Scribble Dash Milestone #4 Requirements

This requirements document explains Scribble Dash's final Milestone #4 requirements. For each milestone, a new requirements document and an updated Figma file will be created.

The mockups show the exact look and colors of a specific UI element. The app has a single theme, but no light or dark theme.

Note that this serves to give you an overall impression of what the app should be able to do. Feel free to decide how you implement specific things (e.g., how you display a specific loading progress or how you specify error messages).

You can find the mockups for Scribble Dash here: https://www.figma.com/design/TTnnjuj2SSijQWo2KI5Eg0/Milestones%3A-ScribbleDash?node-id=4002-623&t=cMEPJGsItty1nquo-0

Milestone #4 Goal

No app variants - just rewards and customisation!

Let's bring in the bling! 💰✨

Implement a coin system to reward players. Introduce a new root navigation destination – the **Shop Screen**. Let users spend their coins on stroke colors and canvas backgrounds.

Icons

All icons for the app can be Material design icons or taken from the mockups as SVG (in case an equivalent Material icon doesn't exist)

Technical Requirements

- **Home Screen (updated)**
  - Add new bottom navigation destination for the *ShopScreen*
    - On tap navigate to the *ShopScreen*
  - Add coin counter UI component at top right of screen
    - This displays the user's total number of coins available to spend in the shop
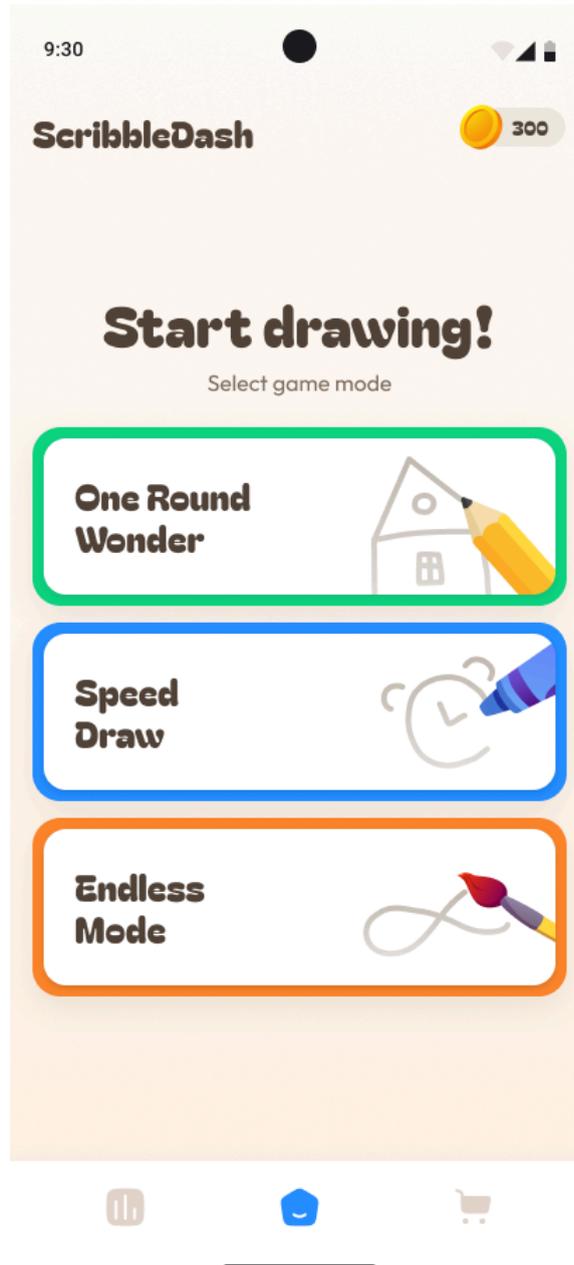

- **Draw Screen (updated)**

- Support different path colors for user-drawn paths on a canvas based on their selection in the *ShopScreen*

  - *Note that for the Rainbow pen colour, it does not have to match 100% as per the Figma mockups. However, all colours of the rainbow 🌈 (defined in Figma) should in some way be visible.*

- Support different canvas color backgrounds

  - Some backgrounds are a texture and must be imported as an asset to fill the size of the canvas
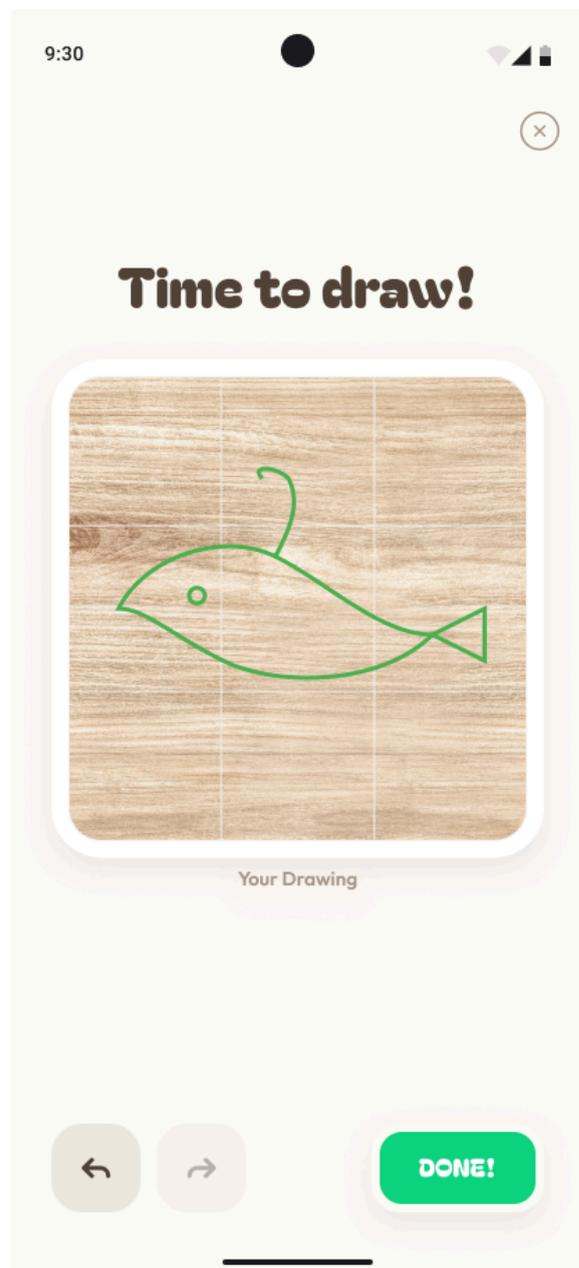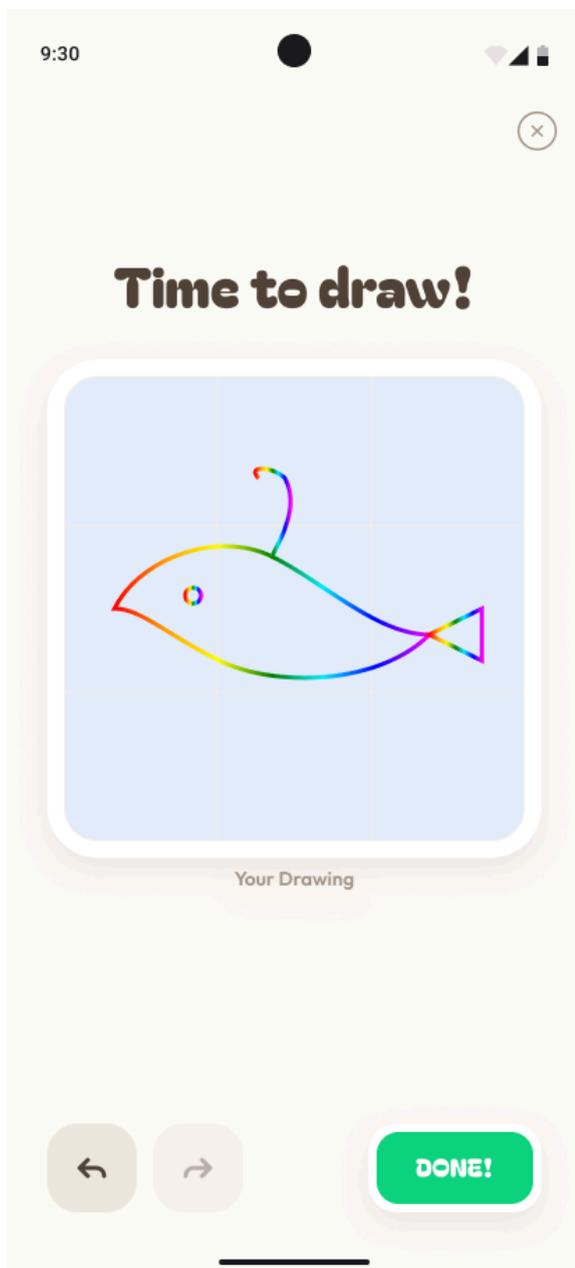
- **Results Screen - 1:1 Comparison (updated)**
  - Include a custom UI component below the feedback text to show the amount of coins earned
  - Only the user's canvas must match their chosen pen color and canvas background
  - The reference drawing should remain the basic white background and black pen color

- **Results Screen - Overall Score (updated)**
  - Include a custom UI component next to the score counter to show the amount of coins earned
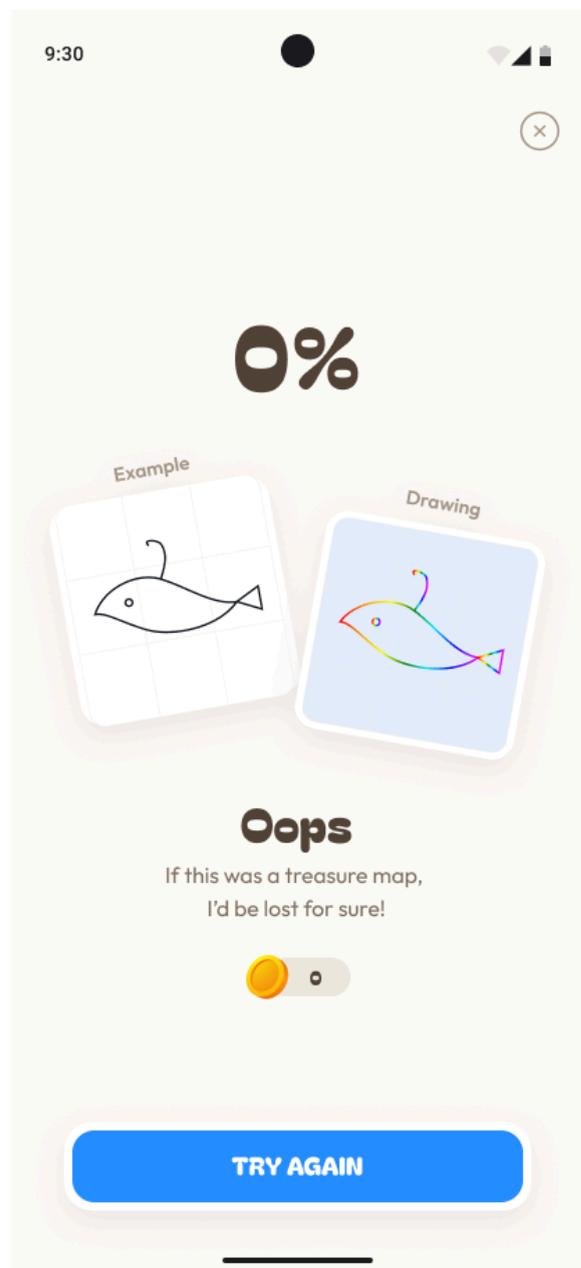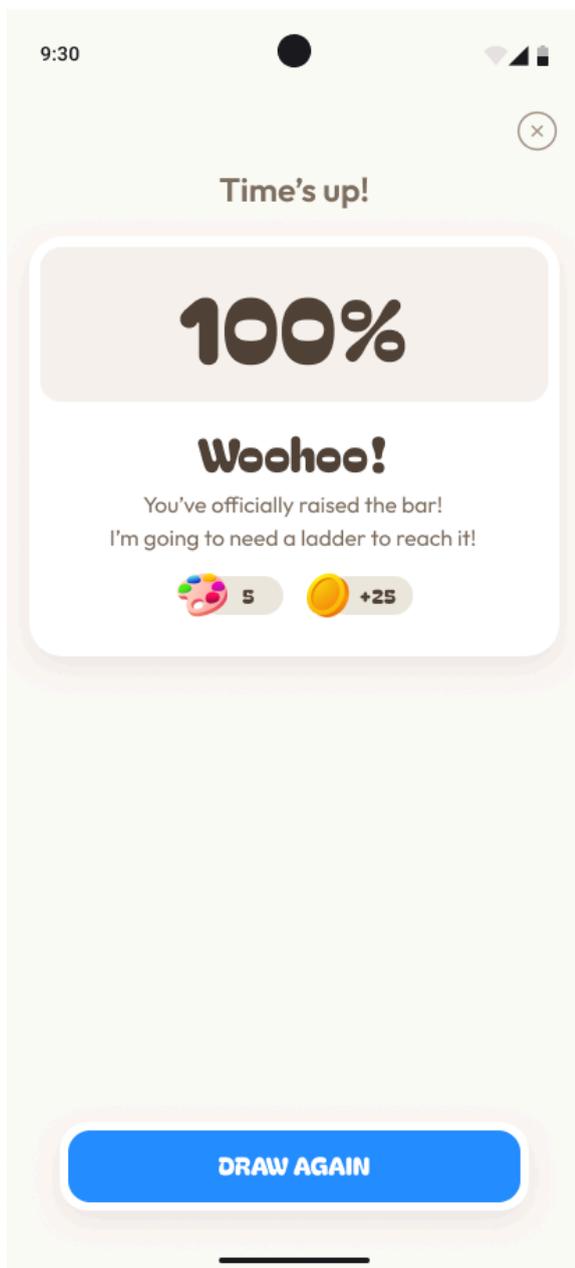
- **Earning coins**
  - Coins are earned by playing any of the game modes and by getting a new high scrore
  - An *Oops! (0% - 39%)* rating always gives one (1) coin
  - A base amount of coins is earned on *Challenging* difficulty
  - A multiplier is applied to the coins on *Beginner (x0.5)* and *Master (x1.75)*

- - Always round decimals up - except an *Oops!* rating, that will always be worth one (1) coin
  - For *Speed Draw* and *Endless* game modes, the coins earned at the end are a total of the drawings done in the game mode

Rating	Beginner (x0.5)	Challenging (x1.0)	Master (x1.75)
Oops!	1	1	1
Meh! / Good	1	2	4
Great	2	4	8
Woohoo!	3	6	11

- **Shop Screen**
  - Title top left of screen: "Shop"
  - Coin counter (total number of coins available to spend) top right of screen
  - Three (3) tabs in a Row
    - Pen
      - On tap, show a grid layout of pen colors to purchase
    - Canvas
      - On tap, show a grid layout of canvas colors to purchase
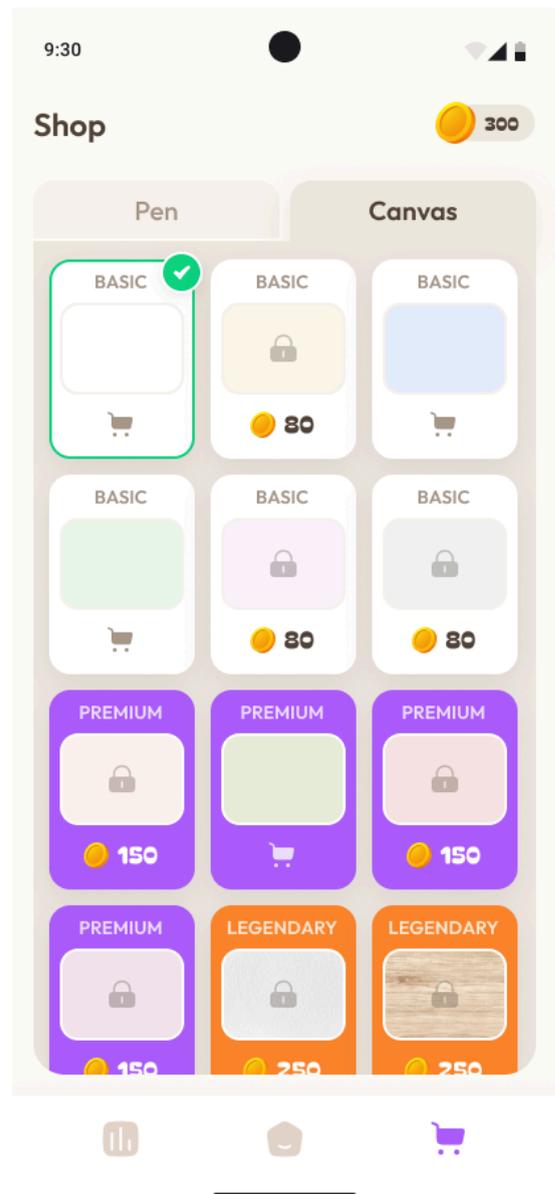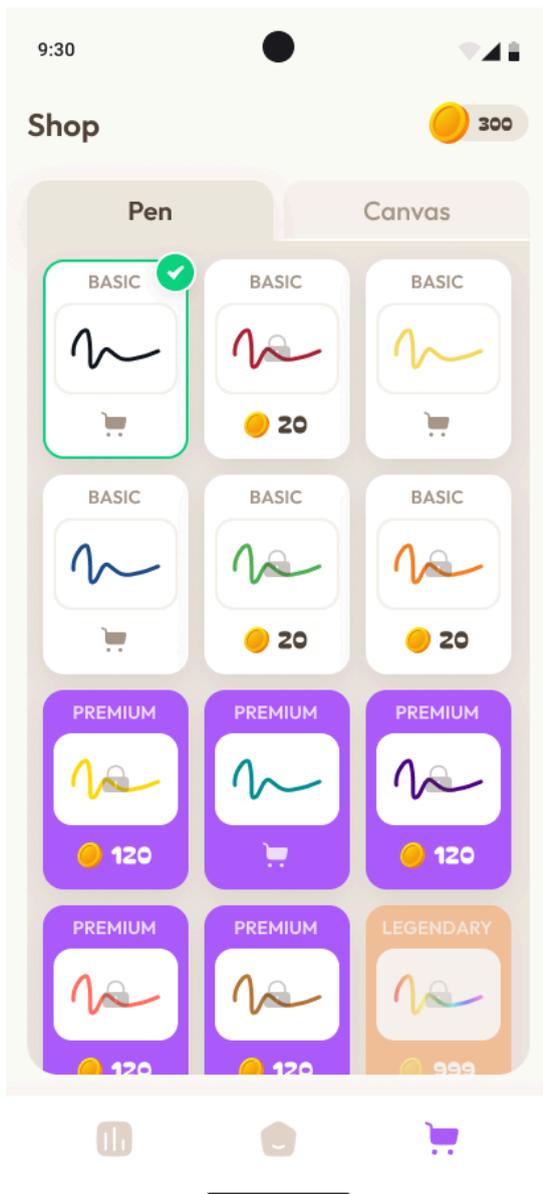
- Grid item
    - Structure
        - Rounded corners
        - Background color based category
            - Basic - White
            - Premium - Purple
            - Legendary - Orange
        - Preview window

- - This is either a path in the color of the item (for the pen)

    - Or the background color of the canvas

    - Conditionally show a small lock icon if the item has not been purchased yet

  - The bottom icon depends on whether the item is unlocked or not

    - Item is unlocked: Cart icon

    - Not purchased yet (i.e. item is locked): Number of coins it costs to unlock

  - Each grid must have one item selected

    - The default pen color is Midnight Black

    - The default canvas background is White

  - The selected grid item has a green border and a green check mark at the top right corner

- Behaviour

  - Tap on locked item

    - If user has enough coins, then reduce the user's total coins by the cost of the item and unlock it and make it the selected item.

    - If user does not have enough coins, show a toast or snackbar that informs them they don't have enough coins to but this item

  - Tap on unlocked item

    - Select the item

Ratings

The rating achieved is based on the user drawing accuracy score.

- Oops: 0% - 39%

- Meh: 40% - 69%

- Good: 70% - 79%

- Great: 80% - 89%

- Woohoo!: 90% - 100%

Pen Colors

Basic

1. Midnight Black: #101820 (Default, always unlocked)

2. Crimson Red: #B22234

3. Sunshine Yellow: #F9D85D

4. Ocean Blue: #1D4E89

5. Emerald Green: #4CAF50

6. Flame Orange: #F57F20

Premium

1. Rose Quartz: #F4A6B8

2. Royal Purple: #6A0FAB

3. Teal Dream: #008C92

4. Golden Glow: #FFD700

5. Coral Reef: #FF6F61

6. Majestic Indigo: #4B0082

7. Copper Aura: #B87333

Legendary

1. Rainbow Pen

Canvas Backgrounds

Basic

1. White: #FFFFFF (Default, always unocked)

2. Light Gray: #E0E0E0

3. Pale Beige: #F5F5DC

4. Soft Powder Blue: #B0C4DE

5. Light Sage Green: #D3E8D2

6. Pale Peach: #F4E1D9

7. Soft Lavender: #E7D8E9

Premium

1. Faded Olive: #B8CBB8

2. Muted Mauve: #D1B2C1

3. Dusty Blue: #A3BFD9

4. Soft Khaki: #D8D6C1

5. Muted Coral: #F2C5C3

6. Pale Mint: #D9EDE1

7. Soft Lilac: #E2D3E8

Legendary

1. Wood texture

2. Vintage notebook