Heuristic Evaluation of [==Art^2==]

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

1. Problem/Prototype Description

Art^2 is a collaborative app designed to help people overcome the barriers of time and self-doubt in pursuing art by offering a low-entry medium (pixel art) and fostering a supportive creative community.

2. Violations Found

1. **H4: Consistency & Standards / Severity 3 / Found by: A, C, D**
   - The interface used the string "Save" on the first screen for saving the user's profile, but used the string "Update" on the second screen. Users may be confused by this different terminology for the same function.
   - Fix: Use the same string on each screen.
   - **Mention the task that the violation applies to**

1. **H1 Visibility of system status / severity: 2 / Found by: A, B, D**
   a. Task 2: Sharing artwork
   b. Problem Description: Although there is a button to share artwork (which is good), there is no confirmation message that work has been shared with others once completed Task 2.
   c. Rational: After typing a note to the user Joe and hitting the 'next' button, the 'sharing' screen disappears and the user is back to the pixel heart screen. I think a lack of confirmation may leave user uncertain whether art was shared, and may lead them to sharing artwork unnecessarily multiple times in hopes of seeing a confirmation message
   d. Suggested Fix: add a pop-up message that indicates to the user that the artwork was shared with [name of user]. This just gives them that reassurance that their goal of sharing artwork was achieved!
2. **H1 Visibility of system status / severity: 3 / Found: A, B, C, D**
   a. Task 1: creating artwork
   b. Problem Description: I like that users can make new artwork, however, I noticed that it may be confusing to know if work has been saved on the platform given there is not a "save" option for the user.
   c. Rationale: Lack of confirmation for saved artwork / lack of ability to save may leave users confused if they feel that they might not be able to access the artwork again at another time because they cannot see a save button.
   d. Suggested fix: add a save button at the top of the screen when in the canvas / create screen page. Gives the user reassurance that their work is saved!
3. **H1 Visibility of System Status / severity: 4 / Found: A, B, C, D**
   a. Task 1: Creating artwork

b. Problem Description: In the feature to create artwork, once it has been created, there is no button to save the work.

c. Rational: Lack of saving options can leave users perplexed in knowing if their work can be saved and can lead to frustration.

d. Suggested Fix: Add a "save" button in the canvas screen.

4. **H1 Visibility of system status / severity: 1 / Found: A**

a. Task 1: renaming artwork

b. Problem Description: User receives no confirmation that their artwork name change has been saved.

c. Rationale: Lack of confirmation for saved name changes may confuse the user if they want to reorganize their artwork by renaming multiple art pieces at the same time.

d. Suggested fix: add a popup that confirms if they want to change the name. Give the option in the popup "do not show this again" check box so that the user has flexibility to see the reminder each time they rename artwork.

5. **H2: Match Between System and Real World / Severity 2 / Found: C**

a. Task 2 and 3

b. Description: As a user of your app, I don't really have a conception of what friends are.

c. Rationale: If friends are on the app, I don't know how to interact with them and what "friendship" looks like in the context of the app. Ofc there is thick context with real friends, but how does the app's narrow context and its concept of friendship and interaction inside its ecosystem look? I don't even know if picking a friend up top will send them a text message, or if there's some in-app message sent?

d. Fix: Make it clear that the friends are ON the app, and that the heart will get shared with them not as a picture, but as a pixel art in-app graphic when I hit Share.

6. **H3: User control and freedom / Severity: 2 / Found: B, D**

a. Task 3

b. Description: users can add collaborators but can't remove them

c. Rationale: While the goal is to allow users to collaborate with other users, it is important to add the option for removing/limiting other user's collaboration abilities.

d. Fix: Add "Remove collaborator(s) button"

7. **H4 Consistency and Standards / Severity: 0 / Found: B**

a. Task 2

b. Description: Change the label on the button from "Share" to "Send" on the last screen after composing a message to Joe.

c. Rationale: Usually, on the final screen after composing a message, the action is to "send" rather than "share."

d. Fix: Update the button text to "Send" for clarity and consistency with user expectations.

8. **H5 Error Prevention / Severity: 3 / Found: A, B, C**
    a. Task 1: Create new artwork
    b. Problem Description: There is a pencil feature and a bucket feature to paint on the canvas. May be confusing to know what the difference is between the two features.
    c. Rationale: In pixel art, we fill out a square completely, however, having the pencil feature may be counterintuitive because it will not signify to the user that we can fill the square.
    d. Suggested Fix: remove the pencil feature because the bucket feature fills the entire square and is more intuitive.
9. **H5: Error Prevention / Severity: 2 / Found: B**
    a. Task 3
    b. Description: Uncertainty regarding the functionality of "undo" and "redo" when users collaborate.
    c. Rationale: Collaborative work may lead to conflicts or confusion in terms of "undo" and "redo"
    d. Fix: To address this concern, consider implementing a collaborative history feature that tracks changes made by each collaborator. This way, users can understand and manage the sequence of actions, ensuring a smoother collaborative experience.

10. **H6 Recognition rather than recall / severity: 2 / Found: A, B**
    a. Task 2: create artwork
    b. Problem Description: The gallery feature takes you to a canvas with artwork, however, the painting features are still available for users to paint. This feature seems to work like the "create" feature, except create starts from scratch.
    c. Rational: It may be confusing to have the painting features during gallery view because it may make it difficult for users to remember if the gallery is for painting or just for viewing artwork.
    d. Suggested Fix: add an "edit" button in the gallery view underneath the photo that is being viewed. This way, we can differentiate between "gallery" and create features. Users will have more control and flexibility to decide if they want to "edit" a photo.
11. **H6: Recognition Rather Than Recall / Severity 1 / Found: C**
    a. Task: 2 and 3
    b. Description: When picking friends to share with, the app says "1 friend selected"
    c. Rationale: If I share with a few friends and scroll through the top bar of friends, I will at some point no longer see on one screen which friends I have picked (since only three avatars fit next to each other on the screen).
    d. Fix: Instead of saying "1 friend selected" (which is great feedback, so good job on H1), tell me which friends were selected: "Joe, Archer, etc. selected".
12. **H7: Flexibility and efficiency of use/ Severity: 1 / Found: B**
    a. Task 1

b. Description: The >> button is clickable but doesn't work
c. Rationale: Cool positioning and reminds me of other drawing apps. In terms of design, I would recommend making the toolbar "movable" so that the user can position it anywhere (i.e. when drawing extends to the bottom of the page).
d. Fix: Once clicked, the toolbar should occupy less space and be easy to move/navigate.

13. **H7 Flexibility and Efficiency of Use / severity: 3 / Found: A, C**
   a. Task 2: sharing the artwork
   b. Problem Description: Having this option in the navigation bar may be difficult to locate for a new user.
   c. Rational: the user may not know that they can share artwork with others if the sharing feature is inside of the navigation bar.
   d. Suggested Fix: Take out the "share" feature in the navigation bar and place it somewhere more visible.

14. **H7 Flexibility and Efficiency of Use / severity: 4 / Found: A, C**
   a. Task 3: Collaborate with others on artwork
   b. Problem Description: I like that you have the option to collaborate with other users on artwork. I think one challenge in this usability aspect that is contradicting the purpose of this task is that there is no option to share an empty canvas with another user. Sharing an empty canvas with another user is not efficient at the moment in the prototype and right now it seems users can only share existing artwork.
   c. Rational: When clicking on collaborate, we are taken to a gallery for users to select piecework to share and then selecting users to collaborate with. There is a lack of option in letting users create a blank canvas with another user. They have to create and initiate the artwork for it to appear in the gallery and then share it from there, which may not be efficient. In fact, it makes the user think that they cannot collaborate from scratch with another user.
   d. Suggested Fix: It could be better to change the order process of collaborating with the user while also adding a "create" button in the collaborating task. For instance, instead of clicking "collaborate", selecting a piece of artwork to collab with, then selecting the user–the process could be changed to clicking collaborate, picking users who we want to collaborate with, then select artwork we want to collaborate with / have a button that creates an empty canvas to collaborate from scratch. This way, the user is aware that they are actually collaborating with someone and even have the option to create work from scratch with the other user.

15. **H8 Aesthetic and minimalist design / severity: 2 / Found: A, C**
   a. Task 2: share button
   b. Problem Description: Share button is hidden in navigation bar
   c. Rational: having a share button hidden diminishes its visibility and users are less likely to perform the task.
   d. Suggested Fix: bring the share button out of the navigation bar.

16. **H8 Aesthetic and minimalist design / severity: 1 / Found: ?**
    a. Task 3: collaborate task
    b. Problem Description: "canvas" button in the navigation bar menu is taking up space and seems repetitive.
    c. Rational: The "canvas" button is not needed because they have the home button page which takes you to the home screen where the user can create artwork.
    d. Suggested Fix: remove the "canvas" button front the menu bar in navigation.

17. **H9 Help users recognize, diagnose, and recover from errors / severity: 3 / Found: A, B**
    a. Task 1 creating artwork
    b. Problem Description: there is no discard button or drafts of the artwork.
    c. Rational: If the user wants to exit out of the artwork, they can only exit out completely by going to the home page. This may create errors in the User experience if they want to know if artwork has been saved as a draft or if they lose access to it completely by exiting out to the homepage.
    d. Suggested Fix: have a "save as draft" button in the case they want to get back to it. Or have an exit button and a popup that asks the user if they want to save their artwork.

18. **H9: Help users recognize, diagnose, and recover from errors / Severity 2 / Found: C**
    a. Task: 3 collaboration
    b. Description: What happens if connection drops/doesn't update in real time?
    c. Rationale: As a user I worry about this on the collaboration screen
    d. Fix: Add explanation or document recovery so that I can make sure what is saved is what I want to be saved/that I'm working on the latest version (also compared to H1, on mobile my connection may be bad and we may both be editing the same pixel at the same time).

19. **H10 Help and Documentation / severity: 3 / Found: A, B, C, D**
    a. Task 1: create artwork
    b. Problem description: I like that you try to go for a minimalist look in the canvas page! However, I think that there may be trouble for the user (for those who are not tech savvy) on how to navigate tools. No instructions for the users are provided in the create artwork screen, and new users to technology may be confused as to what the symbols in the "create" page mean.
    c. Rationale: Symbols for tools may not be very intuitive for non-tech savvy users or people who have never used tech painting tools.
    d. Suggested fix: have an introduction tutorial that goes over what the tools are in the app. This could probably be done in high-fidelity!

20. **H10 Help and documentation / severity: 2 / Found: A, B, C**
    a. Task 1: create artwork
    b. Problem Description: No instructions for what the drawing tools mean.
    c. Rationale: icons for drawing tools may not be intuitive for users who are not tech savvy. I think it's good you have a lessons tab since I'd appreciate some help

with first learning how to use the drawing tools (they're not bad, but not peak intuitive either: what does fill do if used between two separate colors?), but it's not easily searchable/accessible

   d. Suggested Fix: Add a help button, a drawing tutorial that pops up the first time I open the drawing board, or a link in the menu on the drawing screen that takes me to the help section.

21. H11 Accessible design / severity: 3 / Found: A

   a. Task 3: collaborate

   b. Problem Description: artwork images in the gallery view of collaborative task are too small.

   c. Rational: Having the artwork preview images be too small is not very accessible for those who have vision disabilities.

   d. Suggested Fix: Make the images larger, perhaps consider making the gallery screen a scroll downwards/ upwards scroll to view the enlarged images.

Extra Violations (non-tasks)

22. H1: Visibility of System Status / Severity: 3 / Found: B

   a. Other

   b. Problem Description: The large pixelated heart button in the middle of the screen stands out, and once clicked, it's challenging to know why it's there. Make it clear it's a shortcut to the recent drawings.

   c. Rationale: Upon interacting with the prototype, I found the heart button intriguing and clicked on it. It redirected me to another page, but I was uncertain about the subsequent steps. Also, what happens if there are lots of existing pictures – they can't all be shown on the home page?

   d. Proposed Solution: I suspected the heart button serves as a template for users to initiate their work, aligning with your mission to lower the entry barrier. To improve user experience, be more clear about what this is. Is it to go to existing drawings, or are these template drawings, etc.

23. H3 User control and freedom / severity: 2

   a. Task: other

   b. Problem Description: App lacks an easily accessible back button.

   c. Rational: In general, it seems like a tedious process to go back to the prior screen because the user has to navigate through the dropdown navigation bar.

      i. When I first check out the app, I want to be able to explore. Even as a frequent user, I'll make mistakes and will want to go back to a prior screen, and at the moment that is at best doable in a cumbersome way through the hamburger menu

   d. Suggested Fix: Have a 'home' icon on all screens at the top so that the user can immediately know how to exit out of whatever screens they are on.

24. H4: Consistency & Standards / Severity 2 / Found: C

   a. Task: other

    b. Description: User Profile is at top left and hamburger menu is at the top right.

    c. Rationale: From conceptual models and interface metaphors lecture, we know that a key part of meaningful consistency is being consistent with other apps. Typically, the menu is at the top left and profile is at the top right, so this may confuse users and make the app less intuitive to use.

    d. Fix: Switch hamburger menu and profile picture. Also makes more sense since I will rarely want to check my profile picture but will often want to go to the menu, so the first read should not be my profile picture.

25. H5: Error Prevention / Severity 2 / Found: C

    a. Task: other

    b. Problem Description: Contents of hamburger menu change depending on screen I'm in.

    c. Rationale: If I hit the hamburger menu in the home screen, the gallery view is up top. If I hit the hamburger menu elsewhere, home is up top. Then yet on other screens, home is at the bottom. This makes it harder to automate (in my fingers/head) where the buttons for specific actions are, and makes it more likely I may end up on the wrong screen.

    d. Suggested Fix: Keep the home button and gallery button always in the hamburger menu and always visible, just gray them out if I'm already on that screen. Or have buttons that change depending on where in the app I am up top in the hamburger menu, and often used buttons that should always be starting from the bottom of the screen.

26. H7: Flexibility and efficiency of use / Severity: 0 / Found: B

    a. Other

    b. Description: The current design of recent drawings isn't efficient

    c. Rationale: I'm guessing the user will have the option of swiping to get to other recent drawings. The only issue is what happens when the list of drawings gets long. How can the user access previous drawings? How can the user go back to check out the heart drawing without having to swipe the same # of times to get back to that drawing?

    d. Fix: differentiate recent drawings from previous drawings.

27. H8 Aesthetic and minimalist design / severity: 1 / Found: A

    a. Task: renaming the painting

    b. Problem Description: the ability to rename the painting is hidden in the navigation bar.

    c. Rational: having it hidden takes up space because renaming is not really considered to be a functionality that should be grouped with the other buttons in the menu "share, add collaborator, home" buttons.

    d. Suggested Fix: Have the name of the artwork in the create artwork homescreen where the user can tap on the title to rename it rather than having to navigate to the menu.

28. H8 Aesthetic and minimalist design / severity: 2 / Found: A, D

      a. Task: Overall look of the app
      b. Problem Description: App does look consistent between screens but the colors are mostly gray. May bore the user and not evoke a sense of excitement.
      c. Rational: I think the app should focus on retro colors and use bright retro themed color schemes throughout the app.
      d. considered to be a functionality that should be grouped with the other buttons in the menu "share, add collaborator, home" buttons.
      e. Suggested Fix: Have the name of the artwork in the create artwork homescreen where the user can tap on the title to rename it rather than having to navigate to the menu.

29. **H10: Help and Documentation / Severity: 2 / Found: ?**
      a. Other
      b. Description: There is no 'Help" option for navigating technical issues within the app or for figuring out how to do something
      c. Rationale: for novice users, this will be extremely helpful and will ensure that they are likely to stay on the app
      d. Fix: Add a help button/page

Evaluator D Only (not reviewed by peers)

1. **H7 Flexibility and efficiency of use / Severity: 2**
Task: All
Description: From home, sharing takes many clicks (menu->gallery->art->menu->share)
Rationale: Experienced users may be frustrated they need to open a hamburger menu not once but twice to accomplish this task.
Fix: Consider adding "share" to the hamburger menu.

2. **H11. Accessible design / Severity: 1**
Task: All
Description: A large number of key features are in nested menus.
Rationale: This may present a difficulty for those using screen readers. However, it is unclear the extent to which those with low vision are actually within your customer base.
Fix: Potentially no fix is necessary. However, breaking some essential options out of hamburger menus where there is space in the interface for them (such as on the home screen) could improve the accessibility of the interface for everyone.

3. **H2. Match between system and the real world / Severity 3**
Task: Creating a new pixel art drawing
Description: The arrow to minimize the toolbar still points outward to the edge of the screen when the toolbar is maximized.
Rationale: Users generally expect elements to move in the direction that arrows point, but this element moves in the opposite direction.
Fix: Flip the arrow when the toolbar is extended.

4. **H4. Consistency and Standards / Severity 2**

Task: Creating a new pixel art drawing

Description: I'm unsure how to change my palette's colors.

Rationale: The eyedropper to me picks up a color already on the canvas, so I assume that's not how I add new colors. If the eyedropper is the icon for adding a new color, this is a Heuristic 4 violation. If the eyedropper is not how you add new colors, this is simply a missing feature.

Fix: Change the icon if necessary. Otherwise, consider how the very common action of changing color could fit into your existing interface in an easy-to-access way.

5. **H8. Aesthetic and minimalist design / Severity 2**

   Task: Creating a new pixel art drawing

   Description: There are boxes around the tool icons on the toolbar.

   Rationale: The icons are clearly intractable with or without the boxes. The boxes add visual clutter and make the interface look less clean and modern.

   Fix: Remove the boxes.

6. **H4. Consistency and Standards / Severity 1**

   Task: Creating a new pixel art drawing

   Description: There are boxes around the tool icons on the toolbar. There are no boxes around clickable icons in other contexts.

   Rationale: Users may be confused about whether there is something special about boxed icons.

   Fix: Remove the boxes.

7. **H11. Accessible design / Severity: 2**

   Task: Creating a new pixel art drawing

   Description: There are no hex codes or descriptive indicators of the selected color.

   Rationale: Colorblind artists can use color wheels, hex codes, RGB values, etc. to ensure their art looks as intended to people who see differently from them. Not offering these somewhere deprives them of this option.

   Fix: Display a descriptor of the selected color. This may also be very useful for able-sighted artists attempting to use very specific colors.

8. **H4. Consistency and Standards / Severity: 1**

   Task: Sharing an artwork with a friend

   Description: Sometimes, the title of the art is displayed beneath the image, other times it is not.

   Rationale: Users may be confused as to why the name of their artwork disappeared and think an error has occurred.

   Fix: Always display the name below the artwork throughout the sharing process

9. **H9. Help users recognize, diagnose, and recover from errors / Severity 4**

   Task: Sharing an artwork with a friend

   Description: The box for typing your message to your friend is very small.

   Rationale: If I had a longer message, the cutoff would probably make it so I can't easily see typos in my message or easily fix them.

   Fix: Enlarge the box

10. **H7. Flexibility and efficiency of use / Severity: 4**

Task: Collaborating on an artwork with a friend

Description: There is no way to access my messages with a user or see what messages I've received from them while away without going to an artwork I'm collaborating on with them

Rationale: Users likely do not want to go artwork-by-artwork to look for new messages.

Fix: There should be some indication you have a new message, even just on the canvas itself but ideally in an aggregator or notifications screen.

11. **H6. Recognition rather than recall / Severity 4**

Task: Collaborating on an artwork with a friend

Description: It is not obvious that clicking on the profile picture of a collaborator brings up messaging.

Rationale: The profile picture could easily be interpreted as static, simply showing the collaborator is present. I missed the action on the spec and it took me forever to figure out this action was possible

Fix: Show a small messaging icon overlaid on a corner of the profile picture.

12. **H6. Recognition rather than recall / Severity: 2**

Task: Sharing an artwork with a friend and collaborating on an artwork with a friend

Description: There is no visible indication that I could scroll to see additional friends on the share and collaborate screens.

Rationale: Users may be confused as to why they can't see all their friends and may not figure out they're supposed to swipe sideways.

Fix: Add a subtle indicator that this action is possible.

13. **H7. Flexibility and efficiency of use / Severity: 2**

Task: Sharing an artwork with a friend and collaborating on an artwork with a friend

Description: There is no way to search for the friend you want

Rationale: Advanced users with many friends may want to type the name of the friend they wish to share their art with.

Fix: Add a "Search" option to the friend selection- it could be offered as a round icon that looks kind of like the profile pictures to make it blend in.

14. **H3. User control and freedom / Severity 4**

Task: Sharing an artwork with a friend and collaborating on an artwork with a friend

Description: If I select a friend by mistake, I can't unselect them without leaving the page entirely.

Rationale: Users who click a friend they don't mean to share their art with may become panicked when they can't unselect the friend. This would be especially bad if you had selected a large group of friends to share with and needed to start from scratch after going back.

Fix: Allow users to click a friend a second time to deselect them.

15. **H4. Consistency and Standards / Severity 1**

Task: Sharing an artwork with a friend and collaborating on an artwork with a friend

Description: The text "1 friend selected" is left-justified. This appears to be the only context in which left-justified text is used.

Rationale: The left-justification may look out of place in the interface to some users.

Fix: Center the text beneath the button.

16. **H5. Error prevention / Severity 3**

    Task: Sharing an artwork with a friend and collaborating on an artwork with a friend
    Description: The text "1 friend selected" is of a small font size and very easy to miss because of where it is positioned.
    Rationale: A user may send their artwork to a different set of people than they meant to because the number of people selected is not prominent.
    Fix: Increase the text size

3. Summary of Violations

[Spreadsheet](#)

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status	0	1	1	2	1	**5**
H2: Match Sys & World	0	0	1	1	0	**2**
H3: User Control	0	0	2	0	1	**3**
H4: Consistency & Standards	*1*	3	2	0	0	**6**
H5: Error Prevention	0	0	2	2	0	**4**
H6: Recognition not Recall	0	1	2	0	1	**4**
H7: Efficiency of Use	*1*	1	2	1	2	**7**
H8: Minimalist Design	0	2	3	0	0	**5**
H9: Help Users with Errors	0	0	1	1	1	**3**
H10: Help & Documentation	0	0	2	2	0	**4**
H11: Accessible Design	0	1	1	1	0	**3**
H12: Value Alignment & Incl	0	0	0	0	0	**0**

Total Violations by Severity	2	9	19	10	6	46

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)**

⊞ **Copy of A9 Violations**

4. Evaluation Statistics (in %)

Severity / Evaluator	Evaluator A [your name]	Evaluator B [your name]	Evaluator C [your name]	Evaluator D [your name]
Sev. 0 Ex: Eval A count / total sevs 0 in table #3	0	250	0	0
Sev. 1 Ex: Eval A count / total sevs 1 in table #3	33.33333333	22.22222222	33.33333333	44.44444444
Sev. 2 Ex: Eval A count / total sevs 2 in table #3	52.63157895	21.05263158	21.05263158	47.36842105
Sev. 3 Ex: Eval A count / total sevs 3 in table #3	100	66.66666667	55.55555556	44.44444444
Sev. 4 Ex: Eval A count / total sevs 4 in table #3	50	33.33333333	0	83.33333333
Total (sevs. 3 & 4) Ex: Eval A = sum(sev 3: sev 4 counts) / sum(sev 3: sev 4 in table #3)	80	53.33333333	33.33333333	60
Total (all severity levels) Ex: Eval A total sev count / total sevs (green cell) in table #3	55.55555556	42.22222222	26.66666667	48.88888889

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

5. Summary Recommendations
[merge the general recommendations you made here]

    In summary, I would say that we can see that the app does great with regards to its aesthetic and minimalist design, and quite well when it comes to visibility of system status. However, its weaknesses lie in consistency and standards as well as in the flexibility and efficiency of use. It would be worth it to think through the app navigation from scratch again to

make things more consistent to use and to make navigation more efficient. Also better collaboration features are necessary, that give us a better idea of how collaboration and friendship on the app ought to look like.

I have not included significant negative feedback on accessibility as the app is somewhat limited with regards to accessibility due to its visual focus, the limitations are largely addressed in the read me, and since the spec has told us not to dwell on missing features, but it would be worth it to have functionality that responds to native device settings (such as "show text or show bigger interface buttons" setting makes the gallery show bigger previews, or "increased contrast" settings and "colorblind" settings changing the colors in the app, etc.).

For Task 1 and 2, the minimalist design of the canvas screen may pose challenges for non-tech-savvy users; enhance the match between the system and the real world by providing an introductory tutorial for the tools that show non-tech savvy users how these drawing tools are used or provide clearer instructions for drawing tools through a tutorial. I think this will increase accessibility to different groups.

Moreover, addressing visibility concerns, in Task 2, the absence of a confirmation message after sharing artwork may lead to user uncertainty, so my suggestion is the need for a pop-up confirmation that their request was completed. I would suggest implementing a confirmation pop-up after sharing artwork and introducing a save button in the canvas screen for creating artwork.

This next piece of feedback is probably the most essential in my opinion: maintain consistency in navigation bar options across tasks to facilitate user understanding and reduce confusion, and by doing so I think it will really ensure a seamless experience for the user. Improve error prevention by distinguishing between creating and viewing artwork and making navigation bars consistent.

Evaluator D's Addendum

I strongly concur with my peers' conclusions that the app's strong suit is the minimalism of the user interface. I'd further add that the app is highly approachable, which is important in a beginner product like this. On almost every screen, what each function does is clear and there is an obvious next step to accomplishing a given task. The one exception to this is potentially collaboration, messaging functionality is not apparent and difficult to access in usable ways.

On the point of color and aesthetic, I'd like to contribute some nuance: it isn't simply the choice of grey as a color. Although I would advocate for changing it, I think it is reasonable to worry about how your color scheme may look next to users' variously colorful portraits. If this remains an area of concern for you, I think you could instead look to redress the blockiness of the menus, include fewer menu objects overall, and incorporate pixel art icons into your design. All of the above provide potential alternate routes towards making the app feel less like something for professionals.

Finally, I'd advocate for shifting the way you think about menus. Hamburger menus are used throughout your app in order to minimize the number of items on the screen. However, core features are regularly hidden behind your menus. Instead, consider using menus to host additional ways for power users to shortcut through your app, while placing core features in more visible positions to newcomers.

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.