’s difficult to read because the color gray is too light, so if users don’t know that they are supposed to choose between picking a song from the list and importing their own song, it could be confusing.
- FIX: Make is a darker gray.

28. [H2-6 Recognition rather than Recall] [Severity 2] [Found by B]

- The song name and artist are split on the song-choosing page in a confusing way. The user must remember which column is song name and which is the artist. They’re separated in a strange way.
- FIX: Seems like it would be better to just list it as Hotline Bling by Drake.

29. [H2-7 Flexibility and Efficiency of Use] [Severity 2] [Found by B, D]

- After picking the song from the list, the next button appears in the upper right hand corner. It took me a while to figure out how to get to the next screen because I thought that just clicking the song I wanted, or double tapping, would bring me to the next screen. That is a more efficient way to get to the next screen. I don’t understand the reasoning to have to click on the song and then click on the next button in order to advance to the next screen.

30. [H2-8 Aesthetic & Minimalist Design] [Severity 1] [Found by B]

- The entire application has an off-white background with darker text and a very clean design. The sudden switch to an all black screen with electric blue/green sound waves to choosing the start and end to the song is jarring and made me feel like I left ChoreoLab and was using a different app.
- FIX: Maybe consistency in design here is better

31. [H2-1 Visibility of System Status] [Severity 1] [Found by B, C]

- The start/end times for the clip is confusing. Is 1:36 the elapsed amount of time since choosing the start time? Is it the actual timing in the song of where the clip ends? Or is it just where my portion of the video will end? This is quite confusing, especially for the first user who creates the ChoreoLab project.
- FIX: Make it clear to the user whether they are setting the amount of time for their video or the whole clip.

32. [H2-4 Consistency & Standards] [Severity 1] [Found by B, D]

- On the start/end times, it says to double tap to advance, but then a next button appears on the screen as well. This is confusing and it seems like the next button is unnecessary. In most cases, double tapping causes something to be edited, rather than saved - simple “Set” button would work well and be more visible. Also, I can see potential errors coming from tapping on the slider and causing it to move in the instant before the time is set. Choose a method to simplify/clarify this action.

33. [H2-5 Error Prevention] [Severity 1] [Found by B]

- On the “record” screen, the user should not be able to advance to the next screen until they have recorded something. It doesn’t make sense to go to the video editing page without the user recording a video.
- FIX: Throw an error message at the user.
- 34. [H2-1 Visibility of System Status] [Severity 1] [Found by B]**
 - The user is never instructed that the music will begin playing when they press record.
 - FIX: Tell the user that music will play when they begin recording.
- 35. [H2-1 Visibility of System Status] [Severity: 1] [Found by B]**
 - How does the user know where to start and stop the video on the video editing page? Is it supposed to align with when the music started? This is confusing and could lead to users just editing whatever portion of their dance that they liked rather than keeping to the set time that was specified before the recording stage.
 - FIX: Only allow users to make videos that are the length of the music portion they chose.
- 36. [H2-1 Visibility of System Status] [Severity: 1] [Found by B]**
 - The “public” button with the dropdown does not inform the user what the visibility setting is for. Is it for who can add to the video? Or who can view the video? Or both?
- 37. [H2-4 Consistency and Standards][Severity: 3][Found by D]**
 - “Passing it On” seems to be the same as sending a “Collab Request.”
 - FIX: The interface could benefit from having just one naming convention for asking someone to collaborate!
- 38. [H2-7 Flexibility and Efficiency of Use] [Severity: 2] [Found by D]**
 - When choosing to record a new choreo, there is no search function for songs, only a given set of choices and the option to “Import from Device”.
 - FIX: Have a way to quickly navigate information.
- 39. [H2-4 Consistency and standards] [Severity: 1] [Found by C]**
 - Violation: As we discussed in lecture, adding color to an element usually indicates that an action can be taken on that element while removing color from an element often indicates that an action can’t be taken on that element. This is especially true of text. On the back of the “funk” card element in the Discover view, there exist links labeled “BACK” and “VIEW.” I like the use of color on the “VIEW” link but feel that the absence of color on the “BACK” link implies that this action can’t be taken when, in fact, it can.
 - FIX: Most applications with cards that flip over to reveal additional detail don’t use any “BACK” button. Instead, the user can click anywhere on the card to flip it back over. If you feel strongly about keeping the “BACK” button, then use a left arrow that’s consistent with the back functionality in the rest of the application.

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]		4	1	2		7
[H2-2: Match Sys & World]	1		1	1		3
[H2-3: User Control]		3	1	1		5
[H2-4: Consistency]	1	2	2	2		7
[H2-5: Error Prevention]		1	1	1		3
[H2-6: Recognition not Recall]		1	2			3
[H2-7: Efficiency of Use]		2	2			4
[H2-8: Minimalist Design]	2	2	1			5
[H2-9: Help Users with Errors]		1				1
[H2-10: Documentation]		1				1
Total Violations by Severity	4	17	11	7		39

4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
sev. 0	1	2			
sev. 1	8	9	2	1	
sev. 2	7	7	2	6	
sev. 3	4	2	2	2	
sev. 4					
total (sev. 3 & 4)	5	3	3	2	
total (all severity levels)	26	24	10	11	

5. Summary Recommendations

Using the app, the biggest issue we encountered was when passing on (or not) a video. Something important to think about is how projects pass between users. One user can create problems for a project if s/he fails to contribute or pass on a video. Consider how one user's actions can affect the experience of others because the app is essentially collaborative. Perhaps an answer to this is giving the creator more oversight and control or there being a time limit on for each contributor before the project moves on. Along with this, users may not fully understand sharing and broadcasting videos. The basic function is simple enough, but the user interface should somehow explain the details of each (e.g. who sees a broadcast? can a contributor broadcast a video that is only visible to friends of the creator? can you "broadcast" and "pass to a friend")

simultaneously?). Also, the interface for creating a choreo snippet could be made more aesthetically pleasing and efficient.

On the initial discovery page, the options are “Featured” and “Nearby.” For an app designed to be done with friends or collaborators, it doesn’t give a section that highlights these key people in the user’s personal community. In addition, there isn’t clear, visual way to look at the past work that you’ve done or collaborated on.

Another issue that some reviewers had was with the audio editing and video editing process. While we understand that this was partly an issue with the app only being in a prototyping software, there are some aspects that need to be addressed. The most major problem was with setting the length of time for a project for the creator of the project. Is the music time being set for the total amount of time for the snippet or just the creator’s portion? Does the creator have any control over the length of snippets of people adding to the project? What if the user passes the project on and then the next person decides to finish the ChoreoLab by recording 2 minutes of dance? This is then only a two-person project.