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Heuristic Evaluation of [Rubato]

1. Problem

Rubato is a mobile application that allows users to create real-time communally curated playlists; Rubato's prototype allowed users to accomplish three tasks: create a communal playlist, update the playlist, and play songs from any event attended in the past.

2. Violations Found

- [H2-4: Consistency & Standards] [Severity 1] [Found by C, B] When inputting the name of a session, the text in the text field is grey. This grey is quite light and difficult to see and doesn't match with the other textfields in other parts of the prototype; I would recommend changing the text in this white text field to be black, to increase salience and stay uniform with the design.
- 2. [H2-2: Match System & World] [Severity 3] [Found by A, C] As soon as I click to toggle to a private session, it takes me to a screen to invite friends. However, it was jarring to move to the "invite friends" screen as soon as I toggled, and definitely interrupted the flow for creating a session and adding in the appropriate settings. It didn't match what I expected the flow to be! I would recommend moving this "invite friends" screen to after one clicks "create session", or even make it a pop up or an area that becomes unhidden within the settings, to result in a less jarring move.
- 3. **[H2-2: Match System & World] [Severity 4] [Found by C, E, A]** I'm not sure what "show controls" and "hide controls" means. Even playing around with the prototype does not seem to illuminate what exactly these two options mean; it's not language that I'm familiar with. I would suggest rephrasing these two options or adding an example of each option that becomes unhidden in the area underneath that setting once someone toggles on and off (or even a help icon next to it that pops up a useful example!).
- 4. **[H2-2: Match System & World] [Severity 3] [Found by C, E]** I didn't realize that the lefthand picture was not the album cover of the song, but the picture of the person who added it to the playlist. While I like the idea of accountability while creating a communal playlist, this is still jarring from a design perspective, because I expect that lefthand picture to be the album cover. Perhaps if you make all the user icons circular and keep those user icons circular, while keeping the album cover square, kind of like a record cover, it would be helpful! (I see belatedly that the album cover is at the bottom left hand corner -- this was not something I immediately noticed).

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5. [H2-6: Recognition not Recall] [Severity 2] [Found by B, C] I wouldn't have expected to click on the album cover to get to the song control; I would have expected that to take me to other songs in the album. This could be fixed by making it so controlling the functions of a song pops up not if you click on the album cover, but having a bar with an upward arrow at the top or in place of the album cover and having it slide upwards when you click on it or when you swipe on it. It seems that Spotify does a similar thing; you guys mentioned that you're overlaying on Spotify, so it seems like keeping that gesture intuitive and similar to Spotify might be useful.

- 6. **[H2-7: Flexibility & Efficiency of Use] [Severity 2] [Found by C]** I would expect to be able to click on the song title itself (that shows at the bottom) and get to the controls; it minimizes the steps I have to take and makes intuitive sense to me as a user. Implementing that may be useful, especially for the advanced user, who doesn't need an up arrow to indicate the controls.
- 7. **[H2-3: User Control & Freedom] [Severity 4] [Found by C, E]** There is no clear way for me to change settings after I create a session. It would be useful to have a setting icon in the top right hand corner, next to the title of a session, such that it would lead me back to the beginning creation settings page and allow me to change other things.
- 8. **[H2-7: Flexibility & Efficiency of Use] [Severity 2] [Found by C]** What if I don't want to create an entirely new session, and instead I want to reuse one of my popular old sessions? There doesn't seem to be a way to do this through the "create session" route. It would be nice to have this as an option, perhaps through the settings page you go through; you could have a toggle that says "reuse old session" and you'd be able to pick one of your past sessions and it would copy over those songs or "reopen" that session.
- 9. **[H2-5: Error Prevention] [Severity 2] [Found by C]** Search functionalities are auto populated with my last search (when adding songs), which is a bit annoying to have to delete this last search and a little misleading with regard to my current situation/status within the system. It may also lead to accidentally searching an old search yet again. I would recommend keeping the search box blank when you come to the search box!
- 10. **[H2-1: Visibility of Status] [Severity 1] [Found by C]** When I created a second new playlist, the old settings (that were used for the previous playlist) were preserved in their entirety. It would help reorient me as a user, coming into this page, to recognize that I'm not altering a previous session, but creating a new setting, to have default settings to be consistent for every new session. I would fix this by making it so the default settings are consistent for every new session.
- 11. **[H2-4: Consistency & Standards] [Severity 4] [Found by C]** While exploring past sessions, I got quite confused because there is no way to see the song controls from earlier (such as bringing up the forward/backward button and play/pause buttons by clicking the bottom left album), which gave me conflicting information! By reading through your ppt, I knew that you wanted users to be able to replay songs from past sessions, but I wouldn't have necessarily

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realized that through this screen. Having the ability to control the playlist much as you do with playlists you recently created would fix up this misconception.

- 12. **[H2-4: Consistency & Standards]** [Severity 3] [Found by A, C] I was expecting to see the title of the session at the top of the past session I was currently in, instead of "Past Session", because it has consistently been so that in the past, the title is always at the top of the session. I would suggest keeping the title at the top and instead making it clear that it is a past session by using a different opacity in color perhaps making it look "grayed out", so that it is salient to users the current status of the session.
- 13. **[H2-6: Recognition not Recall] [Severity 3] [Found by B, C, E]** Will the past session screen be split between your past sessions and other people's past sessions? It's also not immediately obvious how these are sorted is it by date/time created? Without demarcations of this time and date shown, it would be more difficult to navigate, once you get a large number of past sessions. If you're looking for a session from last month, it could get very tricky to find the exact session, especially if you don't name it by the actual session names or simply can't remember the session name. I would recommend showing date/time created, for easier navigation, as well as splitting between your own past sessions and other people's past sessions.
- 14. **[H2-7: Flexibility & Efficiency of Use]** [Severity 2] [Found by B, C, E] When a large number of past sessions accumulates, how can one sort through them more efficiently? If your average party goer hits up 3-4 parties per weekend, the sessions will definitely accumulate. If you have users like this that use your app a lot, you'll want to add in ways to make it simpler for them to sort/filter through these sessions. Maybe you can add "sort by user" and "sort by date created" and options to hide sessions that are more than 1 month old, or even favorite old past sessions!
- 15. **[H2-1: Visibility of Status] [Severity 4] [Found by B, C, E]** How do you look at a current session that you've just created after returning to the home screen? I'm not certain how one does this; maybe adding a faded out button on the home screen that says "current session", which "lights up" when an actual session is happening can fix this.
- 16. **[H2-6: Recognition not Recall] [Severity 4] [Found by C]** How can you delete songs, if you accidentally added the wrong song? If you don't want to have this delete functionality, you can explain this to the users using a help button. However, you would need to add in a confirmation screen every time someone adds a song, to prevent errors! Otherwise, having a trash can in the top bar could help fix this.
- 17. **[H2-3 User control and freedom] [Severity 0] [Found by B]** On the Onboarding screen, it's unclear whether "Sign in with Spotify is a button" is a button completely separate from the login boxes below or instructions to fill in your Spotify information in the boxes. No "Sign Up" option is given for new users. Add sign up option or clarify that you must log in using your Spotify username and password in the boxes below.

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18. **[H2-4 Consistency and standards]** [Severity 2] [Found by B, E] The same plus button the Home screen for "Create" is used in the Session view for "Add Song", so users may assume they can create a playlist from the Session screen. Make these buttons distinguishable, or label the "Add Song" button.

19. [H2-2: Match between system & real world] [Severity 1] [Found by E]

The "join" icon used on the home screen is not intuitive or familiar to me -- I associate a right-pointing arrow on a mobile interface with 'progress to the next screen.' Consider using a link symbol or group of people symbol to better represent the function.

20. [H2-4: Consistency & standards] [Severity 1] [Found by E] The icons on either side of the volume adjustment bar for a song are identical, which is confusing -- what two extremes are we changing the volume between? Use two different icons to represent quiet vs. loud, or use only one icon to indicate that the slider controls volume.

21. [H2-1: Visibility of system status] [Severity 3] [Found by E, A]

When inviting friends to a new session, there is no confirmation about whether or not the invite has been sent. It is also not clear from the interface what the invite looks like, or how it is sent -- is it sent through Spotify? Through Facebook? Through Rubato? Through a text? What does the content of the invitation say? Give users a brief preview and confirmation.

- 22. [H2-3 User control and freedom] [Severity 2] [Found by B] Since "show user controls" is default config, you might expect to see controls on the Session page and wonder how to actually control songs on the Session page. If you go to Player view to skip, user must recall how many songs to skip rather than see that info readily available on the screen. Allow these controls always to be visible at the bottom of the Session page and move "Add Song" to the top right corner. Keep the Player view, however, so the user can look at the album art.
- 23. [H2-6: Recognition rather than recall] [Severity 1] [Found by E] The home screen does not have any indications that it is a music or playlist-based application. It relies on the user remembering that they signed in with Spotify on the previous page. Add a brief tagline or small illustration to remind the user what they are doing here.
- 24. **[H2-4. Consistency and standards] [Severity 3] [Found by A]** The hamburger icon, which is commonly used as an icon to bring open a menu, is instead used as a back button. This is quite unintuitive, given the usual cases where the hamburger icon. Fix this by using a back button instead.

The next three were for "Join Session", which was not explicitly one of Rubato's tasks, but is relevant for their second task, which is adding songs to a session (you can add songs to a session you created or add songs to a session you joined). I preserved my evaluation in hopes of being helpful when they build this interface out further.

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25. **[H2-1: Visibility of Status] [Severity 4] [Found by C, E]** It seems strange to me that when you join a playlist, everything you see is identical to the person who created the playlist. It isn't clear to me that my status here is as a joiner of the playlist, instead of the creator of the playlist. Also, should someone who joins the session be able to control the volume or be able to change the song on whim? This could lead to a lot of trolling, which is something that your team made clear you were wary of. I suggest removing all those functionalities (unable to change the volume/song or even bring up those controls), leaving *only* the ability to add songs and upvote/downvote, which would both make it clear that you are a joinee of the session and not the owner and would prevent trolling.

- 26. **[H2-4: Consistency & Standards] [Severity 2] [Found by C]** It's strange for me to see "Peter's Session" instead of the title of the session for a session that I've joined (across all the screens in the prototype what if Peter has multiple sessions? What then?). I would expect that when I click on a playlist I've joined, it would show me who created the playlist using an icon at the top bar, along with the session name that Peter used. And of course, no ability to change the settings.
- 27. **[H2-1: Visibility of Status] [Severity 4] [Found by C, E]** When one clicks join, where are these joinable sessions from? Are they session that you were specifically invited to? Are they just open, public sessions (from friends)? Maybe using geolocation? This distinction is not made clear; to fix this, it would be helpful to label the sessions or have a helpful description at the top. It is also be important to display the sessions you were invited to and distinguish clearly between these two different sessions.

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]		1		1	3	5
[H2-2: Match Sys & World]		1		2	1	4
[H2-3: User Control]	1		1		1	3
[H2-4: Consistency]		2	2	2	1	7
[H2-5: Error Prevention]			1			1
[H2-6: Recognition not Recall]		1	1	1	1	4
[H2-7: Efficiency of Use]			3			3
[H2-8: Minimalist Design]						0
[H2-9: Help Users with Errors]						0
[H2-10: Documentation]						0
Total Violations by Severity	1	5	8	6	7	27
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)						

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4. Evaluation Statistics

Severity /	Evaluator A	Evaluator B	Evaluator C	Evaluator E
Evaluator				
sev. 0	0%	4%	0%	0%
sev. 1	0%	4%	7%	11%
sev. 2	0%	15%	22%	15%
sev. 3	15%	4%	15%	11%
sev. 4	4%	4%	26%	19%
total (sev. 3 & 4)	15%	7%	41%	30%
total (all severity levels)	19%	22%	70%	56%

5. Summary Recommendations

Overall, the major violations boil down to being more cognizant of what the user knows about the app at each screen. Since Rubato is centered on a social experience, that requires the interface to quietly give all of the necessary social cues and details for users to feel comfortable sharing. For example: who is sharing what playlists, how are they shared, how long does the sharing last, and can it be revoked. In addition, adding a confirmation message or screen after the friends are invited to the playlist would help users be sure that their action has been carried out.

We also struggled to understand how an 'active' session would be accessed or shared with new people from the options available on the home screen. The interface as it stands is designed around the three explicit tasks -- which helps with the execution of those tasks -- but fails to clearly divide 'what is happening now, in the moment' from 'playlists available in the background' and 'playlists from the past.' This seems important to resolve, since Rubato's value proposition centers on real-time, in-the-moment interactions.

Overall, the user interface was beautiful, minimalist, and far from cluttered; no H2-8 errors were found. The design and layout were easy to follow, with the exception of the back button routing problem noted above. The back button should look the same and behave the same across different screens in the application. The simple color choices, spacing, sans serif font, and high contrast with the blue color as an accent helped us navigate through the app without much visual confusion and evoked the design of Spotify, which is appropriate, given that it is a layer over Spotify. We caution against straying too far away from Spotify and other music player user interfaces, because users are most used to said interfaces, yet we wish to encourage creativity in design; any changes must be made clear and intuitive to users.

Rubato is a fun, useful, mostly intuitive app, and it's hard to believe that nothing like Rubato exists yet! Great work!