

PORTFOLIO

BOSS FIGHT

BLENDER MODELING & ANIMATION

6488226

Nisakorn Ngaosri



TABLE OF CONTENT

• <i>About Me</i>	3
• <i>Pre-Production</i>	4
• <i>Scene Composition</i>	6
• <i>Character</i>	7
• <i>Assets & Materials</i>	11
• <i>Post-Production</i>	14
• <i>Licenses</i>	16
• <i>Change Logs</i>	17

ABOUT ME



ID: 6488226

THEME: Boss fight

NAME: Nisakorn Ngaosri

SUB-THEME: Boss fight



INSPIRATION:



The concept for our game draws significant inspiration from the game **It Takes Two**. We adapted this concept to a world where toys come to life, each room presenting unique challenges and bosses.

STORY:

In a world where toys come to life, a delivery truck leaves the parcel in front of the house. A wooden mannequin (Newbie) explored the new house and found that other toys tried to attack him. Because an evil wizard controls the toys to disrupt him for new adventures.

SCENE 6: GRIM ENGINE

Scene 6 introduces a boss fight with the Grim Engine. This sinister toy locomotive, enchanted by the evil wizard, is brought to life to thwart the protagonist, Newbie. Positioned at the entrance of the playroom, the Grim Engine is a menacing adversary, with a dark atmosphere enhanced by glowing red eyes and a devilish, creeping smile.

TOOLS:

The tools are used to create this project



Procreate

This tool is used to design the pre-production idea, including character design, storyboard, and animatic.



Blender

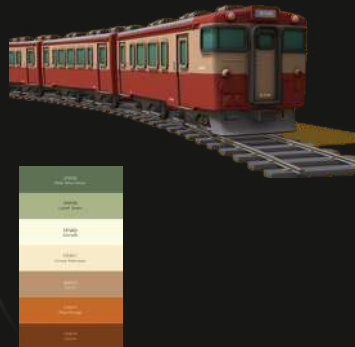
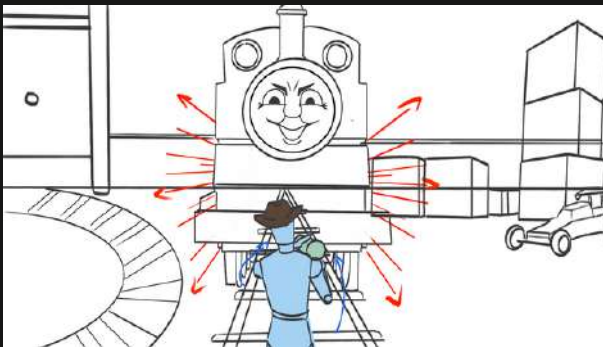
After discussion, we used Blender to create our 3D models, assets, scene layout, material, animation, and VFX.

PRE-PRODUCTION

CONCEPT ARTS



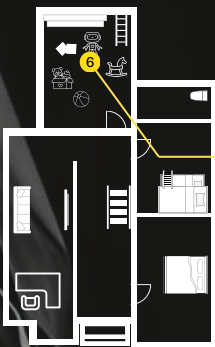
At first, the color script I planned to use made the scene look warm and vintage. However, I adapted the color script to be darker, emphasizing a spooky and unsettling tone using red and green.



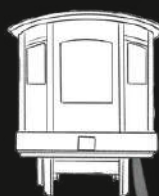
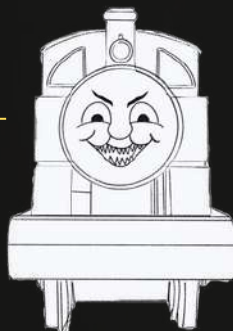
A sinister toy locomotive enchanted by the wizard. The Grim Engine awaits Newbie at the entrance to the playroom. The engine's goal is to thwart Newbie by charging at him in an attempt to run him down. Newbie will try to battle with a carrot bazooka.

Based on feedback from professors, the theme of the boss character has been updated to create a scarier, more intense encounter. The train is now dark atmosphere and creepy smile, with glowing red eyes when the flashlight faces the train's face.

CHARACTER DESIGN

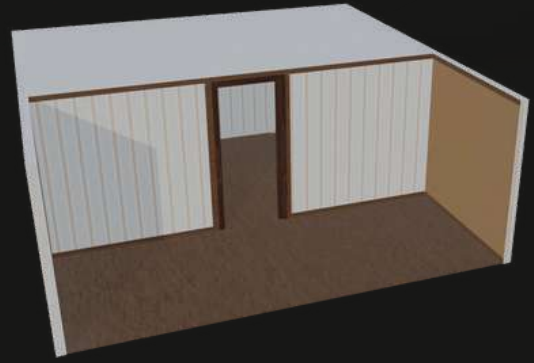
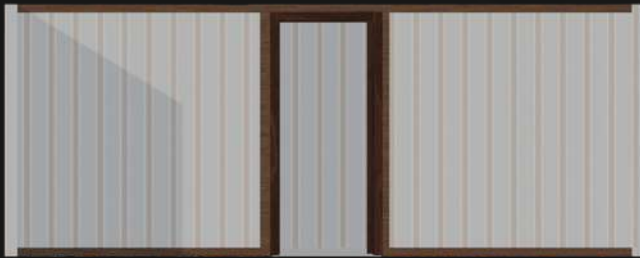


2 floor

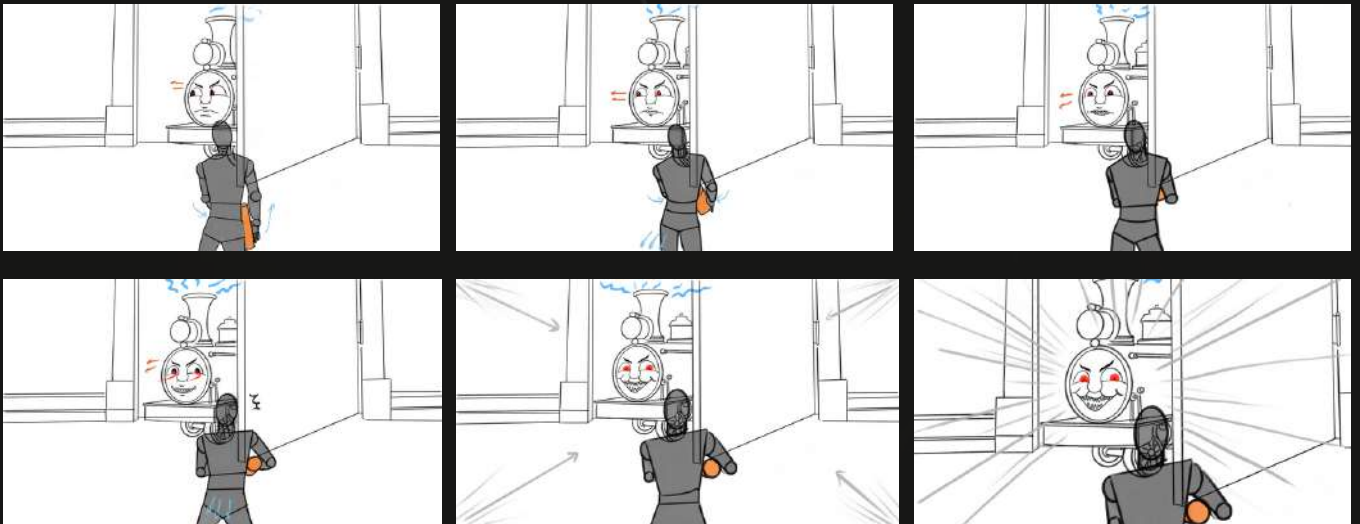


PRE-PRODUCTION

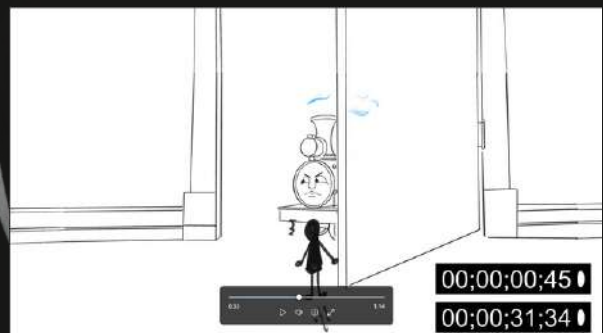
LAYOUT SCENE DESIGN



STORY BOARD



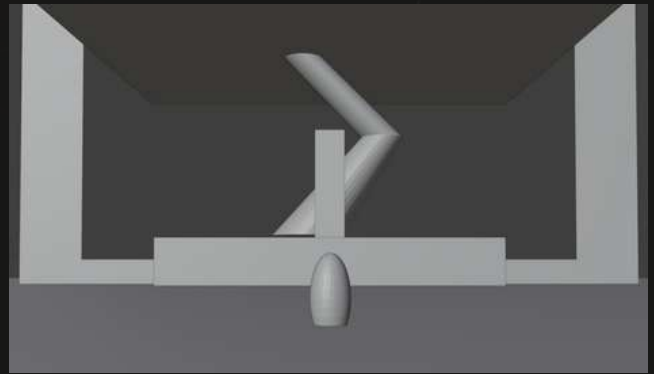
ANIMATIC



Explore the full animatic video: [Link](#)

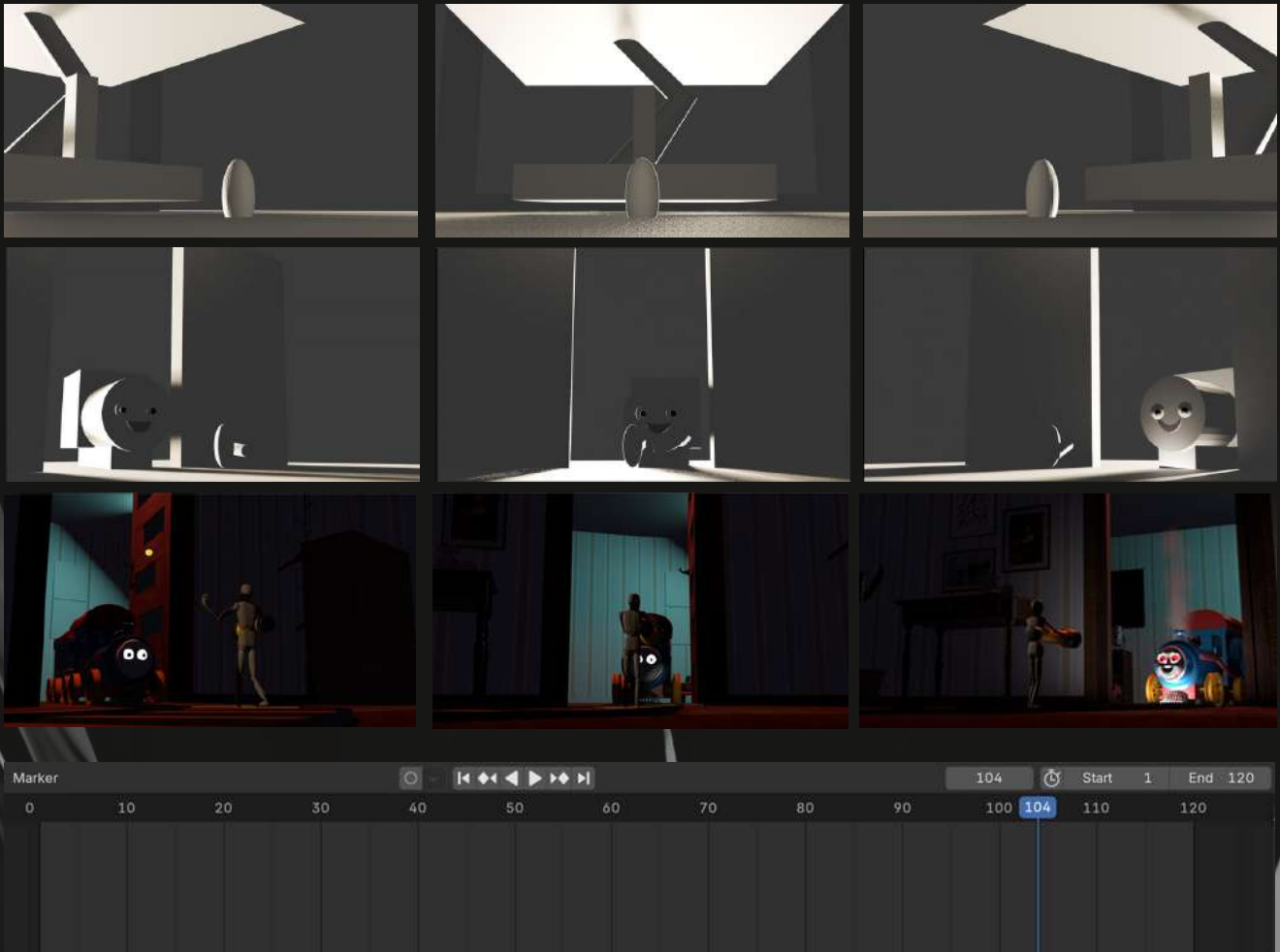
SCENE COMPOSITION

MASTER SCENE



We set up the master scene to look similar to an example video of a boss fight montage, which features a low-angle camera and a moving right pan.

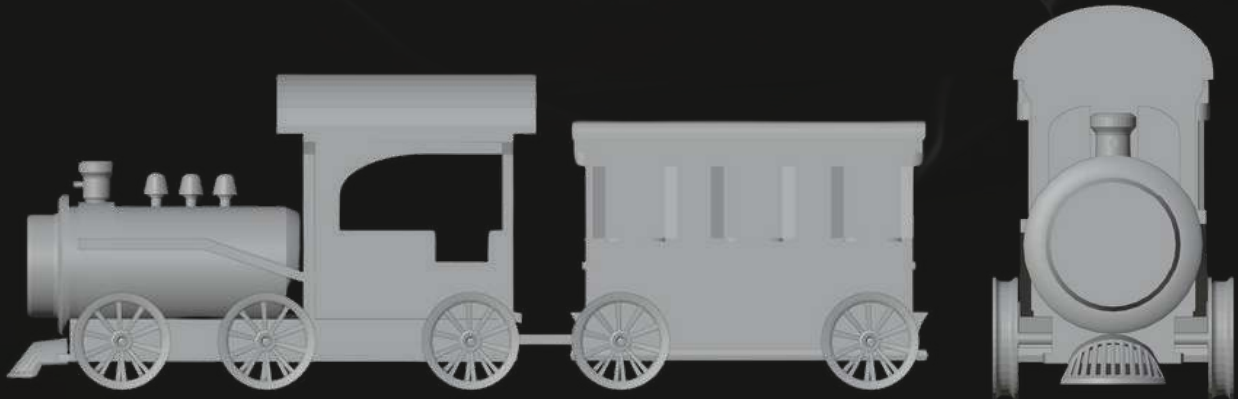
SHOT



Explore the 3D Previsualization : [Link](#)

CHARACTER

BASE MODEL



MATERIAL

The train boss model uses materials sourced from BlenderKit to realistic appearance. Below is a breakdown of the materials applied:

blenderkit



Material: Wood Panelling

A 2K PBR Texture of wood panelling material. This red wooden material has displacement. Wood 45 Red Wall Panelling

File size: 11.7 MiB

Tags: weathered old wood pbr texture red wall panelling

License: RF



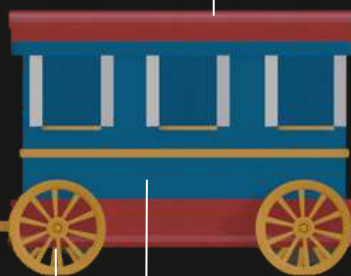
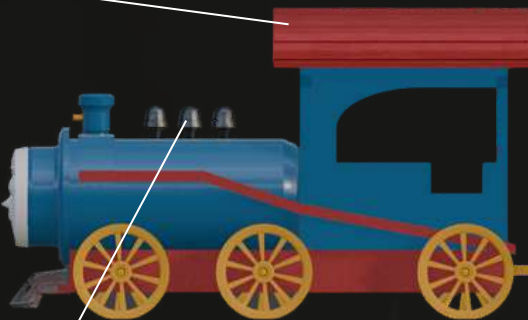
Material: Asphalt (Red)

Red Asphalt suitable for roads.

File size: 3.0 MiB

Tags: Road Asphalt Red

License: RF



Material: Dirty Metal

Dirty metal for your interior or exterior scenes

File size: 9.3 MiB

Tags: metal metallic dirty interior exterior

License: RF



Material: Blue Plastic

An old, scuffed and scratched, blue plastic texture. With some PBR and procedural aspects. Scratched Blue Plastic

File size: 11.3 MiB

Tags: old plastic scuffed rough scratched pbr procedural blue

License: RF



Material: Curvature Metal

Curvature metal

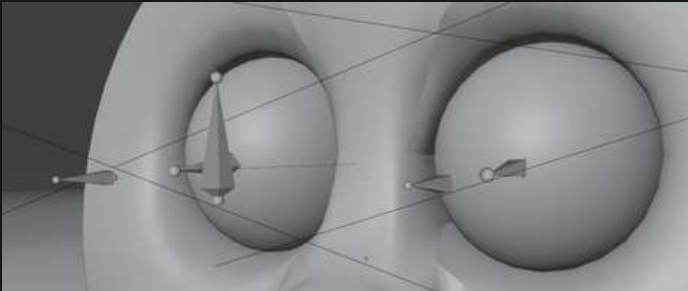
File size: 1.8 MiB

Tags: Curvature metal

License: RF

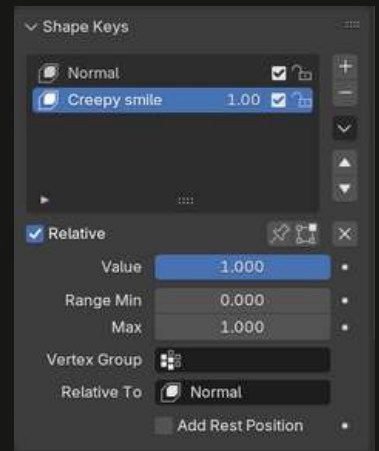
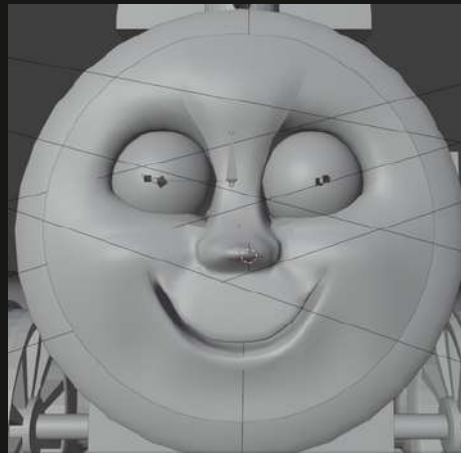
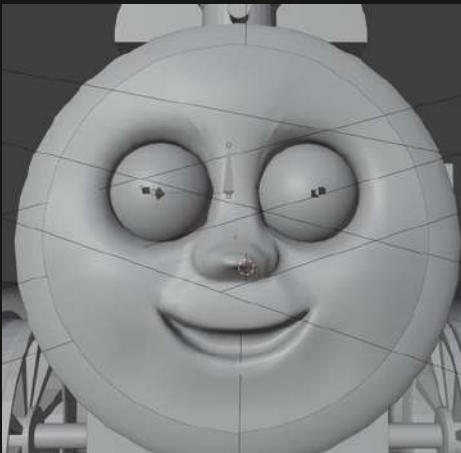
CHARACTER

RIGGING TECHNIQUE



I used the rigging technique for moving eye control of the train boss, allowing for the expression of the train's menacing personality during the fight.

SHAPE KEY TECHNIQUE

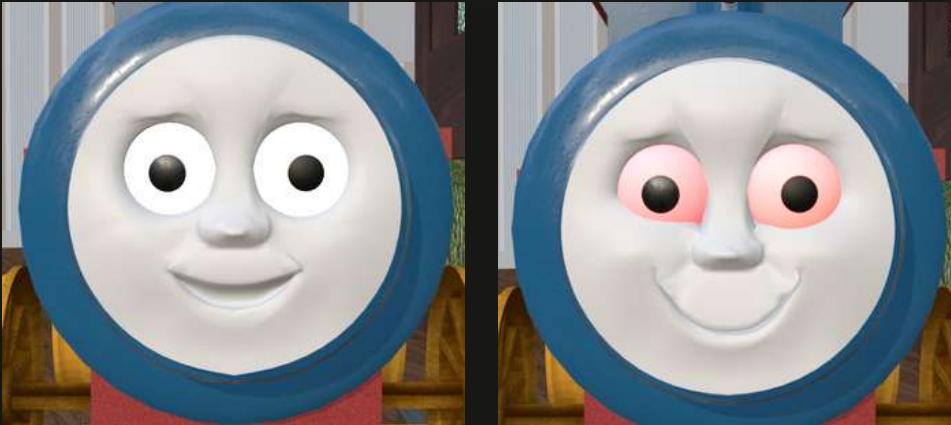


To make the train's creepy smile, I employed the Shape Key technique in Blender. First, I create devilish smile as a new shape key, exaggerating the curve of the mouth and adding sharp edges to the corners. Then, I adjusted the value of the shape key to allow smooth transitions between the normal expression and the creepy smile during animation

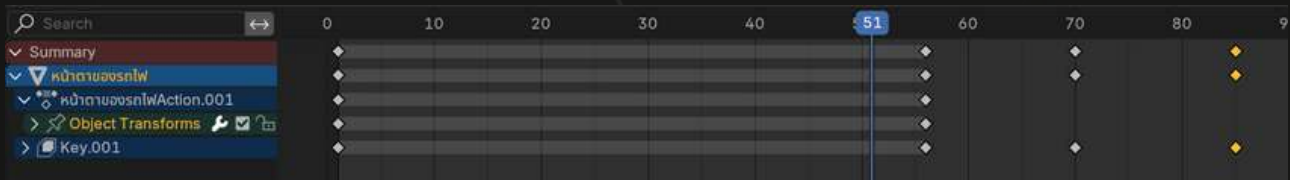
CHARACTER

ANIMATION

BOSS ANIMATION



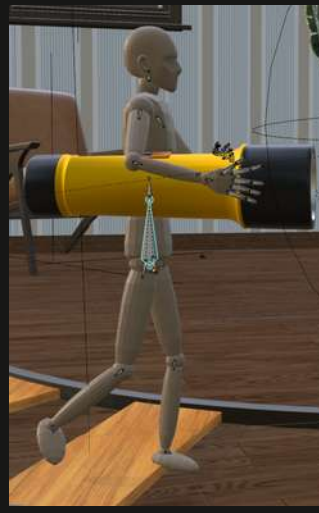
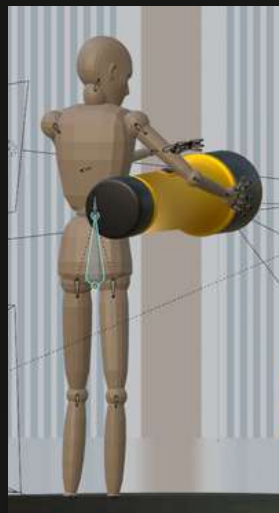
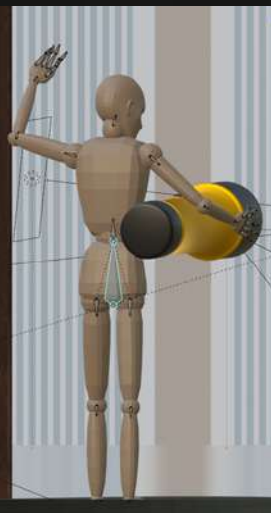
Face:



Eyes: I adjusted the emission color and strength to make glowing evil eyes.



MAIN CHARACTER



Firstly, I animated the main character to smash the flashlight and make him move in reverse when scared by the Grim Engine.

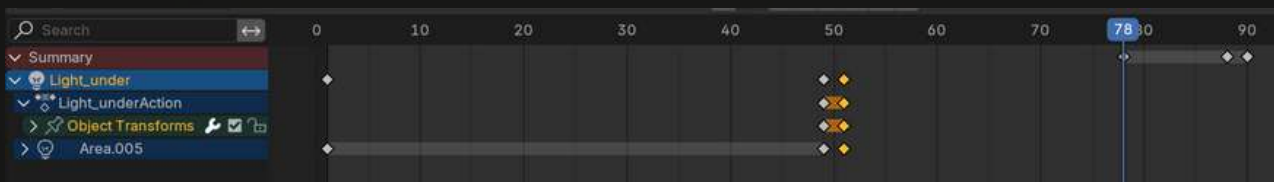
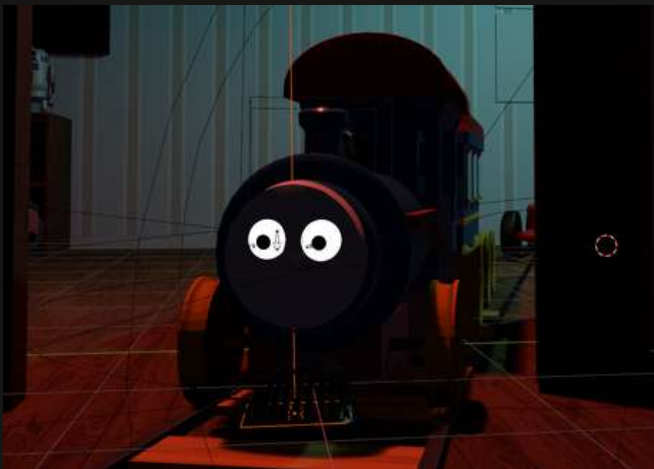
CHARACTER

ANIMATION

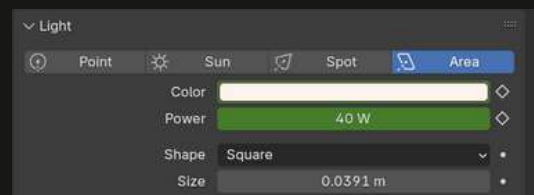


Key frame of the main character

LIGHTING

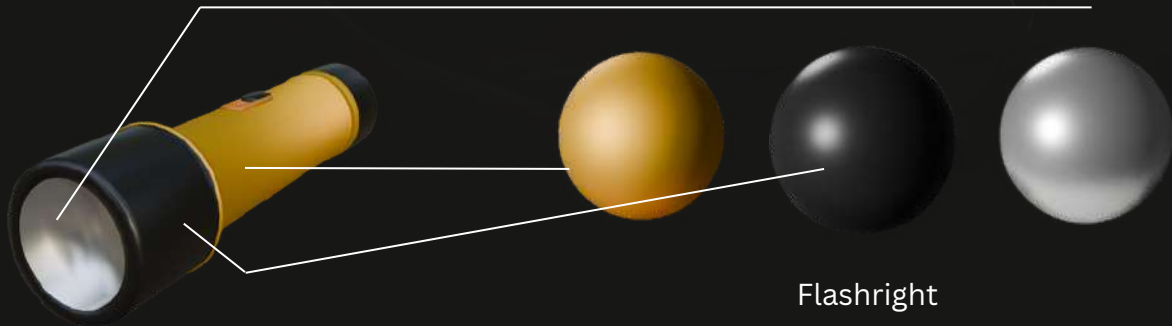


Lighting animation : I increased the power of light during the jump scare moment, casting an intense beam from beneath the boss's face. This lighting effect amplifies the horror and emphasizes the Grime Engine's menacing expression.

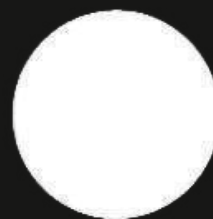


ASSETS & MATERIALS

SELF-MADE



Main character



Eyes

PLUG-IN FROM BLENDERKIT



Material: Wooden Floor

Realistic wooden floor

File size: 72.9 KiB

Tags: [Wood](#) [Floor](#) [Interior](#) [Panels](#) [Boards](#) [Wooden Floor](#) [Brown](#)

License: [RF](#)



Material: Striped Wallpaper

A striped pattern wallpaper.

File size: 18.6 MiB

Tags: [striped](#) [wallpaper](#) [bedroom](#)

License: [RF](#)



Model: Interior Door

Interior wooden door for your environment. Contain procedural textures

File size: 0.9 MiB

Face count: 8.7k

Tags: [door](#) [interior](#) [architecture](#) [wood](#) [room](#) [home](#)

License: [RF](#)

ASSETS & MATERIALS

PLUG-IN FROM BLENDERKIT



Model: Hanger

wooden chic hangers. It's a simple structure, but it's a daily necessity, so I created it.

File size: 0.4 MiB

Face count: 777

Tags: [furniture](#) [fixtures](#)

License: [RF](#)

Model: Coat Rack

Empty coat rack. Feel free to experiment with cloth sim, or hang hats

File size: 83.2 MiB

Face count: 11.0k

Tags: [coat](#) [rack](#) [hat](#) [bag](#) [holder](#) [hanger](#) [decor](#) [metallic](#) [clothing](#)

License: [RF](#)



Model: Luka Cabinet

Cabinet is based on the real product from Castlery. Procedural textures.

File size: 0.3 MiB

Face count: 335

Tags: [cabinet](#) [bookcase](#) [rack](#) [shelf](#) [shelves](#) [wood](#) [wooden](#) [walnut](#) [shelving](#)

License: [RF](#)



Model: Tree Indoor

Tree indoor for your design

File size: 28.9 MiB

Face count: 33.4k

Tags: [tree](#) [plant](#) [indoor](#) [interior](#)

License: [RF](#)



Model: Old Desk 02

a beautiful Old desk 02 for you

File size: 102.9 MiB

Face count: 3.5k

Tags: [Old](#) [desk](#) [02](#)

License: [CC0](#)



ASSETS & MATERIALS

PLUG-IN FROM BLENDERKIT



Model: Standard Double Light Switch

Standard Double Light Switch

File size: 1.5 MiB

Face count: 478

Tags: [Power](#) [Socket](#) [Outlet](#) [Interior](#) [Furniture](#) [Switch](#)

License: [RF](#)



Model: Florent Bodart Birds Painting

Florent Bodart Birds Painting

File size: 55.9 MiB

Face count: 983

Tags: [Painting](#) [Picture](#) [Decor](#) [Decoration](#) [Interior](#)

License: [RF](#)

Model: Painting

Print by John Singer Sargent - Miss Beatrice Townsend (1882). Public Domain canvas painting with CC0 license for interior decoration.

File size: 38.0 MiB

Face count: 178

Tags: [canvas](#) [wall](#) [painting](#) [paint](#) [decor](#) [bedroom](#) [decoration](#) [frame](#)

License: [RF](#)



Model: Painting

Print by Henry Ossawa Tanner - En route pour la peche (Setting Out to Fish) (1878). Public Domain canvas painting with CC0 license for interior decoration.

File size: 26.6 MiB

Face count: 358

Tags: [canvas](#) [wall](#) [painting](#) [paint](#) [bedroom](#) [decoration](#) [frame](#) [paris](#) [boat](#)

License: [RF](#)



Model: Murano Vase-02

Beige Murano glass vase and paperweight decoration set with book

File size: 32.3 MiB

Face count: 327.4k

Tags: [decoration](#) [room](#) [living room](#) [bedrooms](#) [vase](#) [murano vase](#) [murano](#)

License: [RF](#)



Model: Otio Lounge Chair

For when you need to finish that book you had to return to the library yesterday, take a seat on the Otio. Thanks to the Otio's smart (not to mention good-looking) ergonomic design and firm-yet-soft cushioning, you won't feel guilty spending hours here.

File size: 21.4 MiB

Face count: 19.8k

Tags: [Loungechair](#) [Chair](#) [Armchair](#) [Interior](#) [Furniture](#)

License: [RF](#)



Model: Whicker Basket

Juste a wicker nashet

File size: 4.1 MiB

Face count: 38.0k

Tags: [wicker](#) [basket](#) [bin](#)

License: [RF](#)



Model: Window

Classic lowpoly window for your house.

File size: 1.1 MiB

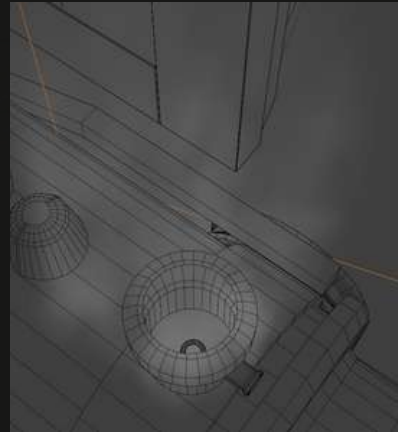
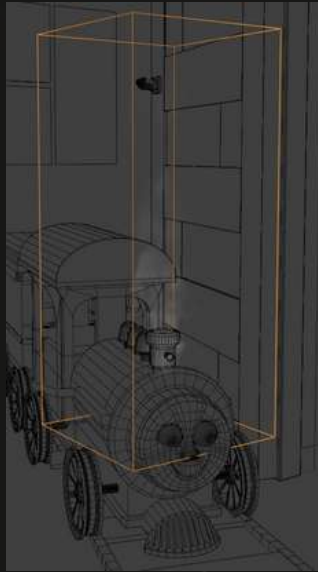
Face count: 622

Tags: [window](#) [glass](#) [windows](#) [lowpoly](#)

License: [RF](#)

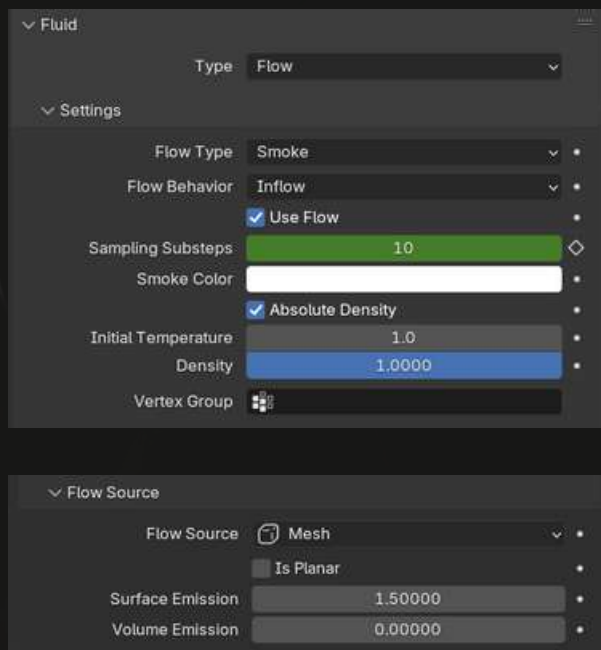
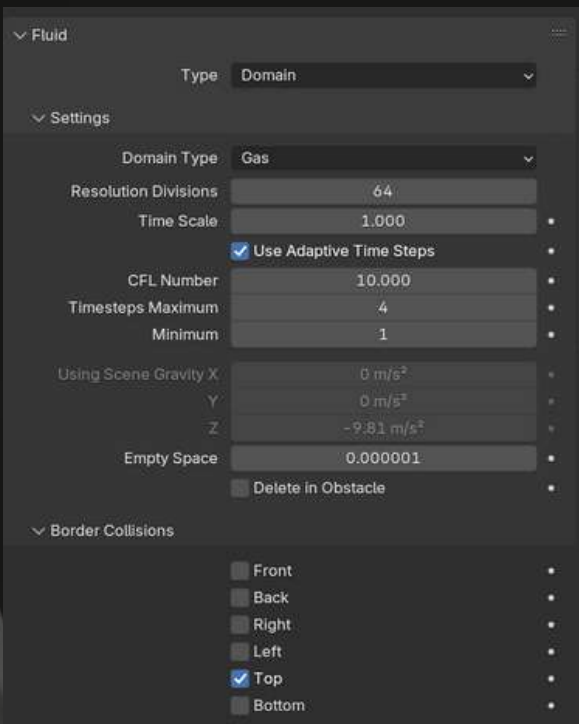
POST-PRODUCTION

PHYSICS PROPERTIES - FLUID



Fluid - flow type: Smoke

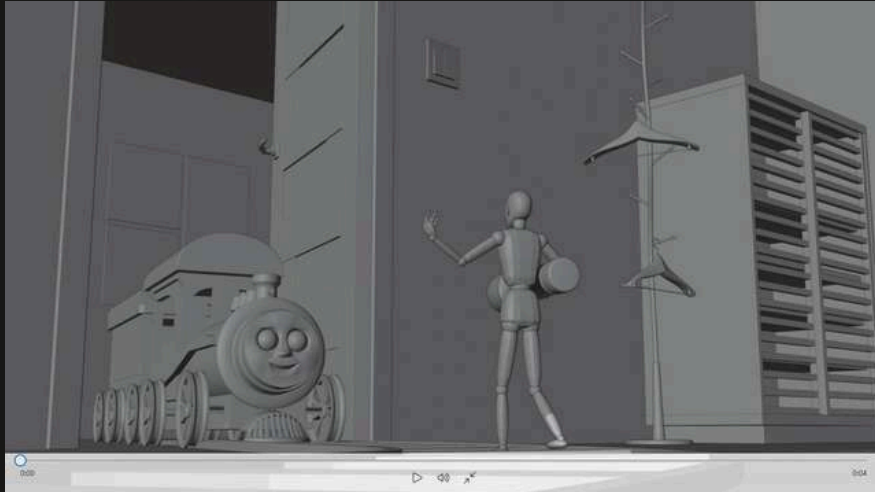
Smoke Domain for gas



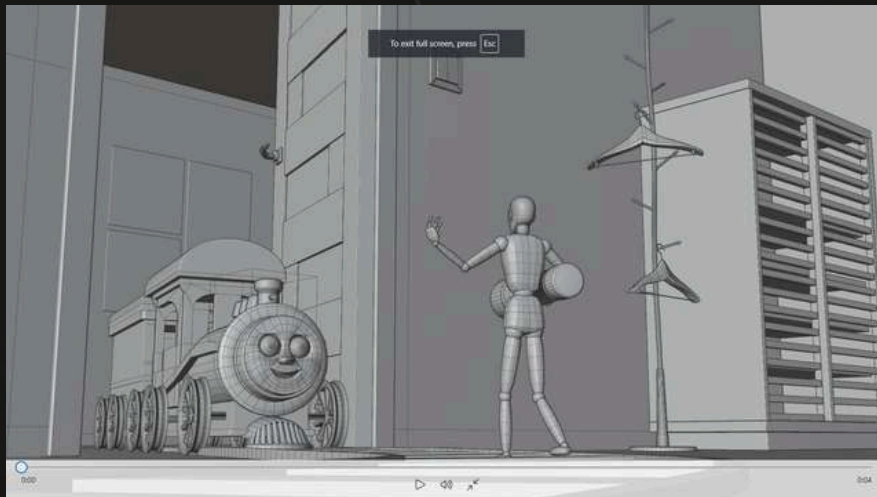
I used the **"Smoke Simulation Domain Setting"** technique to create the smoke effect of the train, adding a dynamic atmosphere to the boss fight. Torus will dissolve into smoke based on fluid setting, and the smoke domain will expand space to spread gas on the air.

POST-PRODUCTION

FINAL OUTPUT



AO - [Link](#)



Wireframe - [Link](#)



EVEES - [Link](#)

LICENSES

ASSETS & MATERIALS



Most of my scene used assets and materials from BlenderKit which allows 2 available licenses to sell higher-level-derivative works, but royalty free license doesn't allow to re-sell

Royalty Free



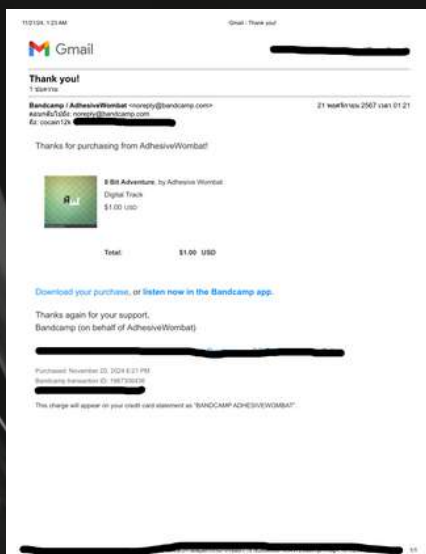
This license protects the work in the way that it allows commercial use without mentioning the author, but doesn't allow for re-sale of the asset in the same form.

CC0 - No Rights Reserved



CC0 allows creators to waive their copyright or database rights, placing their works in the public domain. This enables others to freely use, modify, and build upon the works for any purpose without legal restrictions.

BACKGROUND MUSIC



8 Bit Adventure from Marsupial Madness by Adhesive Wombat

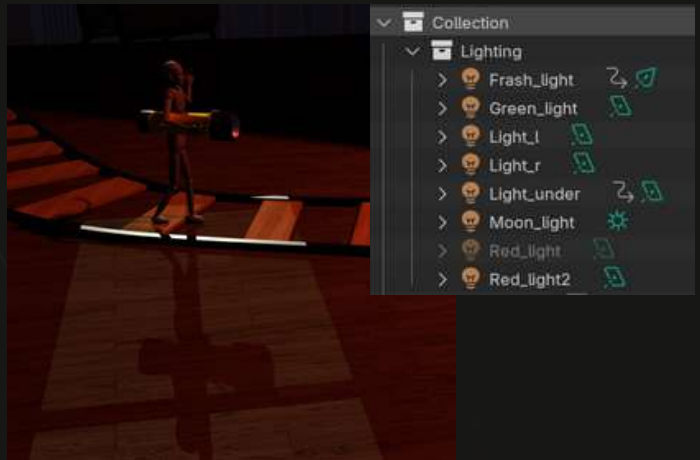
- Licensed / Copyrighted Track
(Purchased)

CHANGE LOGS

LIGHTING



The most significant update is the **lighting**. New green and red hues have been **added to create a scarier atmosphere**, enhancing the visibility of the boss model's shadows and adding depth to its ominous appearance. Additionally, **moonlight streaming** through a window has been introduced to illuminate the main character, ensuring better visibility during animation.

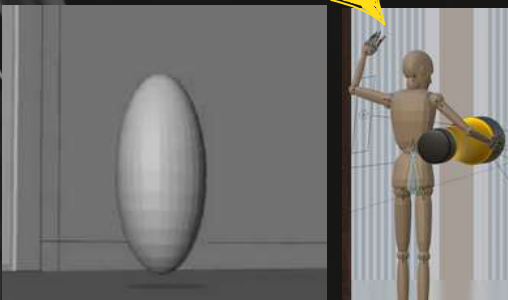


ENVIRONMENT ENHANCEMENTS



To make the scene more realistic, I **added various assets** around the environment to resemble an actual home

ANIMATE



SMOKE SIMULATION

