

Heuristic Evaluation of [Pife]

1. Problem

Pife is an app for musicians to motivate themselves to practice, collaborate, and perform their instruments. It relies on gamification elements and avatars to incentivize practice.

2. Violations Found

1. H1. Visibility of system status \ Severity: 2 \ Found by: A

The user is unsure of the purpose of “My Schedule” from just glancing at the page. Is this a page meant to set up a practice schedule? There’s no visual indicator of that.

Fix: Indicate clearly that this is a Practice Schedule

2. H2. Match between system and the real world \ Severity: 1 \ Found by: A

This might just be a mistake, but the health bar gains +5XP when the goal is not met after the user clicks pause. That should not happen if the app means to encourage more practice. Also the avatar shows the same happy expression despite the unmet goal. A discouraged/sad face would be more inline with the failed practice session.

Fix: Subtract points when goals are not met and show appropriate avatar expressions

3. H3. User control and freedom \ Severity: 2 \ Found by: A, D

Pausing the timer on the practice session leads to the “goal not met” page. Perhaps users merely just need to take a break. Users should have more control over their practice timeline. Also, the time left should still be displayed on the page so that users know exactly how much of their practice session is unfinished.

Fix: The wording should be changed to encourage users to come back to continue their practice

4. H3. User control and freedom \ Severity: 2 \ Found by: A, D

There’s no start button on the Practice page. Users should be able to control when to start their practice session after they’ve set the time.

Fix: Add a start button

5. H3. User control and freedom \ Severity: 2 \ Found by: A

It’s not obvious that users can change the time in “Today’s Goal” on the Practice page. The check also doesn’t make sense in this context since you haven’t completed the practice.

Fix: Use an arrow to indicate that a drop-down menu is there to change the time

6. H3. User control and freedom \ Severity: 2 \ Found by: A

On “My Schedule” page, the input format doesn’t allow users to set multiple times in a day. Also, it seems redundant to have days of the week and the month. Wouldn’t there be inherent overlaps between the weekly and monthly calendars?

Fix: Decide on one schedule view and allow users to input a greater variety of schedules

7. **H4. Consistency and standards** \ Severity: 1 \ Found by: A

The “Today’s Goal” page has heart health bar as the “timer” progress bar. But there’s also this same motif on the homepage so the user may be confused by why there are two of the same bars for seemingly different functions.

Fix: Use different progress bar for timer function

8. **H6. Recognition rather than recall** \ Severity: 2 \ Found by: A

Once the practice session is completed, the “Goal Met!” page does not provide an immediate summary of the session. Users should not have to remember how long they had set their practice time for.

Fix: Put in a summary page (ie. what treadmills show after a run)

9. **H6. Recognition Rather than recall** \ Severity: 2 \ Found by: D

The two boxes (set up to lead to starkly different interfaces) look similar enough that an inexperienced user might mistake one for another. In terms of the phrases as well, “search performances” and “perform” are also relatively close. Distinguishing the two buttons beyond just their labels (color scheme, depth or maybe even size) will make each sub-task more easily retrievable for a user.

The goal would be to make choosing one or the other option habitual as mentioned above.

10. **H5. Error prevention** \ Severity: 2 \ Found by: A, D

The “My Saved Feedback” page seems to have an especially error-prone layout. Users trying to scroll through the “Great” column might accidentally also scroll “Work On.” Also, it’s unlikely that users would need to see both feedbacks side by side so there’s information overload.

Fix: Separate the two columns into two separate pages

11. **H8. Aesthetic and Minimalist Design** \ Severity: 1 \ Found by: A, D

For the “My Saved Feedback” page again, redundant information detracts from the the main idea of this interface. The user should not feel like they are having to read a mini-paragraph within each cell of the feedback page.

For instance, “Your transition between C & F could use some work” could just become “Transition between C - F”. Given this column is labeled “Work On”, it should already be understood that every entry in this column speaks towards room for improvement.

This fix will also enable more room for multiple improvements/praises to be processed by the user.

12. **H4. Consistency and standards** \ Severity: 1 \ Found by: A, D

On the “Now Performing” page with the singer, the stop button is different from the “Done” button or the pause button on the Practice page. The difference may confuse users.

On the “Now Performing” action, it seems like accidentally hitting the “X” leads to the Duration screen which contains a log of comments received on the given performance. A likely scenario is the “X” being pressed instead of the radio (stop) button to its left.

The duration screen should offer a button to “go back to performance” in the event that it was abruptly halted by the wrong click on the top panel.

Fix: Use the same button to mean “Stop” in all modes

13. **H5. Error prevention** \ Severity: 4 \ Found by: A

Once you enter the Perform page, the only button on the page is “Perform Live.” Users should have some warning of what the button would lead to especially if it turns on their camera and makes them public. It is also unclear exactly what the “Perform Live” button will do.

Fix: Attach a warning to explain what the button leads to and what kind of setup the user should have in place

14. **H8. Aesthetic and minimalist design** \ Severity: 3 \ Found by: A, B, D

The list of performances and “watch performance” button exist in relative isolation as the interface stands. In fact, one finds out later that on the above page, the “watch performance” has no functionality. But when the user clicks on a performance (which in itself is unintuitive given the interface looks like a list of information as opposed to list of buttons), then the watch button at the bottom comes into play. Initially, the watch button only serves to confuse.

I would suppose changing the list to look more like a list of buttons that can directly navigate to the given performance would clean up this interface and render a clear association between a musician's interest in a particular performance and being able to enter that performance from the same place that it is first seen.

15. **H5. Error prevention** \ Severity: 1 \ Found by: D

On the “Now Performing” page with the singer, the record and stop buttons are really small. Since they are the most important functions on the page, users should have easy access to them.

Fix: Make the record and stop buttons larger

16. **H4. Consistency and Standards** \ Severity: 1 \ Found by: B

When picking a performance to listen to, the profile could state multiple instruments/genres. Since the user would expect that the performance also includes such instruments and genres, it can be jarring when finding only one of such instruments. This is especially true if the user specializes in the instrument/genre *not* being played. Therefore, emphasizing which instrument/genre being performed would be helpful.

17. **H8. Aesthetic and minimalist design** \ Severity: 2 \ Found by: A

The summary page after a performance is cramming too much information into one page. It would be really difficult to read all the comments on that page and distinguish between the positive and the

negative and to respond to them. Also, the save and comment icons are self-explanatory so the extra text label is unnecessary.

Fix: Arrange the page so that there's one comment per line. Remove the "save" and "comment" labels

18. **H4. Consistency and Standards** \ Severity: 1 \ Found by: D

The "Duration" screen signals experience points much differently than the Goal Met screen from practicing. One possible implication could be that higher number of points get shown in larger font. Even still, the difference in color is not something we would want the user to get conditioned to. This would only serve to confuse. Furthermore, the +10XP is in a tiny corner while the +20XP is given much better visibility and space for the post-performance screen.

Fix: Either define more clearly changing design consequences of varying experience point score or to simply have a uniform way of displaying achievement points across all tasks.

19. **H4. Consistency and Standards** \ Severity: 2 \ Found by: D

Elsewhere on the platform, "Done!" would imply that the task has been accomplished (specifically for the practice task). However, here the task is far from over. The done button actually leads to the major component of the collab task flow. The collaboration in question is scheduled by the musician users. Based on this scheduling, the musicians can then fast forward to the collaboration.

Including a "done" button on the above interface comprises the intricacies of the described task flow; making a user feel like the task is already nearing completion.

"Done!" should be changed to "Schedule/Plan/Coordinate" - something that makes it evident that the best of the collab task is yet to come.

20. **H3. User control and freedom** \ Severity: 2 \ Found by: A

It is unclear how users should be adding collaborators. Once they search a name, a profile pops up. On the profile page, there's no obvious button to click to change the people in the collaboration cue.

Fix: Include a "Add" button or make it clear that the collaborator profile pics are buttons that can be clicked on

21. **H4. Consistency and standards** \ Severity: 1 \ Found by: A

The colors of the backward and forward arrows on "Stefani" page is different from all the other black arrows used on other pages. Users may have trouble understanding what these colors mean. Also, I am unsure what the arrows would do. Would it allow searching for other people also named Stefani?

Fix: Use consistent colors for arrows

22. **H4. Consistency and standards** \ Severity: 2 \ Found by: A

Scheduling collaboration page appears different from the scheduling page for the users' own practice sessions. Since the function is exactly the same, the design should also match.

Fix: Use consistent design for scheduling features

23. **H7. Flexibility and efficiency of use** \ Severity: 2 \ Found by: A

In the “collaborators” page, it seems unnecessary to indicate the number of people you are collaborating with if you have to search them up by name anyway.

Fix: Remove the number of collaborators field

24. **H2. Match Between System and the Real World** \ Severity: 1 \ Found By: B

It’s very confusing to see 2 before 1 & 3 since most apps have numbers sorted. Therefore, sorting the numbers would resolve this issue and any potential confusion.

25. **H3. User control & freedom** \ severity: 2 \ found by: C

On slide 10 of your presentation, you state that users can collaborate live with 2+ users. How much is 2+? Just how the “Facetime with up to 34 people” on the new iPhone update is honestly pointless (when am I ever going to FaceTime 34 people and not have it be a trainwreck?), how many collaborations can be shown on your screen and still be effective? I am thinking no more than 4-5 collaborations at a time.

Fix: Perhaps start the app with just 1-on-1 collaborations and add the option for more people either through point gains or through an app update. Again, 4-5 collaborations should be the limit.

26. **H7. Flexibility and efficiency of use** \ Severity: 2 \ Found by: A, D

This is regarding the interface that is seen within the “search performances” sub-task. Up until this point, an experienced user will definitely have figured out that avatar level is also a unique characteristic of each musician using Pife. What’s more, even the heart bar can be used as an identifying factor.

Therefore, adding filters by level and heart bars may speed up interaction for experienced musicians while maintaining simpler filters (genre and instrument) for less experienced musicians. This would also supplement the mission statement from the slides whereby the designers are aiming to build a sense of confidence and passion amongst musicians. Filtering by metrics for these attributes will really help!

27. **H7. Flexibility and efficiency of use** \ Severity: 2 \ Found by: A

On the “Matched Times with Collaborators” page, users cannot make adjustments to their schedule on their collaborators directly. Instead, they have to remember which times are available and go back to edit their schedule if there are no available matches. This is an unnecessary step and leaves room for error.

Fix: Users should be able to directly make edits to the schedule on the matched times page

28. **H7. Flexibility and efficiency of use** \ Severity: 1 \ Found by: A

On the “Currently collaborating” page, “Me” takes up the entire bottom spot which is unnecessary. If there are more collaborators, it would make others appear smaller while keeping my profile very visible. When collaborating, it makes more sense to see the other people.

Fix: Use a small screen for self-view (like in Facetime)

29. **H1. Visibility of system status** \ Severity: 2 \ Found by: A

“My History” page doesn’t have a clear, actionable function. Are users allowed to click into these texts? Or are they there just for a record?

Fix: Use a different font, color, or design to indicate which items can be clicked on.

30. **H4 - Consistency and Standards** \ Severity: 2 \ Found by: D

Clicking on both the “settings” icon as well as the level (lv. 2) bar leads to a page where schedule, history and feedback can be viewed and modified. However, here two different actions (pressing the level bar or pressing the settings icon) map to the same follow up screen - the settings area.

The user might well get conditioned to viewing settings from one or the other option, in which case the one not used will be redundant no matter what.

In any case, consistency must be maintained even in order to define what the follow up page means - is it a settings area or is it a deep dive into the avatar’s level progress?

31. **H1. Visibility of system status** \ Severity: 3 \ Found by:A

It is unclear to me what is the difference in function between the health bar and the level bar. Gaining and subtracting xp seem to affect the health bar but the level bar is not affected. The heart of this application is gamifying practice, which hinges upon knowing how to achieve the next milestone. Therefore, the lack of clarity between the health bar and the level bar heavily hurts the app’s effectiveness.

Fix: Be more explicit about what each bar is affected by in this app world

32. **H2. Match between system and the real world** \ Severity: 3 \ Found by: A, B

Clicking on the Lv.2 bar leads the user to a page with details about “My schedule” and “My history.” These are items I would associate with a personal profile page or perhaps a home page. I don’t normally play games so maybe it is normal for level bars to lead to these statistics, but it doesn’t align with my non-gaming mental model.

Fix: Consider using a more universal “My stats” page

33. **H3. User control and freedom** \ Severity: 2 \ Found by: A

When the user initially enters the app, they read the avatar’s bio. The only action on the page is “Done!” This string isn’t really clear what the action is (ie. where does clicking Done lead?)

Fix: Use “Next” or another more actionable term

34. **H4. Consistency and standards** \ Severity: 2 \ Found by: A, B

Beatriz’s name wasn’t introduced or set on the bio page so it was surprising to see that pop up on the top status bar.

Fix: Allow user setting of name early on

35. **H4. Consistency and standards** \ Severity: 2 \ Found by: A

The app switches between first and second person. Sometimes it’s “My Schedule” but in “My history” there are items such as “You leveled up” which is confusing since there’s also an avatar involved.

Users may spend unnecessary time dissecting whether the terms refer to their actions or their avatar's actions.

Fix: Stick to one POV and use consistent terminology

36. **H7. Flexibility and efficiency of use** \ Severity: 3 \ Found by: A

There is no easy way to return to the Home page from "My schedule" or "My Saved Feedback" and other subpages other than clicking the back arrow multiple times. This is inflexible.

Fix: Put in a home button or a global navigation bar for ease of use

37. **H4: consistency & standards** \ Severity: 3 \ Found by: C

Your "go back" sometimes go too far back. When I'm on the Search Performances screen and click "go back," it takes me all the way to the home screen instead of to the "Perform" or "Search Performances" screen.

Fix: make the "go back" tab consistent. Is it a way to reach the home page? Or a way to retreat back to the last page visited?

38. **H4: consistency & standard** \ Severity: 3 \ Found by: C

You have a "Return Home" tab at the bottom right corner of your Great/Work on screen, but this doesn't show up anywhere else; on other screens, users typically have to click on a "Go Back" tab on the bottom right.

Fix: Figure out whether you would like both, or just one or the other. I would support both, because "going back" does not necessarily to the home page, but to the last page you went to, and "Go home" would always mean go to the home page, which I think is important.

39. **H8. Aesthetic and minimalist design** \ Severity: 1 \ Found by: A

The back arrow on the Shop page has a different weight from all the other text/ box outlines. Also, the words "go back" are redundant. It's also a little unusual for an in-app back button to appear on the bottom of the screen.

Fix: Omit "go back" and move the arrow to the top where they normally are found

40. **H1: Visibility of system status** \ Severity: 2 \ Found by: C, B

On the "Select Your Avatar" screen, the bio is hard to read. It also seems random/ out of place.

Fix: Make the text bigger, and perhaps have it within a colored box instead of on a white background to make it "pop." In addition, the explanation of the avatar and its meaning is hard to focus on due to the overload of info.

41. **H2 - Match Between System and Real World** \ Severity: 2 \ Found by: C, B, D

For the "Select Your Avatar" screen, there seems to be no clear linkage between the 'avatar' and the first person sentences above the avatar's head. While experienced users might be able to make the connection instantly, some users would require an explicit way of knowing that "my happiness

depends on how much you practice” represents your avatar’s language. Once this link is established, it will be easier for a user to identify themselves with the very avatar.

I would suggest adding quotes, or better yet, a quote box linking the avatar to the phrases that the team conceives the avatar saying (anywhere in the app).

42. **H2: Match between system & real world** \Severity: 2\ Found by: C

People aren’t going to feel ready to perform to random people when just starting an app designed to encourage practicing. Having “Perform” and “Collab” as an immediate option under “Practice” seems rushed.

Fix: Perhaps enable these buttons after several levels are achieved through practicing. That way it feels like a user is working up to some goal, instead of it being immediately available. This will increase longevity of the app (people won’t get bored with it too quickly)

43. **H4: consistency & standards** Severity: 1\ Found by: C

In the “Practice” screen, the avatar’s placement moves to a different location once you click “done.” This causes a little bit of disorientation.

Fix: make sure the avatar’s placement is consistent with other screens, whether it moves or not, the box/dimensions for the avatar placement should be the same.

44. **H5: error prevention** Severity: 2\ Found by: C

There’s no way to go back to change your avatar, or to sign in as someone else. Avatar change is import; for example, what if a user hates the avatar they chose, or accidentally chose the wrong one? There should be a way to fix this.

Fix: make sure a sign up/ log in screen is implemented. Make sure the user has the option to change their avatar.

45. **H1. Visibility of system status** \Severity: 3\ Found by: D

Suddenly, the user jumps up “+10 XP” on this interface. Though it is well-defined that completion of practice is what leads to this jump, it is unclear how that translates to a spike in the level bar.

The user would perhaps want to know a simple metric for how and when the level bar increases. Does the +10XP correspond to the “heart” bar as well as the “level” bar? If this is the case, the uniformity must be highlighted to the user proactively.

46. **H7: Flexibility and efficiency of use** Severity: 3\ Found by: C

What am I practicing on the practice screen? Is the avatar supposed to represent a certain instrument? Or can I choose any instrument each time I practice? What if you play multiple instruments?

Fix: It might be good to have a “what would you like to practice now?” option and have the user choose from a drop-down list of instruments (e.g., guitar, piano, voice). That way, they can have different levels for different instruments, which would be beneficial for people who want to learn and master more than one instrument.

47. **H2: Match between system & real world** Severity: 4 \ Found by: C

Besides growing, what is the point of the avatar? The more I play with the prototype, the more I find the avatar useless and not much of an aesthetic gain. I forget the importance of the avatar. Remember your Revised Dashboard slide? It incorporated the avatar speaking/showing emotion. I liked that and would love to see it in the hi-fi.

Fix: Have the avatar talk to the user, through speech bubbles and/or sound - similar to your concept video (e.g., when the avatar in the concept video said “get it!” while the user was playing guitar). This talking can be encouraging to its users, and will allow the avatar to serve a bigger purpose within the app.

48. **H3: User control & freedom** Severity: 2 \ Found by: C

Is there a way by which to choose someone to collab with through the “Search Performances” section? What if a user hears someone and wants to collab with them directly. How does one contact them?

Fix: have a way for the user to contact people they like hearing. Have a way for the user to grow a friend-base and that way, asking to collab will seem less creepy over time.

49. **H10: Help & Documentation** Severity: 2 \ Found by: C

Where do I fill out my collaboration schedule initially? Ties in with Task 3. If a user wants to share their practice schedule with others, perhaps they should have the option to update their schedule each week/month/etc. to keep it up to date.

Fix: There should be some instructions on this section teaching the user how to import their scheduling availability and how often they should do it. And perhaps after you fill out a general schedule, the app algorithmically matches you to someone to collab with who has the same time openings as you (instead of you filling it out each time and THEN having the app match you, which is what you currently have). Just a thought

50. **H9: Help users recognize, diagnose, & recover from errors** Severity: 2 \ Found by: C, B

On the Great/Work on page, I don’t think a user should be able to “save” a critique/praise; rather I think these should always be kept within the app for reference. What if a user receives a critique, and forgets to save it. When they decide to look at the notes for improvement, they may forget that they had said critique. When receiving feedback, most people would want the comments automatically saved. By making deleting the comments default and only giving the option to save individual feedback, saving feedback in the normal case becomes very inefficient. Therefore, adding an option to delete comments or a “Save All” option would resolve this issue.

Fix: get rid of the save button and change to a “favorite.” this way a user could make sure they highlight areas they need to focus on / particular words of encouragement, but can always go back to all of the feedback if needed.

51. **H2: Match between system & real world** Severity: 2 \ Found by: C

On the shop section, there is no way a user is going to pay 5 dollars for pants for an avatar that doesn't really do much. .99 cents would make more sense... but I think since you initiate a point system during practicing as well as performing/collabing, that points could be redeemed for stuff for the avatar (or even cooler, for the user)

Fix: use a points system rather than actual money. This will give an incentive to the user to practice, perform, and collab more.

52. **H5: Error prevention** Severity: 1 \ Found by: C

The "X" button under the "Currently Collaborating" screen makes me think it means "cancel." But when I click on it, it takes me to the points/comments/feedback section. It's a little ambiguous and seems unintuitive.

Fix: change the "X" button to a different icon, perhaps a + sign.

53. **H8: Aesthetic & minimalist design** Severity: 1 \ Found by: C

The "list of performances" screen seems a little much to me. There's too much wording. What makes a person stick out? The photo icon seems too small. I lose interest in watching a performer perform because there are too many choices and it seems as if I would just pick one from random.

Fix: make a "Musical.ly"-type scroll down (Instagram-like, too, if that is more familiar to you) that shows a live feed of a person performing. That way I can scroll down to the next person if I am not feeling it, or just continue watching if I like it/do as I please. It would feel more interactive and would have a better aesthetic.

54. **H2: Match between system & real world** Severity: 2 \ Found by: C

In your slides, you state an interface change will include improving "user connection with the avatar by placing the avatar in a home setting and allowing for avatar evolution." How exactly will this make a user feel connected to said avatar? The home setting seems like a stretch; I don't think the avatar *needs* to be in a home to connect to the user, but needs to have a way to communicate to the user and build a relationship. This goes with task 1: "I want to feel motivated to practice." Right now, I don't see how your avatar can help consistently motivate a user.

Fix: what if avatars were just animated avatars of the users (kind of like bitmoji). Obviously a user is connected to themselves, and if they have a mini-them encouraging them to practice/collab (by, perhaps, showing them how fun it can be), they might just do so.

55. **H6. Recognition rather than recall** \ Severity: 2 \ Found by: D, B

The primary violation here is that the genre and instrument only appear once the settings screen is arrived at. These do not appear on the main home screen (screen where perform, practice and collab appear at the bottom).

These facets of the user's persona should be made visible even on the previous interface along with perform, collab and practice. It should not be the case that the user has to specially enter the "settings" page to view their configured genre and instrument each time.

56. **H3: User control & freedom** Severity: 2 \ Found by: C

Where is the reply feature to encourage community engagement implemented? I don't see it in the med-fi, but you mention it is on slide 17. I think this will make a user feel like they did perform live in front of others, and would be great to implement

Fix: give the user a chance to reply to comments, and for the OP to reply back (messaging option implementation). This can create bonds between people as well.

57. **H10: Help & Documentation** Severity: 2 \ Found by: C

"I want to perform in front of others." Say you are alone and want to use this app to perform live for some people. Where does your phone go? It's very hard to find a way to have a phone upright without your hands, and so performing solo live on the app may be hard.

Fix: give a tutorial on how to perform live with Pyfe. Show the users they can either order a stand for their iPhone or lean it on their laptop/desk/wall. Have a way to live-connect to a professional camera with audio equipment as an option, since audio on the iPhone is not the best and users may not enjoy it as much. These are just a couple of options.

58. **H4. Consistency and Standards** | Severity: 3 \ Found by: B

The shopping cart on the home menu leads to clothes Beatriz has along with trophies earned. This is confusing because a shopping cart is usually associated with buying items, which works with the pieces of clothing that could be bought. However, the trophies in the shop are extremely confusing, since they cannot be bought. This violates consistency and standards because platform conventions link shopping carts with items that can be bought with real money. However, the inclusion of trophies violates this internal model of the shopping cart. Removing the trophies from the shopping cart would present such a violation of consistency and standards. (I talk about more about where to put the trophies in a #17.)

59. **H4. Consistency and Standards** | Severity: 1 \ Found by: B

In the "Shop" screen, there is a blue square around Beatriz. This violates consistency and standards, since Beatriz usually doesn't appear with a blue square. Therefore, it looks like Beatriz is being selected, which is potentially confusing. Removing the blue square would be helpful in preventing such confusion.

60. **H3 - User Control and Freedom** | Severity: 3 \ Found by: B

In the shopping cart (nor anywhere else in the application), there is no way to input credit/money on the application, especially since there is an amount of cash shown. This violates user control freedom, since the shop is effectively useless since no money can be inputted. To resolve this issue, there needs to be an option to insert money into the application.

61. **H4 - Consistency and Standards** | Severity: 2 \ Found by: B

Beatriz's size changes between various pages where they should stay the same, such as between the home page and the level up page. This violates consistency since users might believe that there is a

meaningful rationale behind the pet size changes. This is especially true since the pet is said to “grow” (rather than level up), meaning that this growth could be significant.

62. **H4 - Consistency and Standards** | Severity: 3 \ Found by: B

Clicking on the level bar of the pet at the home page should NOT go to the Settings page. This violates consistency and standards since most platforms leave rarely viewed and rarely changed options in the settings menu. To fix this issue, you should create a separate page about Beatriz, her history, and levelling up. Including the trophies in the shop would be much more relevant and consistent between other gamification applications. The settings page can include rarely changing information such as the schedule.

63. **H3 - User Control and Freedom** | Severity: 1 \ Found by: B

Since the user has the option to choose a pet, it seems odd that the user does not have an option to change backgrounds. This violates user control and freedom because it doesn't extend options for pets to the pets' environments. This problem can be easily fixed by allowing users to pick backgrounds (potentially as a level up result).

64. **H10 - Help and Documentation** | Severity: 4 \ Found by: B

The pets' happiness bar and level bar seem very similar, so it's a glaring problem when there is no area to go and discover the differences between the happiness and level bars. Therefore, giving an explanation of how the two bars are different would be extremely helpful.

65. **H4 - Consistency and Standards** | Severity: 1 \ Found by: B

On the Today's Goal page, there is a random unexplained checkmark next to the “15 Mins.” Since this checkmark is never explained and pausing the practice at 1:47 left leaves to a “Goal Not Met” message, this checkmark use is inconsistent with the common meaning that checkmarks mean that a goal has been completed.

66. **H4 - Consistency and Standards** | Severity: 1 \ Found by: B

On the “Goal Met” screen, the two stars that randomly appear are quite confusing. Since stars are often used when rating others, two random stars could be interpreted as a 2 star performance (which is quite demoralizing). Either the stars should be part of the pets' animation or totally removed.

67. **H2 - Match Between System and the Real World** | Severity: 3 \ Found by: B

On the goal not met as well as the goal met pages, it seems that the increase in XP is actually more closely associated with the happiness bar. Since the models of happiness and growing up are critical for the gamification of the application for success, we need to have the users' have the same leveling up model as the creators'. Therefore, either tying increases in XP with levels would help prevent such potential confusion.

68. **H4 - Consistency and Standards** | Severity: 1 \ Found by: B

The pet moves height-wise when moving between the practice screen to the Goal Not Met screen to the Goal Met screen. Since the pet is not doing anything during these times, it would be less distracting to keep the pet in the same position between screens.

69. **H2 - Match Between System and the Real World** | Severity: 2 \ Found by: B

Saying “Goal Not Met” is not appropriate on the paused page when practicing. This is because the words goal not met usually are associated with failing a certain task. Therefore, this dissonant use of terminology would discourage users who were taking a break between practice. “Let’s get back to playing” would be a great replacement.

70. **H6 - Recognition rather than Recall** | Severity: 2 \ Found by: B

When filtering performance searches, checking the genre and instrument boxes don’t say which genre/instrument are being filtered for. This is because you are expected to remember your specific genre and/or specific instrument, which violates recognition over recall. Adding which genre/instrument being filtered for would solve this issue.

71. **H4 - Consistency and Standards** | Severity: 2 \ Found by: B

When picking a performance to listen to, the profile could state multiple instruments/genres. Since the user would expect that the performance also includes such instruments and genres, it can be jarring when finding only one of such instruments. This is especially true if the user specializes in the instrument/genre *not* being played. Therefore, emphasizing which instrument/genre being performed would be helpful.

72. **H1 - Visibility of System Status** | Severity: 4 \ Found by: B

There is no way for users to be able to find what they need to do next in order to level up. Since the system obviously knows, it becomes hard for the user to know what needs to happen next. Since gamification depends on knowing what needs to be achieved to reach the next level, this app’s effectiveness gets hit pretty hard. On the home page, letting the pet suggest what to do next would be a way to achieve such clarity. Potentially having a pet specific page (with the trophies for past milestones) would be another good way to quickly find what needs to happen next for levelling up.

73. **H3 - User Control and Freedom** | Severity: 2 \ Found by: B

Since the feedback is given in categories like “Did great” and “Work on,” it would be logical to expect to allow for giving 1 piece of feedback on both fronts. Therefore, providing such a capability would help resolve this issue.

74. **H1- Visibility of System Status** | Severity: 2 \ Found by: B

When posting a comment, there is no feedback on whether it has been successfully posted. This violates the visibility of system status because the user doesn’t know if the app successfully did the requested task. If you add a short posted dialog, that would resolve this issue.

75. **H2 - Match Between System and the Real World** | Severity: 1 \ Found by: B

It's very confusing to see 2 before 1 & 3 since most apps have numbers sorted. Therefore, sorting the numbers would resolve this issue and any potential confusion.

76. **H4 - Consistency and Standards** | Severity: 1 \ Found by: B

The filter by functionality looks different between searching performances and collaborators. This violates consistency since we expect that differences in look would imply differences in functionality. Choosing one option and applying it universally would be the best way to go.

77. **H3 - User Control and Freedom** | Severity: 2 \ Found by: B

Since you can select collaborators, it would be helpful to be able to also remove collaborators. This way, the user is able to control his/her collaborators in any situation. Adding a remove option on already selected collaborators would be the way to go.

78. **H3 - User Control and Freedom** | Severity: 2 \ Found by: B

In the schedule there is no way to set specific dates. This violates user control since it only allows for 1 of 2 major use cases. Since schedules can vary depending on dates, it would be helpful to have such a functionality added to the application.

79. **H3 - User Control and Freedom** | Severity: 3 \ Found by: B

During leveling up, we see that Beatriz can breath fire and wear hats. However, we don't see how we can get her to wear hats and breath fire. This violates user control since users get these items but can't use them. Therefore, adding the ability to user/control such items would be very helpful.

80. **H4 - Consistency and Standards** | Severity: 3 \ Found by: B

Multiple references to hat in very different situations have been very confusing. Since there is a hat in the shop and there is a hat when levelling up, the user will naturally ask what the difference between the two are. (They could potentially be the same. It's unclear.) Therefore, adding more to the onboarding process to explain what leveling up means along with clothes/backgrounds would clarify such confusion.

81. **H4 - Consistency and Standards** | Severity : 2 \ Found by: B

Saved feedback doesn't include user information while the original feedback given does. Since the user got user information in the original feedback, for consistency reasons, the user should get it in the saved feedback. Therefore either adding user info to the saved feedback or removing the user info from the original feedback would fix this issue.

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			3	2	1	

CS 147 Autumn 2018: Assignment 9 (Heuristic Evaluation Group Template)

Instructor: James Landay

H2: Match Sys & World		2	6	1	1	
H3: User Control		1	11	2		
H4: Consistency		10	6	5		
H5: Error Prevention		2	1		1	
H6: Recognition not Recall			2			
H7: Efficiency of Use		1	4	1		
H8: Minimalist Design		2	1	1		
H9: Help Users with Errors			1			
H10: Documentation			2		1	
Total Violations by Severity						81
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)		18	37	12	4	

4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
sev. 0	0	0	0	0	
sev. 1	3	8	8	4	
sev. 2	15	8	4	1	
sev. 3	4	4	4	4	
sev. 4	1	2	1	3	
total (sev. 3 & 4)	5	6	5	7	
total (all severity levels)	28	27	20	17	

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

5. Summary Recommendations

We agree that it is true that musicians seek performance spaces that are low-risk, especially when starting out, and the app really can be a platform for this.

Overall, the avatar should show up more consistently to make sure it remains central to a musician's aspirations and passions. For an app like this, the goal should be to make the link so strong that the musician instinctively begins to identify with the avatar each time they interact with Pife. The same goes for others' avatars. We do not uniformly see them appear on interfaces where other musicians are introduced (performances and collaboration). What exactly does or will the avatar do to encourage engagement with the user? We think you all should think of other ways to create user engagement within the app, and not just with a one-time cool feature, but with features that can be rewarding over time for the user. Examples may include: discounts on music equipment dependant on accumulation of points, a development of a fan base ("followers") for a user, and a way by which users can repeatedly react with each other through messaging (and not just a one time reply to a critique from a user). Adding a few details like these would help the interactive nature of your app, and its longevity. The community aspect can well be reinforced by making avatars actively coexist in various interfaces.

There is also opportunity to better define how the three tasks supplement one another. For instance, *practice leads to better performance which then leads to enhanced confidence in being able to collaborate*. Though the ostensible purpose is to get musicians to realize such a connection (as was seen in Pife's rationale for interface changes in from low to medium fidelity), it needs to be defined more visibly on the app. Including a suggestion on performing after a successful practice task or practicing more after an average collab session will definitely help consolidate the tasks into one holistic idea.

Though actual user testing might tell a different story, we would suggest really honing in on the idea of experience points at every critical stage of the app. As a user evaluating the app, each time the

experience points showed up; I felt a sense of encouragement in my own (hypothetical) talent. Which is why highlighting the potential for experience points on interfaces leading to them is a recommendation I would definitely endorse.

Aesthetically, there's room to decide on a cohesive visual language and make the different design elements consistent across all tasks.

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