

# Release Summary (v.1.0)

Pix Paint

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## Key User-Stories & Acceptance Criteria

As a program-user I want to...

- Use Pix Paint as an offline application.
  - Executable runs without issue on Windows
  - Executable runs without issue on MacOS
  - Executable runs without issue on Linux
- Create a new canvas to draw on with pen and eraser tools
  - Clicking on pen or eraser tab selects that tool
  - When clicking on the canvas with a mouse, pixels should be drawn/erased where clicked/held
  - Adjusting the pen/eraser size sliders should make the pen/eraser a bigger square
  - Adjusting the pen/eraser opacity sliders should adjust the pen/eraser opacity
- Access colors from a color wheel to change the pen color
  - Changing the color format on the color wheel should change the color wheel accordingly
  - Changes to the color sliders should adjust the selected color accordingly
  - The pen's color should match the currently selected color
- Open/save/export a canvas
  - Able to save file as PNG or PIX to a selected path
  - Able to set exported size/resolution
  - Able to open PNG
  - Able to open PIX with layers separated
  - Can name project file on canvas creation
  - Can use shortcuts to open, save, or export
- Resize my canvas anytime
  - Changing spinbox sizes results in the canvas size changing
  - Canvas size change should also affect save/export
- Zoom in/out to better see parts of canvas as needed

- Scrolling the mouse wheel up, zooms out while keeping the mouse in the same position relative to the canvas
- Scrolling the mouse wheel down, zooms in while keeping the mouse in the same position relative to the canvas
- Pressing the + or - buttons in the UI zooms in or out
- Moving the sliders adjusts the position of the canvas view
- Undo and redo a stroke
  - Clicking undo button OR pressing Ctrl + Z after drawing or modifying the layers restores the previous state
  - Clicking redo button OR pressing Ctrl + Y after undoing restores undone state
- Use layers so that different parts of the artwork can be edited independently
  - Clicking add layer in the UI creates a new layer on top of the currently selected layer, also adding it to the list of layers
  - Clicking delete layer in the UI removes the currently selected layer and sets the current layer to the one below
  - Drawing/erasing only affects the currently selected layer

## Known Problems

- Drawing/erasing in a way that does not modify the canvas is added to the undo/redo stroke history
- Zoom-related keyboard shortcuts while one of the buttons is highlighted does not work
- Hard-coded scene names
- Layers cannot be moved, renamed, or have opacity changed
- Left-over get/set global variable functionality from a time before we entirely understood how autoload on Godot works
- At certain proportions, the clear background shows up when you resize the canvas
- At zoom levels  $< 1$  (canvas is smaller), mouse does not stay in same position relative to canvas

## Product Backlog

- Have the program as an online application.