Heuristic Evaluation of Retune

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

1. Problem/Prototype Description

The project that we are evaluating is "Retune," an app that is meant to help casual music listeners find new music through community.

2. Violations Found

Task 1: Find a new friend to add

1. **H3 User control and freedom, Severity 3, Found by B, C**
   ○ Description: There is no back button if one passes on a person in "Explore People."
   ○ Rationale: If a user accidentally passes on someone that they wanted to friend/follow, then they would be unable to go back to them.
   ○ Fix: Add a back button to previous people shown in the explore feed.
2. H3 User control and freedom, Severity 2, Found by C
   ○ Description: After friending someone, the user does not have an easy option to unfriend them.
   ○ Rationale: If the user friended someone by mistake, they currently have no way to do it. If the intended UI is like Instagram's and one is able to unfollow by clicking the "following!" button under their profile picture, then this would be the easiest option but would still require an extra click.
   ○ Fix: Add functionality to unfollow in the user's profile, as well as an undo button when adding friends.
3. **H3 User control and freedom, Severity 3, Found by A, B, C**
   ○ Description: Home page with feed unable to scroll properly.
   ○ Rationale: When one tries to swipe up to see more on the feed, the bottom nav bar comes up too.
   ○ Fix: Anchor the nav bar to the bottom and allow for scrolling to see more users.
4. **H4 Consistency and standards, Severity 3, Found by C**
   ○ Description: Different wording between "following" and "add friend."
   ○ Rationale: Users may be confused as to whether or not "following" and "add friend" mean different things.
   ○ Fix: Standardize, i.e. replace "Add friend" with "Follow"
5. H4: Consistency & Standards / Severity: 1, Found by A

- ○ Task: Task 1
- ○ Description: Inconsistency with capitalization
- ○ Rationale: The "search by username" on the Explore page and the "following" on people's profile pages are not capitalized giving a bit of an unfinished unprofessional look, given that other text items in the app are properly capitalized.
- ○ Fix: Properly capitalize text items, or at least try to maintain consistent choice in capitalization.

6. H5 Error prevention, Severity 2, Found by C
   - ○ Description: Have to click through 3 different screens to input at the start.
   - ○ Rationale: Users may be more prone to errors if they are speeding through the first couple of screens; cannot see their past inputs.
   - ○ Fix: Consolidate the starting questionnaire into one screen, perhaps with some confirmation as well.

7. H8 Aesthetic and minimalist design, Severity 2, Found by A, B, C
   - ○ Description: Low contrast search bar.
   - ○ Rationale: The search bar is a little difficult to see against the background.
   - ○ Fix: Increase strength of the border, designate the text input area more heavily with a background color.

8. H10 Help and documentation, Severity 1, Found by B, C
   - ○ Description: Unclear card flip arrow.
   - ○ Rationale: It was not immediately clear that I needed to click the arrow to flip over the card to see the other side.
   - ○ Could add some help text, i.e. "flip" or also include something like a peeled back corner of the card to indicate that there's another side to it.

9. H7. Flexibility and Efficiency of Use, Severity 2, Found by: B, C
   - ○ Description: The song/user information cards on the explore page should flip if tapped
   - ○ Rationale: The little arrow in the corner is somewhat small, and for a mobile application, users would likely want and expect a larger place to tap
   - ○ Fix: Just have the entire card be tappable to trigger the card flip

10. H10 Help and documentation, Severity 1, Found by B, C
    - ○ Description: Unclear where "back" after adding a friend takes you.
    - ○ Rationale: I was not sure where "back" led—if it was back to the feed, or back to the home page.
    - ○ Fix: Include help text of "back to explore."

11. H11 Aesthetic and minimalist design, Severity 1, Found by C
    - ○ Description: On the home page with no friends yet, the white text is difficult to read over the white waves in the background.

- ○ Rationale: For color-deficient users or people with other visual impairments, this will cause further difficulty in reading.
- ○ Fix: Change either background waves or text color/strength + add a surrounding to increase contrast. Something like the page with no more users to explore/find would be good for consistency as well.

12. H1. Visibility of System Status, Severity: 2, Found by B
   - ○ Description: Passing a user should have some sort of confirmation
   - ○ Rationale: Adding a user as a friend has a confirmation popup, so passing should at least have some visual cue that it worked, even if users don't need to manually confirm it
   - ○ Fix: I don't think an entire popup is necessary, but maybe just having the borders of the card or the pass button flash in red could be enough

13. H8: Aesthetic & Minimalist Design / Severity: 1, Found by A
   - ○ Description: Sizing of profile page description and name
   - ○ Rationale: Hard to see the name and the description.
   - ○ Fix: Increase the font size and the weight of the font. The description for Sophie's profile has very light font that is hard to see but the description on Gene's profile seems to be way better.

14. H11: Accessible Design / Severity: 1 Found by A
   - ○ Description: Sizing of profile page description and name
   - ○ Rationale: Hard to see the name and the description.
   - ○ Fix: Increase the font size and the weight of the font. The description for Sophie's profile has very light font that is hard to see but the description on Gene's profile seems to be way better.

15. H8: Aesthetic & Minimalist Design / Severity: 1 Found by A, C
   - ○ Description: Order of content in Explore page profile cards
   - ○ Rationale: The top of the card feels a bit text heavy and cluttered, affecting the visibility of the text items.
   - ○ Fix: Play around with the ordering of the items. I think that "Current favorite song:..." could be put at the bottom of the card so that the image and sound wave create a bit of natural separation between text items. Additionally, I would consider playing around more with different font sizes and text styles to allow for a design that seems more dynamic and interesting to the eye!

16. H6: Recognition not Recall / Severity: 1/ Found by: A
   - ○ Task: Simple
   - ○ Description: User's name not visible in the front of the card
   - ○ Rationale: The front of the user's card only contains their username rather than their name. The user's name is only visible at the back of the card. I feel like when encountering a card, one would be most interested in knowing the

identity of the person they are about to add as friends or pass on. Usernames usually don't give one enough information and it feels like extraneous steps need to be taken just to access the user's name.

Task 2: Check out the music your friends are into

17. H3 User control and freedom, Severity 2, Found by A, B, C
    ○ Description: Unable to unlike a post after you have liked it.
    ○ Rationale: If a user liked a post on accident (if they were hypothetically stalking a crush's old posts 😅) they would not have an option to undo it.
    ○ Fix: Add functionality to unlike a post once it's liked.
18. H4 Consistency and standards, Severity 2, Found by C
    ○ Description: The user is able to click on Gene/Sophie's username (i.e. @gene) in the top of their posts on the feed. However, after clicking from Gene's profile into his posts, the user can't hit Gene's username to navigate back to the page.
    ○ Rationale: Users may think that the username tagline allows users to navigate back to the same profile page, but this is currently not the case. May lead to errors or frustration with navigation.
    ○ Fix: Add the link from the username to the profile.
19. H4 Consistency and standards, Severity 2, Found by C
    ○ Description: Ambiguous profile in the post.
    ○ Rationale: Currently, it is not clear if the icon is the user who posted or someone else commenting on it.
    ○ Fix: Move username beside the profile picture; have Instagram's "view x comments" underneath the caption, or have the caption be in a different color than the comments.
20. H8 Aesthetic and minimalist design, Severity 3, Found by C
    ○ Description: Not clear that the username is a button.
    ○ Rationale: Found it difficult to realize that I need to click on the username tag at the top; if I didn't have the Figma highlighter it would have taken me a long time.
    ○ Fix: make it more clearly labeled.
21. H8 Aesthetic and minimalist design, Severity 2, Found by C
    ○ Location of the icons on the post are less intuitive.
    ○ Rationale: Heart and comment icon are far away from the comments section, making them seem less grouped together (Gestalt).

- ○ Fix: Move the username down to the comments section beside the profile picture, and move the heart and comments icon down there as well.
22. H8 Aesthetic and minimalist design, Severity 1, Found by A, C
    - ○ Description: On the home page with Gene and Sophie's profiles, the play button with audio is in a separate box from the user's profile.
    - ○ Rationale: Users may be confused as to whom the audio belongs to.
    - ○ Fix: Applying Gestalt principles, combine the audio player into the same box in the feed as the user's profile.
23. H12 Value alignment and inclusion, Severity 3, Found by C
    - ○ Description: In the comments, there currently is no option to report comments that are harmful or violate community standards.
    - ○ Rationale: Depending on how widespread the outreach of this app is (i.e. connecting strangers or people beyond an immediate friend circle), online communities can often foster toxic behaviors. Having some protection from this would help users feel safe.
    - ○ Fix: Include functionality to report a comment if it is harmful.
24. H4. Consistency and Standards, Severity: 3, Found by B
    - ○ Description: Have song name with the audio clip
    - ○ Rationale: The examples all have the song mentioned in the post, including the new post option. However, if it's an open caption format where someone can write whatever they want, there's no guarantee they will have the song name/artist in the post. Users should know what they are about to listen to, especially since music exploration is so essential to your app's conventions
    - ○ Fix: Include the song name and artist with the audio clip
25. H2. Match between System and the Real World, Severity: 3, Found by B
    - ○ Description: Be able to do something with the music you see
    - ○ Rationale: If the purpose of the app is to explore music, there should be an option to save the music and look back on favorited songs. The like feature is a bit confusing, because it seems to operate the way that liking works in most social media apps, and users may like a friend's post, even if they don't want to save the song. There should be an option in the system to save music the way you would want it in the real world
    - ○ Fix: Have an option to save a song in some way (using Spotify API to export it or maybe make different playlists if you save a song, the way that instagram has "collections" of saved posts), or clarify that the like option is to like the song associated with the post
26. H6: Recognition not Recall / Severity: 2, Found by A
    - ○ Description: Posts contain no dates

- ○ Rationale: Each of the posts that are shown on the home feed as well as on each of the users' profiles contain no post dates. I feel like having post dates will allow for a more organized feeling, and could provide useful information for the user. If I were a user I feel like I'd want to know when specifically my friend went to a certain place shown in their post and when they were enjoying a certain song.
  - ○ Fix: Add dates to posts.

Task 3: Make a post of your own

27. H4 Consistency and standards, Severity 2, Found by C
    - ○ Description: Unable to access profiles of other users who have commented.
    - ○ Rationale: In other cases, user handles have functioned as links to their profile, but not here. People often connect through other people, and a comments forum is a good place to do this.
    - ○ Fix: Add a link from the username to their profile, maybe also incorporate liking comments and replying.
28. H6 Recognition rather than recall, Severity 2, Found by B, C
    - ○ Description: After uploading the image to post, the next screen is searching for a song that matches the picture.
    - ○ Rationale: The user is unable to see the picture while searching for a song, so they must reconstruct details and imagery to match the vibe.
    - ○ Fix: Find a way to include a snapshot of the image if possible, a suggested song list would be great as well.
29. H7 Flexibility and efficiency of use, Severity 2, Found by B, C
    - ○ Description: After posting, the user is taken to a screen that says "Successfully posted!"
    - ○ Rationale: The user requires an extra click to return back to home after posting.
    - ○ Fix: Depending on what you think the most likely next task will be, route the user back to either the home or post in the profile, while keeping the confirmation.
30. H10 Help and documentation, Severity 3, Found by A, C
    - ○ Description: "Add a caption!" header is above the post instead of next to the text box.
    - ○ Rationale: A user may want to click on the header or be confused by the distance between the header and the actual text input box.
    - ○ Fix: Move the "Add a caption!" text to be beside the text input.
31. H11 Accessible design, Severity 3, Found by C

- ○ Description: No alt text for photo.
- ○ Rationale: Some users with visual impairments may not be able to access the content if it does not have alt text.
- ○ Fix: Include option for incorporating alt text with the image upload.
32. H4. Consistency and Standards, Severity: 1, Found by B
    - ○ Description: Lack of consistency with add photo, song, and caption screen
    - ○ Rationale: The screens to add photos and songs both don't have the template for the post, and then that randomly appears for the screen to add a caption
    - ○ Fix: (same fix as last time) It could just be one screen (like the add a caption screen) where there are prompts to click and add photos, the caption, and the song. Since there will need to be a camera roll popup and a song selection screen once those are selected, those can transition from the same screen instead of designated "add a photo" and "add a song" screens anyway.
33. H3: User Control & Freedom / Severity: 3, Found by A
    - ○ Task: Task 3
    - ○ Description: User can't go back after choosing a song.
    - ○ Rationale: When making a post, the user is immediately taken to the next step after adding a song. This can become really annoying because the user would have to constantly switch between screens in order to make alterations to their song choice during this process.
    - ○ Fix: Add a "Confirm selection" button so that the user can click this to move on rather than immediately being taken forwards after choosing a song.
34. H5. Error Prevention, Severity 2, Found by B
    - ○ Description: Preview post before posting
    - ○ Rationale: There is somewhat a preview of the post on the add caption screen because the blank caption space is in the post template format, but there should be some clear form of preview or confirmation for the post before posting, instead of after posting.
    - ○ Fix: There should either be a new screen to confirm the caption and show an official preview of the post, or there should be a confirmation popup before posting, rather than after.
35. H8: Aesthetic & Minimalist Design / Severity: 2, Found by A
    - ○ Task: Task 3
    - ○ Description: Styling of instructions when making a post
    - ○ Rationale: The boxes that the instructions "Find a song to accompany your post" and "Add a caption" appear in are the same color and styling as the rest of the UI for the app. Thus, the instructions look like something clickable or something that is a part of the song cards/ posts when they are not.

       ○ Fix: Make it a bit more noticeable that these are pop-up messages rather than a part of the UI. Maybe make it a transparent white box instead.

All Tasks + Extra Violations

36. H2 Match between system and the real world, Severity 1, Found by B, C
    ○ Description: Settings icon on the profile page is less intuitive to me, I think.
    ○ Rationale: The gear icon is something that the majority of users are likely used to.
    ○ Fix: Switch to a gear icon.
37. H4 Consistency and standards, Severity 0, Found by C
    ○ Description: Headers ("Home", "Your profile") spaced differently from the top of the screen.
    ○ Rationale: Some of them are very close to the top cut-in of the iPhone screen, making the UI crowded.
    ○ Fix: Make the spacing even between screens, with a fair margin.
38. H4 Consistency and standards, Severity 1, Found by C
    ○ Description: In edit profile, differently colored "Save" button.
    ○ Rationale: "Save" button is a significantly different color from the rest of the UI, which may lead the user to think that it has some special or different functionality other than saving the settings.
    ○ Fix: Change to a bolder purple consistent with the color scheme.
39. <mark>H12 Value alignment and inclusion, Severity 3, Found by A, B, C</mark>
    ○ Description: Privacy concerns with finding people online and seeing their posts.
    ○ Rationale: Some users may want some information to be private or shared only with a close circle.
    ○ Fix: Close friends group or otherwise privacy settings for users to control the flow of their information.
40. H12 Value alignment and inclusion, Severity 2, Found by C
    ○ Description: Currently does not have the option to filter by community.
    ○ Rationale: Users may want to engage with users of a certain community, i.e. cultural, because they may resonate with members of these groups more.
    ○ Fix: Add options to filter explore results.
41. H8. Aesthetic and Minimalist Design, Severity: 1, Found by B
    ○ Description: Taskbar should be a bit more opaque
    ○ Rationale: I like the transparent look and how coherent it feels, but I can imagine there being an issue with visibility if a user posts images with a lot of

white, and icons become less visible when those posts are behind the taskbar
- ○ Fix: Just make it a bit more opaque
42. H11. Accessible Design, Severity: 1, Found by B
- ○ Description: Super small text in profile
- ○ Rationale: The bio, "no posts yet", and settings text are super small. I don't think you need text for the settings, although I understand if you want them there for consistency with the task bar. Honestly I also don't think you need text for the taskbar, since the icons are large and straightforward, so you could get rid of the text on both the taskbar and settings.
- ○ Fix: Just make them bigger.
43. H8: Aesthetic & Minimalist Design / Severity: 1, Found by A
- ○ Description: Coloring of buttons on navigation bar
- ○ Rationale: The buttons of the navigation bar are colored to be white when unpressed and dark gray when pressed. I found this to be a bit confusing because the white stands out more, so when I was looking to see what tab I was on I saw the other buttons before the gray button which represents the tab I was on.
- ○ Fix: Invert the color way. Make the tab the person is currently on a brighter color, because this is information that the user would want to immediately perceive and make the other buttons a lighter color.
44. H4: Consistency & Standards / Severity: 2, Found by A
- ○ Task: Extra violations
- ○ Description: Wording of onboarding screens
- ○ Rationale: The onboarding questions are all formatted in question form asking "What…" and then one of the questions is a statement saying "Please input a username," which feels out of place. It would be better if consistency is kept within the formatting of questions for these screens.
- ○ Fix: Maintain consistent wording within onboarding screens.
45. H4: Consistency & Standards / Severity: 1, Found by A
- ○ Task: Extra violations
- ○ Description: Ordering of onboarding screens
- ○ Rationale: The question asking for a username is placed towards the end of the set of questions, but I think it would make most sense to place it towards the beginning near the name. Asking for the user's name first, and then moving on to asking about the user's song preferences, and then asking for a username is not a sequence that makes a lot of sense and creates for a messy onboarding experience.
- ○ Fix: Place username question after asking for the user's name.

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	0	1	0	0	**1**
H2: Match Sys & World	0	1	0	1	0	**2**
H3: User Control	0	0	2	3	0	**5**
H4: Consistency & Standards	1	4	4	2	0	**11**
H5: Error Prevention	0	2	0	0	0	**2**
H6: Recognition not Recall	0	1	2	0	0	**3**
H7: Efficiency of Use	0	0	2	0	0	**2**
H8: Minimalist Design	0	5	3	1	0	**9**
H9: Help Users with Errors	0	0	0	0	0	**0**
H10: Help & Documentation	0	2	0	1	0	**3**
H11: Accessible	0	3	0	1	0	**4**
H12: Value Alignment & Inclusion	0	1	2	0	0	**3**
Total Violations by Severity	**1**	**19**	**16**	**9**	**0**	**45**

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
Sev. 0 Ex: Eval A count / total sevs 0 in table #3	0%	0%	100%
Sev. 1 Ex: Eval A count / total sevs 1 in table #3	42% (8/19)	32% (6/19)	37% (7/19)
Sev. 2 Ex: Eval A count / total sevs 2 in table #3	31% (5/16)	56% (9/16)	75% (12/16)
Sev. 3 Ex: Eval A count / total sevs 3 in table #3	44% (4/9)	56% (5/9)	67% (6/9)
Sev. 4 Ex: Eval A count / total sevs 4 in table #3	0%	0%	0% (N/A)
Total (sevs. 3 & 4) Ex: Eval A = sum(sev 3: sev 4 counts) / sum(sev 3: sev 4 in table #3)	44%	56%	67% (6/9)

Total **(all severity levels)** Ex: Eval A total sev count / total sevs (green cell) in table #3	38%	44%	56% (25/45)

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

5. Summary Recommendations

The most important issues that we noticed were with the intended use of this app. In the music portion, showing the song names and being able to save or export songs are essential features that should be easy to use and very obvious, or else the app will just seem like Instagram with adding songs. Having a difference between liking a post and saving the post's song should be well communicated, and there should definitely be some option to make a playlist, view saved songs, or export to a music app. On top of features and indicators, we would also encourage you all to think about the color scheme of the UI. The background color and pattern provide a fun feeling to the app, however, sometimes some of the components such as the search bar and pass/add friend buttons can be difficult to see on top of it.

We thought that the explore option was really well done, and it is a great and novel idea for the app, but my biggest question was whether people show up as options after being passed on. If there is an expectation that pinned songs or music taste will change over time, it makes sense that users may appear again. However, if this is the case, users may want a "do not suggest again" option. Your group should discuss the intended functionality of this component and especially consider what happens if there aren't a lot of users, but each of the users change their music taste over time. Furthermore, what do you want the purpose of the app to be moving forward? Is it intended to be a platform for you to make new connections i.e. if you're really into the opera community and want to make new friends in this space? Or is it intended to be more insular, sharing intimate moments with your friends? With this come decisions regarding privacy and discoverability.

Overall, we think the design of this app could improve a lot if this perspective of the target user is taken into account more. It would be awesome to see more features added to the app, such as features for sharing and maybe creating more of a sense of dynamic conversations and interactions within the app's community.

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.