mosaicly

Test Plan and Report

Product name:	Mosaicly
Team name:	Mosaicly Team
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Testing Approach

To test our system, we manually tested as we coded our user stories and tasks, making sure that we tried all possible inputs (including the timing of inputs). Once we believe that we have exhausted all possible inputs and achieved all desired outputs, the user story is accepted as complete.

System Test Scenarios

User Story 1.2: Create account

Description: As a user, I want to have my own username, profile picture, and other profile information to be saved so that other users can see the information I want them to see from me.

Scenario: Create account using oAuth2 Providers [Pass]

Setup:
- User is signed in to the Mosaicly website.

Input:
- Go to the Home page.
- Click on "Login" button.
- Click on either the Google, Discord, or GIthub button.
- Select desired account on the redirected website (if available, such as on Google)

- Authorize sign in on the redirected website.

Output:
- Users should see their profile icon or a "Go to Profile" button on the top-right corner of the Mosaicly website.

User Story 2.1: Canvas Functionality (Visuals and Controls)

Description: As a user, I want to use a canvas that I can navigate and draw on with different colors so I can see other people's interactions and have different ways of expressing myself.

Scenario: Access existing canvas [Pass]

Setup:
- User is signed in to the Mosaicly website.
- There exists a canvas C that is unarchived.
- User has canvas C opened and is within 20 meters of canvas C.

Input:
- Tap the "Edit" button above the canvas.
- Tap on a color from above the canvas.
- Tap anywhere on the canvas view.
- Repeat the above 2 steps for all available colors.
- Click the "View" button above the canvas.
- Zoom in by scrolling up or pinching out.
- Pan around the canvas (one finger if in view mode, two fingers if in edit mode).
- Zoom out by scrolling down or pinching in.

Output:
- In Edit mode:
    - The user should be able to see that there's an indicator that a color has been selected (the selected color is "raised" and enlarged).
    - The user should be able to see that a pixel is placed with the desired color based on where they clicked or tapped.
- In View mode:
    - Outside of the editing mode, the user should be able to see the pixels be zoomed in.
    - The user should be able to see a different part of the canvas from panning around.
    - The user should be able to see the pixels but zoomed out.
    - The user cannot add pixels in View mode.

User Story 3.1: Create a new canvas

Description: As a user, I want to be able to create a canvas with its own information so that users can identify and interact with my canvas.

Scenario: Create canvas [Pass]

Setup:
- User is signed in to the Mosaicly website.

Input:
- Click on the user's profile picture.
- In the expanded menu, click on "Create a Canvas".
- Fill in the field labeled "Give it a name".
- Optionally, fill in the field labeled "Location Description".
- Click on the right arrow at the bottom of the screen.
- Click on the map to place canvas anywhere.
  - Alternatively, click on the icon next to coordinates to select the user's current location, or manually input the coordinates in the field labelled "Canvas Coordinates".
- Click on the right arrow at the bottom of the screen.

Output:
- Users should be able to export a QR code in either image format or PDF format after the canvas is created by tapping one of the export buttons.
- The user should be able to find the new canvas in the "My Canvases" section of the profile.
- Other users should be able to find and access the canvas page through a QR code or the backup code.

User Story 3.2: Canvas Real Time Updates

- **Description:** As a user, I want to be able to see who is interacting with the canvas in real time so I know I am having real interactions with other people.

Scenario: Consistency in canvas editing with other users [Fail]

Setup:
- User A and user B are signed in to the Mosaicly website.
- There exists a canvas C that is unarchived.
- Both users are on canvas C, and are currently in edit mode.

Input:

- User A draws something on the canvas, while user B draws on something that overlaps with user A's drawing.
- Repeat this conflicting drawing several times at a rapid pace.
- Observe the canvas state of users A and B.

Output:
- Both users should see the exact same canvas pixels after all the conflicting draws, before and after both users reload.

User Story 4.2: QR Code Generation

Description: As a user, I want to be able to share my canvas online so that other users can interact with it.

Scenario: Get QR Code from existing canvas **[Pass]**

Setup:
- User is signed in to the Mosaicly website.
- There exists a canvas C that is unarchived.

Inputs:
- Tap on the profile icon.
- Tap on the "My Canvases" option.
- Tap on the qr-code icon on the bottom right (mobile) or right side (desktop) of a canvas C.
- Tap the outlined image button to open an image of the QR code in a new tab.
    - Alternatively, click on the outlined PDF button to open a PDF with the QR code in a new tab, or click on any of the solid buttons to download the QR code in either image or PDF format.

Output:
- The QR code should direct to canvas C when scanned.
- The QR codes on image and pdf should be the same.