

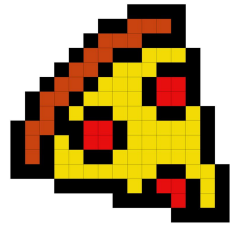
Art + ^2

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“Learn Art and
Build your
Community

– One pixel at a time”



Problem

People don't continue art after formal education because it is time consuming and they aren't good at it. This makes them hesitant to share their work with others since they're not proud of their art.

Solution

App that allows users to learn an artistic medium with a lower barrier to entry (pixel art) and collaborate with others to build a community.

Values in Design

- **Creativity**
 - Main feature is freestyle pixel art
- **Community**
 - Share and collaborate on pixel art
 - Connect with friends on app
- **Inclusion**
 - Optional lessons for all levels of artists
- **Simplicity**
 - Simple app design and grayscale colors to make user's art pop
 - Inclusion of only the necessary tools on each page

Tensions

- **Health**
 - Promotes screen time
 - Eye strain
 - Sedentary lifestyle
- **Accessibility**
 - More difficult for those with lack of motor control
- **Inclusion**
 - Not accessible for those without access to mobile devices

Tasks

1. Create a pixel art piece
(simple)



2. Share a pixel artwork
(moderate)



3. Collaborate on a pixel
artwork (complex)



*No changes were made to the tasks

Usability Goals & Key Measurements

- Fun
 - Measured with 5 point Likert scale
- Robust
 - Number of misclicks/errors user makes when performing task
 - How fast they can recover from failure

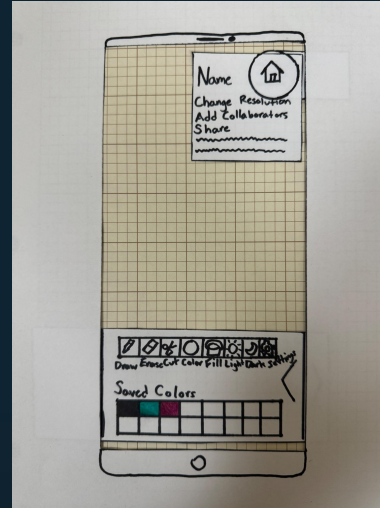
Progress?: On track to hitting these goals



Interface Revisions

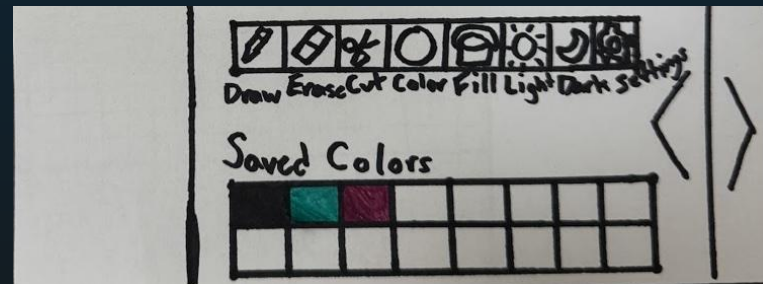
Design change #1 - Before

How can we make drawing pixel art more simple? How can we reduce our toolbar to be more intuitive to reduce errors?



Low-fi drawing page

Low-fi Toolbar



Design Change #1 - After

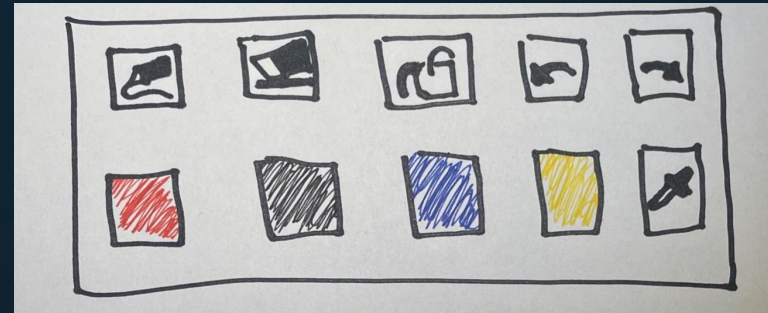
Feedback: "Maybe you could make drawing a pixel simpler there was a lot going on with the toolbar."

Change:

- Reduced toolbar to having just 6 functions w/ 4 colors.

Rationale:

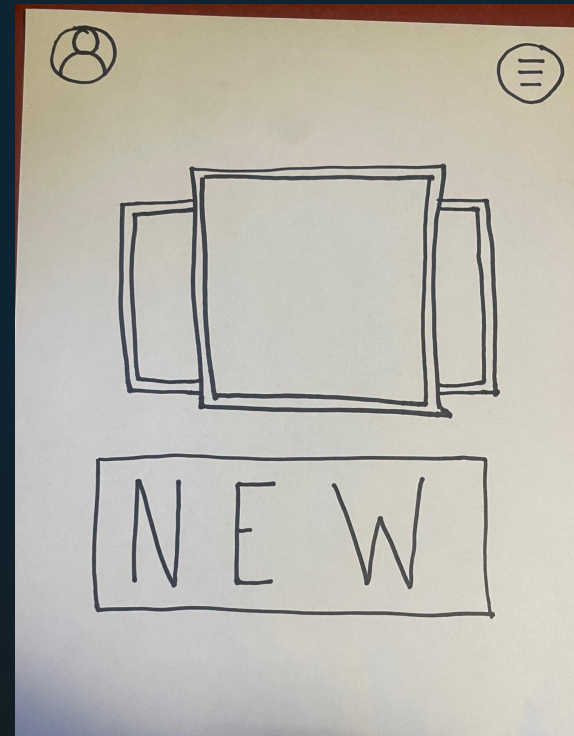
- We wanted the most important features present.
- Our design is simple so for consistency we wanted to make the toolbar simpler and more intuitive.
- We noticed that there was a lot clutter in our toolbar.



Design Change #2 - Before

How can we make our core value of collaboration more visible? How can we emphasize building community to create a fun experience?

Low-fi Home page



Design Change #2 - After

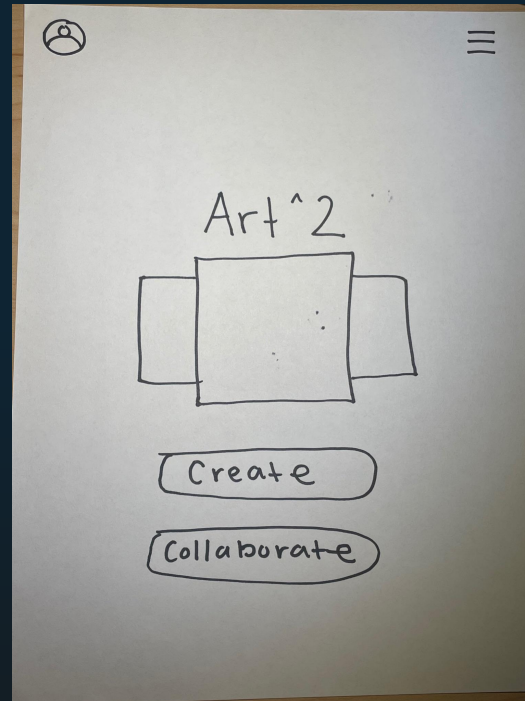
Feedback: "Make collaboration more apparent because it's one your goals."

Change:

- We added a collaboration button on the home page to emphasize community

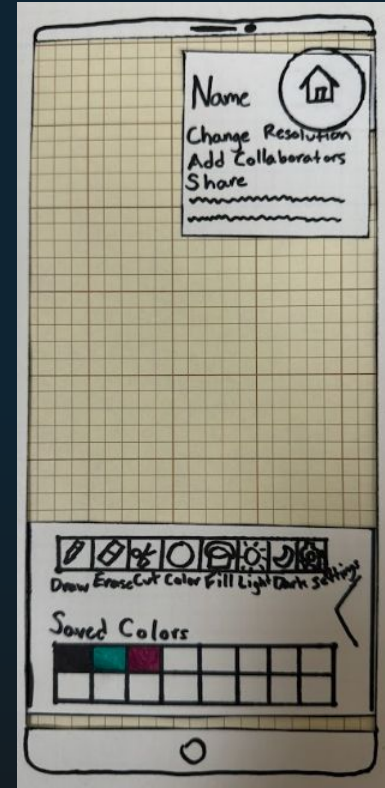
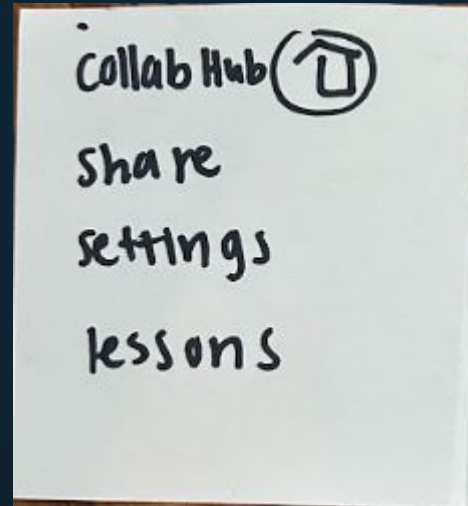
Rationale:

- Feedback we heard was that a key part of our goal was hidden behind the hamburger menu
- We wanted easier access for the user to build a fun community
- To be consistent with our values we decided to move collaboration to home page.



Design Change #3 - Before



How can we make navigating the app through navigation menus more clear and intuitive and lead to a more robust application?



Design Change #3 - After

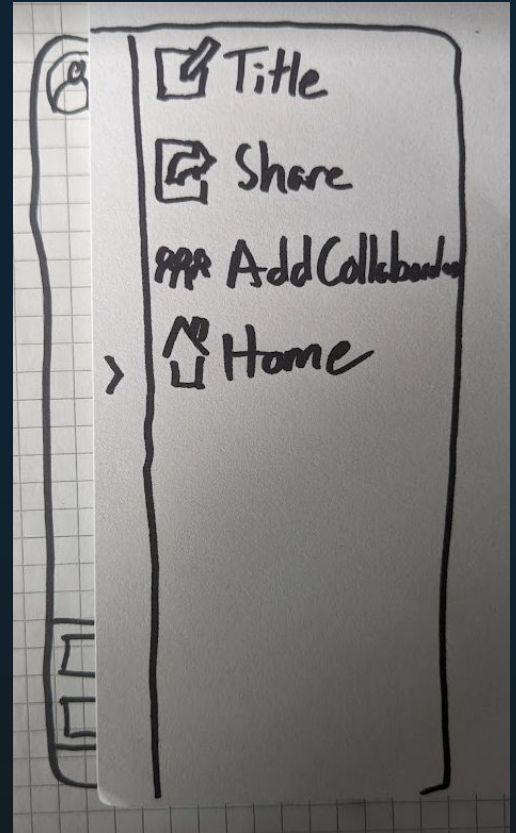
Feedback: reading through the navigation menus is slow

Change:

- Make navigation menus larger
- Add icons to navigation options
- Have different icons,  vs , for homepage and canvas navigation respectively

Rationale:

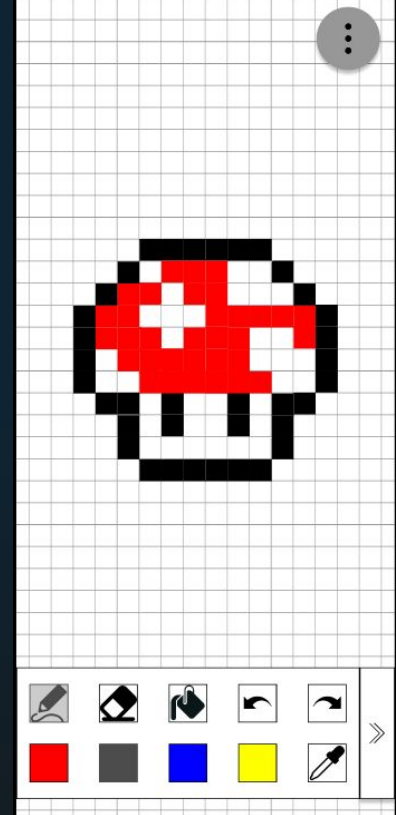
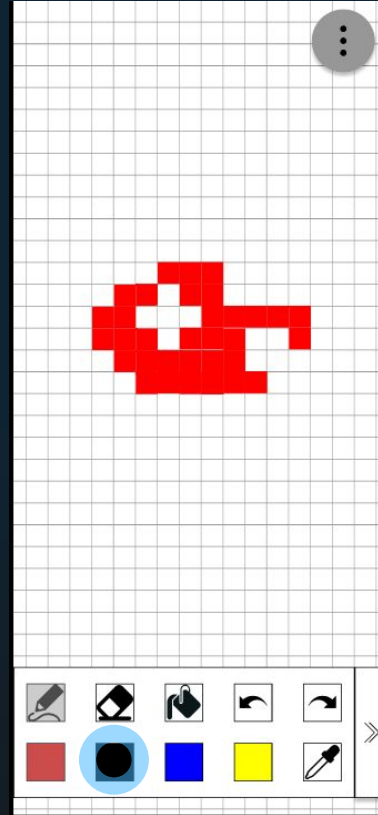
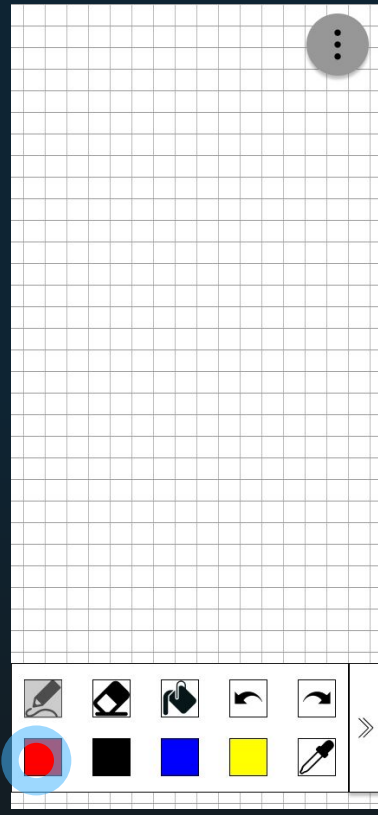
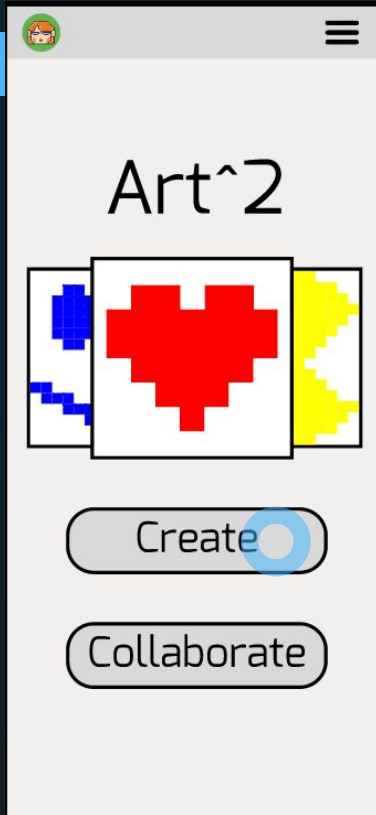
- Larger menus allow for larger text and fewer distractions while menu is open
- Icons are a quicker visual cue than text
- The same icon in two different places leading to different things could be confusing



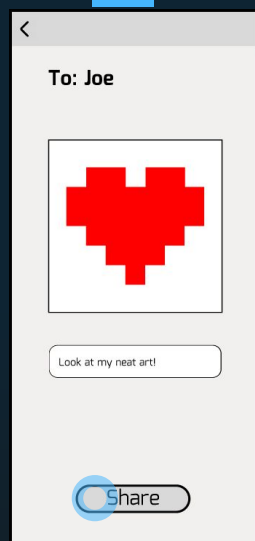
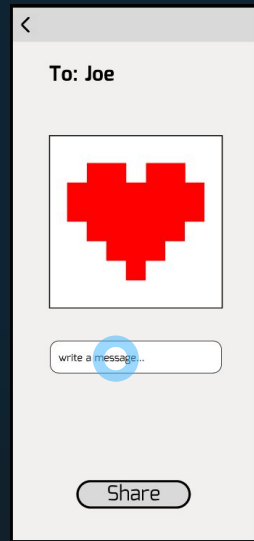
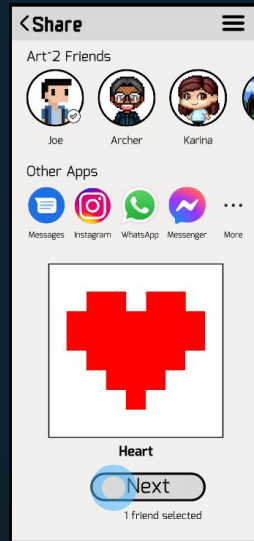
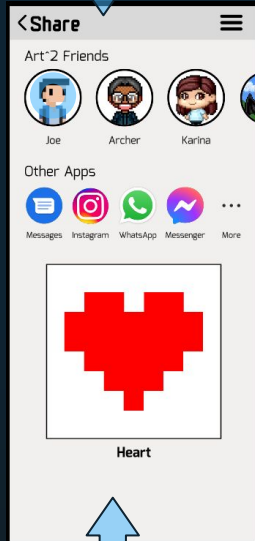
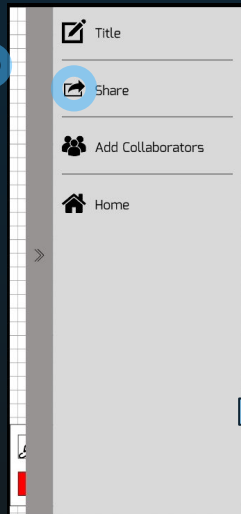
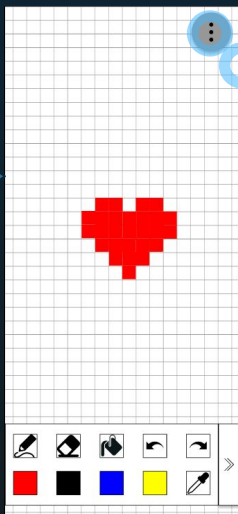
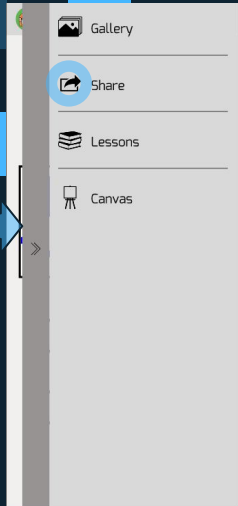
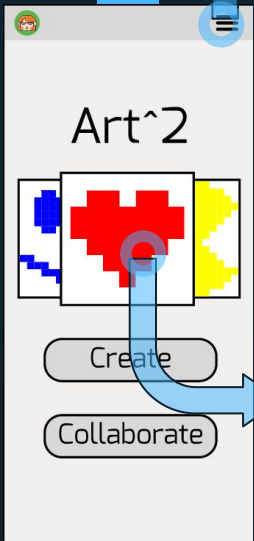


Medium-f task flows

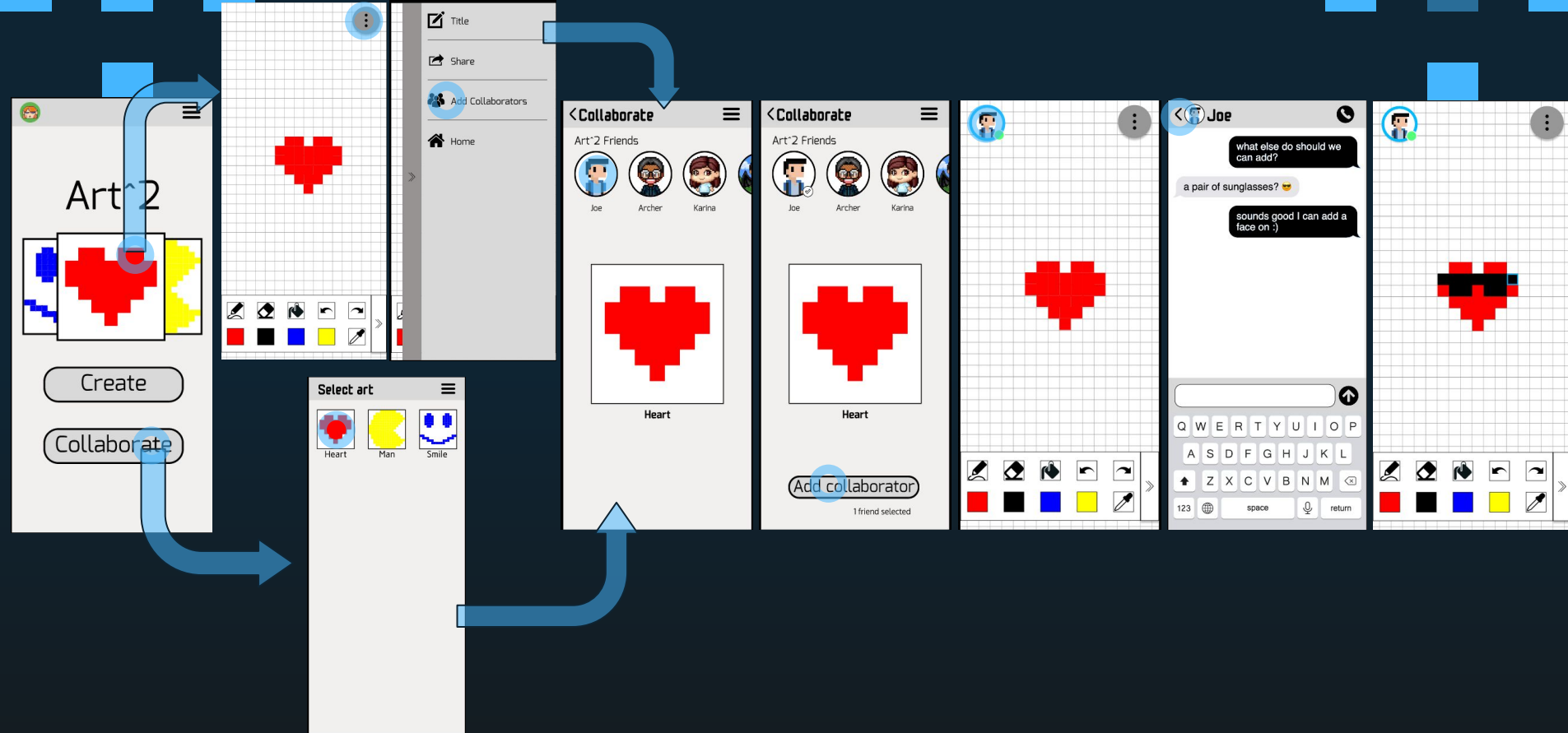
Task #1: Create



Task #2: Share



Task #3: Collaborate



Prototype Implementation

This medium-fi prototype was created using Figma. The prototype is designed to mimic screens and interactions on our mobile application.

Pros:

- Real time collaboration
- Can prototype design and interactions
- Componentize
- Auto layouts

Cons:

- High learning curve
- Too much functionality
- Slow to open
- Unable to accurately mimic user's experience without state

Limitations

- Correct tooling behavior in the canvas page
- Zooming into and moving around the canvas
 - Impractical to create multiple screens for all permutations
- Flushed out lessons
 - isn't one of the main tasks, need to curate useful content for it
- Interactive chat functionality
 - cannot implement this with one user

Wizard of Oz - Canvas

- User clicks on drawing tool and all red squares are filled in
- User clicks on black color and drawing is completed
- Implemented in this way as there would be too many permutations of screens to be built out if the user could selected each square they want to draw individually

Wizard of Oz - Collaborate

- Messages with friends automatically populated after adding collaborators
- Difficult to mimic interaction between two parties on Figma with one user

Wizard of Oz - Home/Gallery

- User already has pre-populated drawings that were created
- Makes the app look more appealing than blank artwork

Hard coded features

- Created drawings
- Messages
- Share/Collaborate flow

Figma Link



THANKS

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