**Emugators 9/11/2023**

**Filter Research + Proof of Concept**

NTSC transmission = North American color-encoding system. 30 fps refresh rate.

Filters and overlays are different but can be used in combination to achieve graphically manipulated results.

Current set-up:

* Apply NTSC 2x filter and NTSC Palette from FCEUX on launch

Future work:

* Incorporate some code that manipulates the pixels like this: <https://www.shadertoy.com/view/XsjSzR#>

**SFX**

Sound effects are an element that can make an experience feel more immersive and authentic. The goal for this feature is to include it as one of the secondary aesthetic elements.

As far as implementation, the method would be to associate sound clips with their actions in the GUI code, for example:

Action: Drag and drop a cartridge

Upon a successful cartridge drop, a sound effect would be triggered along with loading the ROM.

**Other Aesthetic Elements**

After experimenting with more GUI elements such as new windows and menus, the next path forward is to expand the museum experience by including artistic and historical material in the form of a museum tour feature. The following mock-up illustrates how this feature would show up and be accessed by the user from the GUI.

A video game console and a screen

Description automatically generated

**View Artwork and Trivia**

Figure 1: Mock-up of Museum Exhibit button (game-specific)