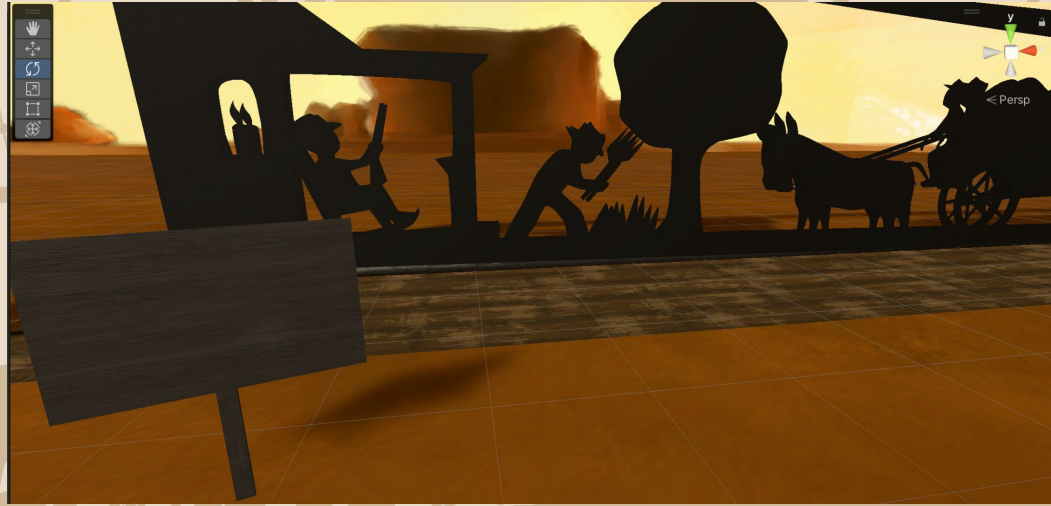


# PAPER STORIES:

The Western VR Pop-Up Experience  
From The Identity Project Book



Embark on a virtual pop-up adventure that allows you to navigate inside the creative mind of the famous Béatrice Coron's, *Paper Stories*.

**EXPERIENCE, INTERPRET, and INTERACT** inside the beautiful and meticulously crafted piece, *WESTERN*.

**Béatrice Coron** is a French born American artist who creates illustrations, book arts, fine arts, and public art. She specializes in paper art- characteristic silhouette designs cut out of Tyvek. She also creates works in stone, glass, metal, rubber, stained glass and digital media. Alongside an extensive resume, her work has been purchased by major museum collections, such as the *Metropolitan Museum*, *The Walker Art center*, and *The Getty*.

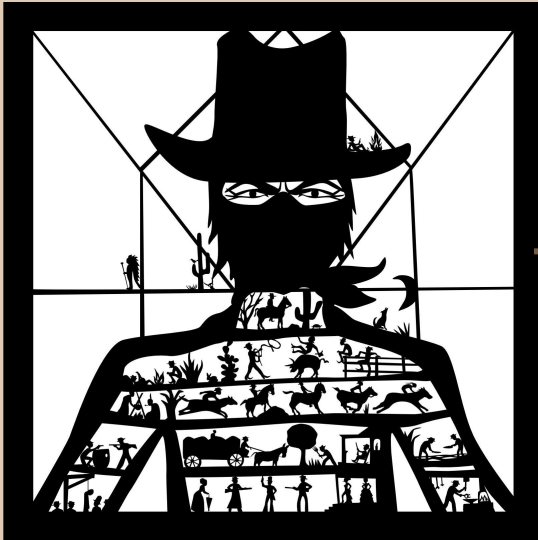
Visit her website here:

<https://beatricecoron.com/statement.html>



## Synopsis

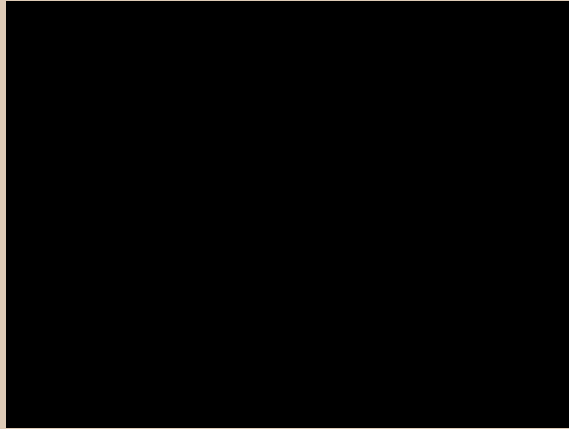
**Paper Stories** is a virtual art gallery experience. The player will be able to bring Béatrice Coron's work of art to life through interacting in the world of VR. Participants will experience a pop-up book style adventure, as they walk through the different panels of Coron's piece, "**Western**", from her Identity project book. The player will get the unique chance to get up close with the art and observe the intricate details hidden within.





## Major Key Aspects

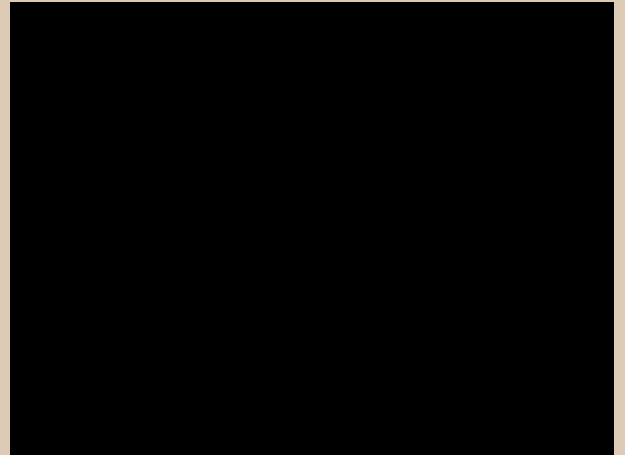
Created by RVCC Students  
GDEV 290 2023 in 6 weeks.



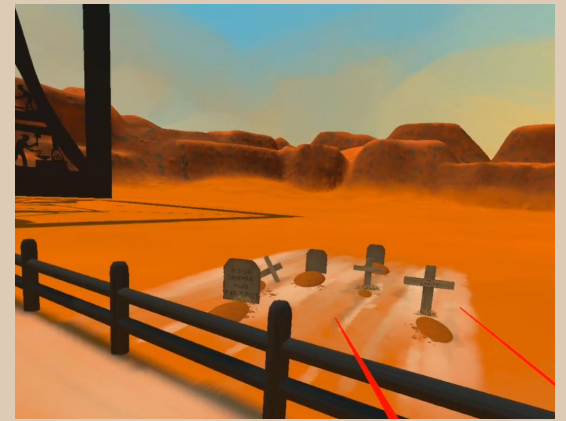
Interactive pop-up book allows for  
immersion with visuals and sound.



Experience Beatrice's artwork up close and  
personal.



## In Game Screenshots



## **In Game Video Clip**

Video Placeholder

## About Us

**Hello!**

**We are the 2023 class of Advanced Game Development at Raritan Valley Community College.**

We come from different educational backgrounds with a variety of skill sets; some of us are more programming oriented, and others, art focused.

This was our first official group project together- as a class- despite sharing similar classes within our major curriculum.

We hope you enjoy our work and continue to look forward to what we (as individuals) have to offer in the upcoming future.



*(pictured left to right)*

Bassil Abuhuzeima, Salvatore Anzalone, Jeffrey Sickles, Maxwell Kosempel,  
Gunnar Hunt, Lane Ackerman, Patrick Esmerado, Isabella Reinn Dela Pena,  
Tiffany Rojas, Skylar Solewater



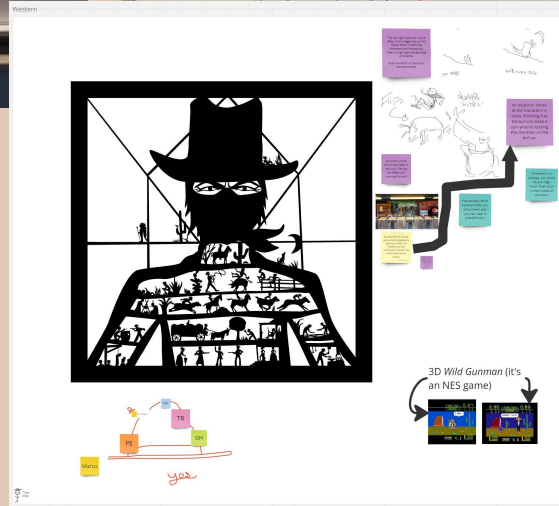
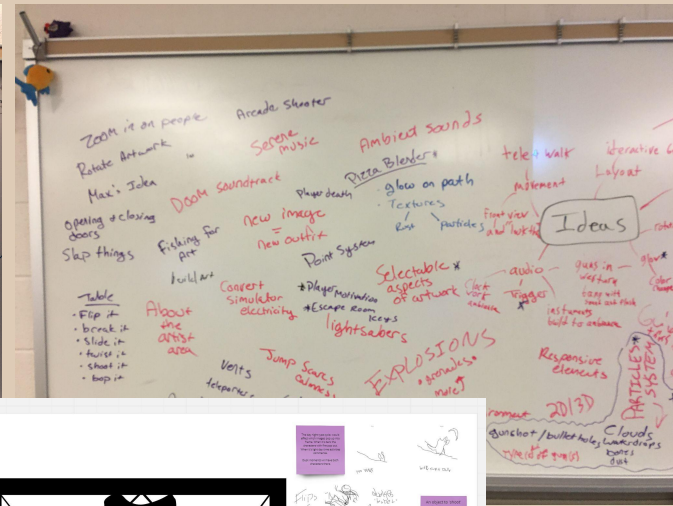
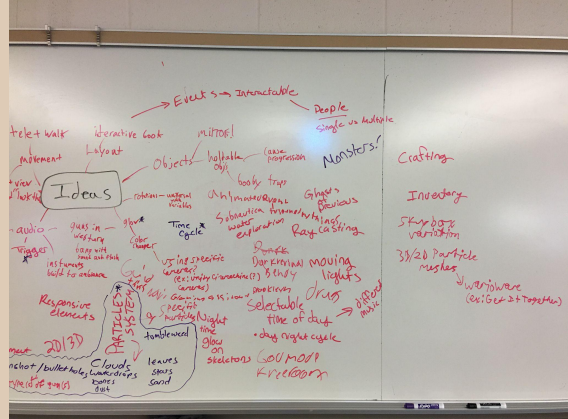
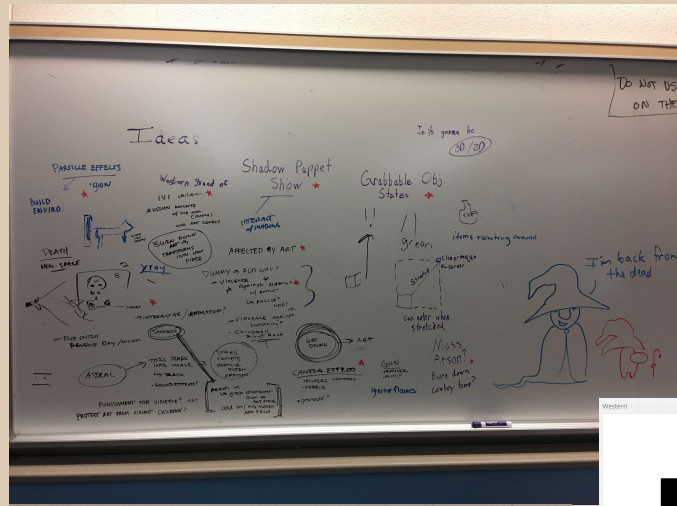
# **Post Mortem: *The Who, The How and the Serious Issues***

**An outrageous task turned reality...the RVCC way!**





# PRE-PRODUCTION / PLANNING



After meeting with Beatrice and Rick, we took to the whiteboards in groups to brainstorm how we were going to approach this project. Each team went around writing out ideas, we did not filter ourselves.

Through these ideas, we were able to narrow down important concepts we could use as framework.







## Moodboards for the mechanics:

- ★ Pop up has been around for a bit! However, Inspirations came from different areas for this effect to come to life. Here's how it went-

Carnival shooting games



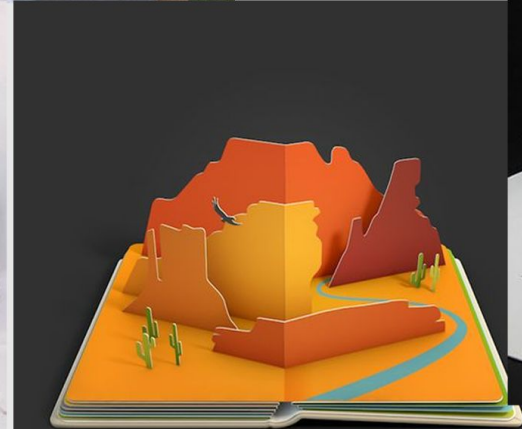
Shadow Puppet show



Pop up book

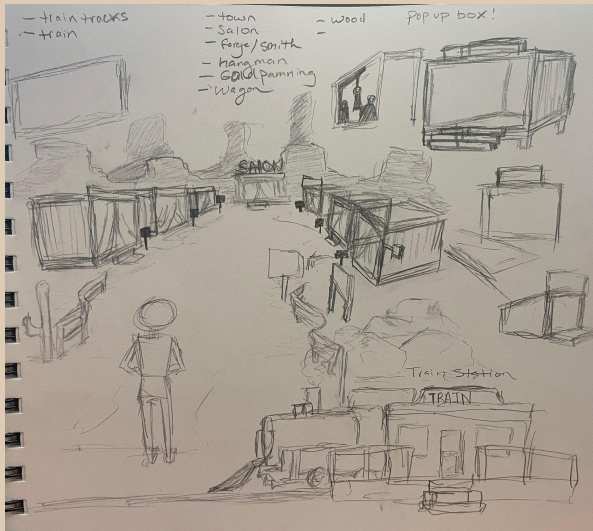
- ★ Each of us built off the ideas of one another (*And of course there was more then just those steps mentioned but...to keep it simple*), which led us to our final product!

**HUMAN SIZED POP UP ART**



# Concept Art

To start off, I mostly wanted to get an idea of what sort of feel we're going for! Since the portraits are the main artworks, designing a town and its buildings was tricky. We discussed a bit an idea of the buildings serving as the box of Beatrice's artwork.



As I built some rough concepts, I attempted to see whether more elaborate buildings would work compared to simple ones.

In the end, I found that by mixing both. You can get a decent standout house. That also highlights the work when its triggered!

And honestly this edition gave life to the town, as opposed to just the cutouts.

(To note: these are merely concepts, I planned on building them out more by choosing one that I liked but I hadn't liked the compositions chosen)





## Concept Art



- Starting off, we merely had the silhouettes of the artworks. And while it looked nice, something was really missing. It felt almost empty
- The idea of a building to serve as it's 'box' came up. Corresponding to each artworks theme and motif

Admittedly, the train station was going to be more grand. But in the end, the attraction isn't from that. So I simplified a cute tiny train station. As a team it was mentioned that this would sort of being our starting point! The player would enter and it would give the idea that they just left the station into this town in the middle of nowhere!

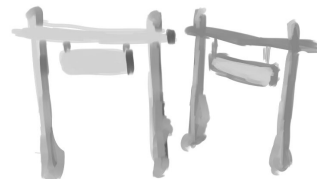
The billboard either would have had images of our wanted posters or even the tutorial!

## Concept Art

- The images from Beatrice's identity of the western cowboy, displayed some obvious imagery. The women resting at the saloon in their old western dresses inspired the Saloon building.
- While the shootout, quickly gave me that fight at a home or even at in town. I'd imagine a fight just outside your home. I debated having it shorter, but I found that it became too stagnant having them all short. So I stuck with the taller building
- As for the signage, its important to have that town welcome! So you know what you're going



May need to cut this shorter—



NAMES FOR SIGN:

BEATRICES' ARTPOST  
CORON TOWN  
IDENTITOWN  
IDENTITY TOWN

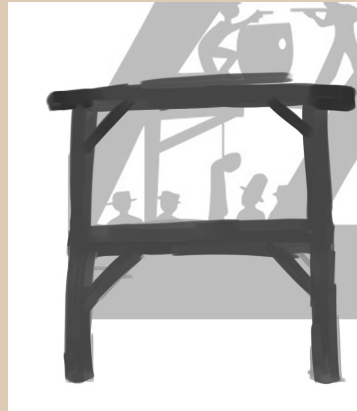
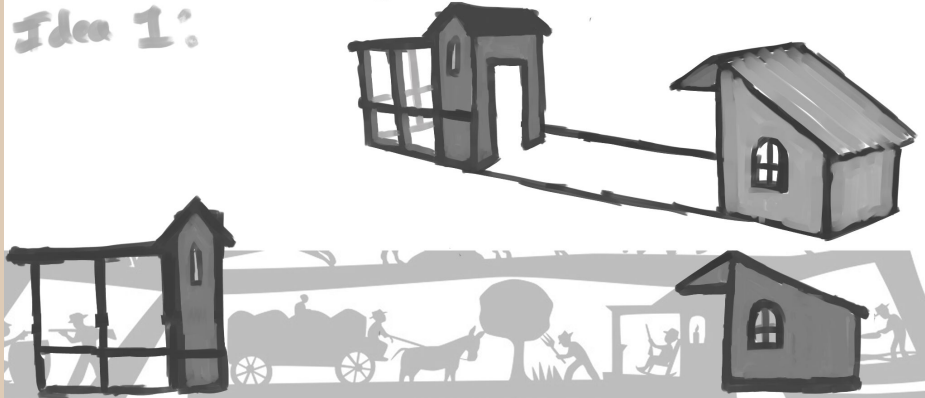
Don't worry on the  
name just yet, focus  
on the sign

## Concept Art

- The blacksmith one was almost too obvious, I debated adding on possible swinging doors. Or even an open doors. However, I didn't really like the look to it.
- When it came to the horse(donkey?) i found that a little farm seemed interesting to add on. And of course just the end building that the man sits at. In the end that farm building didn't work as intended. It didn't really work so a tree became the next idea
- As for the hanging, it became apparent to me that this must be on a platform. The issue arises where how would we see the action if we're on the ground? Well simple, keep it short but on the perfect level to see as it swings up! I also encouraged having a crowd, as it felt less empty and would mix well with the audio!
  - As silly as it is, I did also design the hanging poles too. But I found those to be redundant, as the image already had that pole there!
  - So just platform came to be



Idea 1:



# Concept Art

- As for the gold panning, well this one was the hardest for me to figure out! The square/rectangular shape had it restricted towards another building.
  - In the end, the suggestions were of a cave and it hit me! The scene for the gold panning really gives that feel of being in an open marsh. And from there I thought of just a cave entrance
  - Sadly, I think this was my weaker build. The cave was styled to fit the shape of the image. I should've brought this up or had shown visuals as I did for my previous farm one.

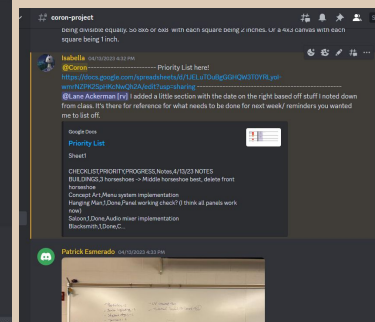
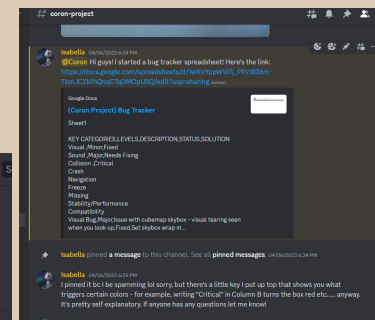
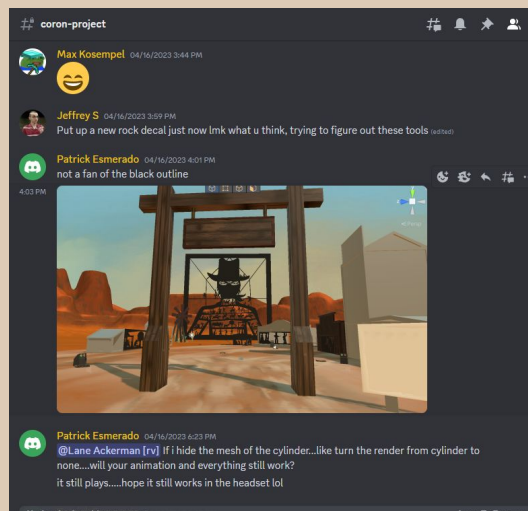
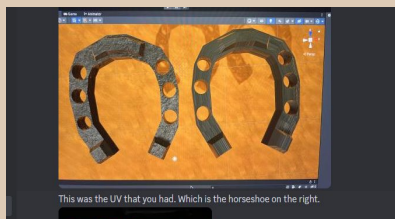
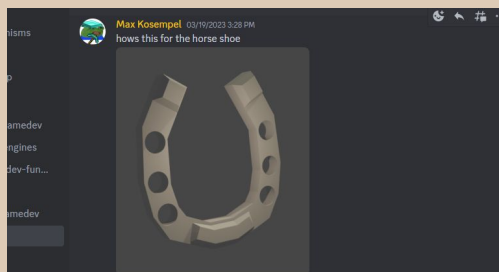
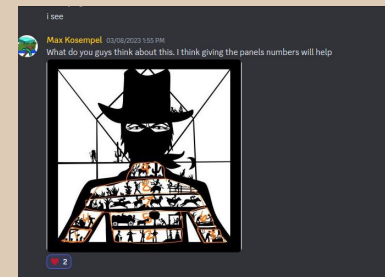


While I did make plant decals, in the end transparency for billboard cutouts could prove to be detrimental towards performance. And white lines became my mortal enemy, perhaps my understandings were flawed, or I hadn't realize that while my painting style is easy for digital artworks. It is not the best for what we aimed for. Billboards were an idea to reduce the size of the project but they didn't work as intended. As I go further into projects, I think I will discover new/proper methods to make these work out!

However, that does not deter me. In fact, I found that proper research and testing are the utmost important to do as an artist, even if the one skill set is all I have. It's vital to expand upon that and come to understand where issues could lie for programmers as I build my art.



# PRODUCTION (MAKING OF)



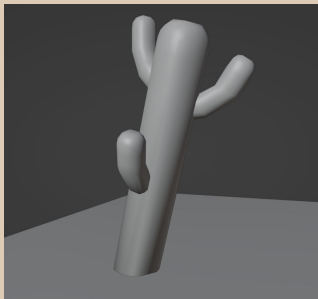
After we met in class again, we all decided to work as a team to tackle a concept idea- huge credits to **Patrick Esmerado** for the framework, and **Max Kosempel** for the “pop-up” book idea.

We used Discord as our main form of communication. We assigned roles for the team based on their skill sets. Here we would discuss issues, reminded each other of what we planned on doing next, and what we needed for our next meeting date. We also gave each other critiques and decided as a group what worked better with the blossoming environment.

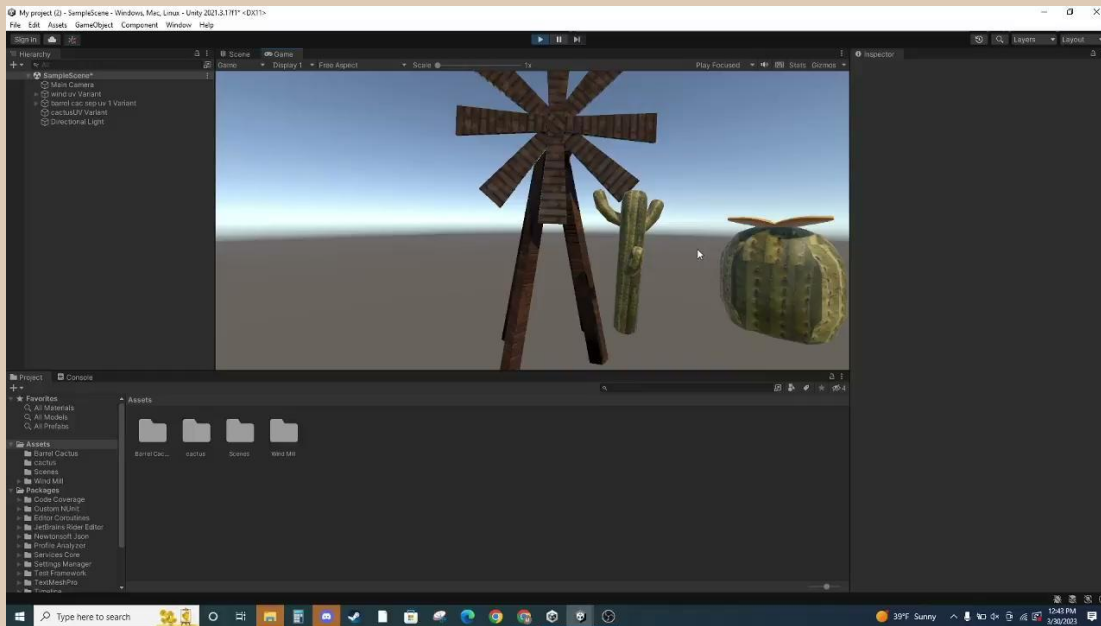
This alongside spreadsheets and our shared google drive was how we stayed organized throughout the process. We also made sure to update each other whenever we uploaded new stuff onto the drive, so Patrick could start assembly.



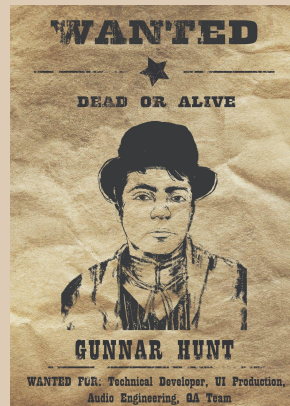
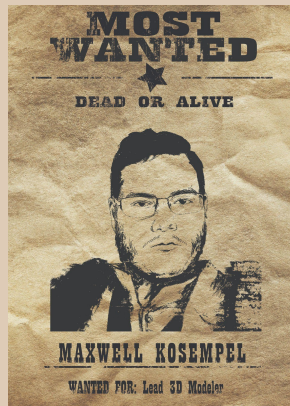
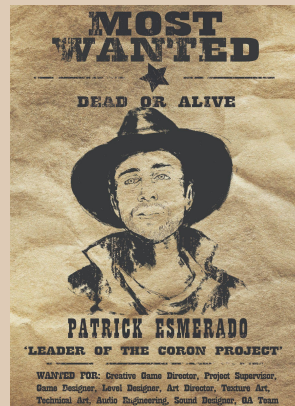
# ART / LIGHTING



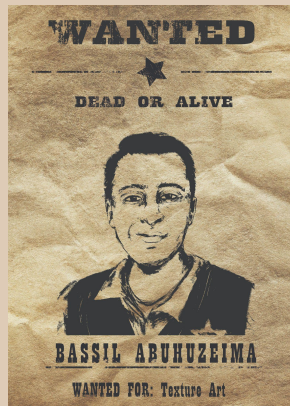
3D models by  
**Max Kosempel**



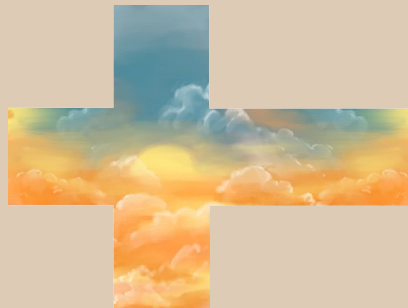
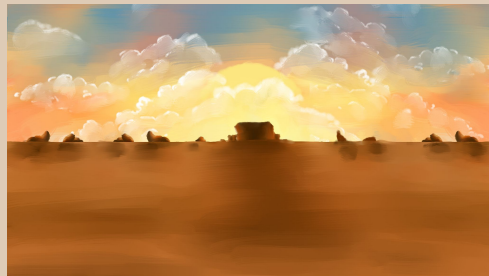
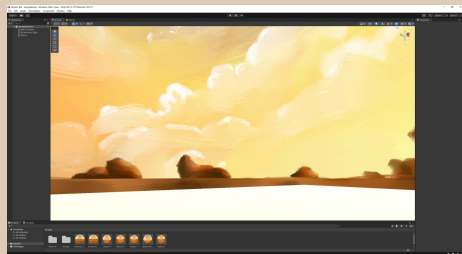
## ART / CREDITS



Wanted  
posters  
designed  
and  
illustrated  
by **Tiffany  
Rojas**



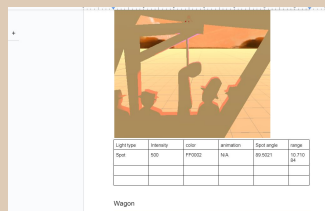
## ART / LIGHTING



Skybox art and design by **Tiffany Rojas**



Lighting and Particle Effects by **Skylar Solewater**



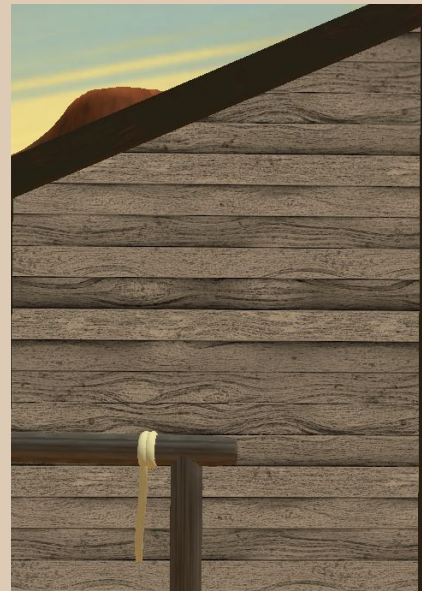
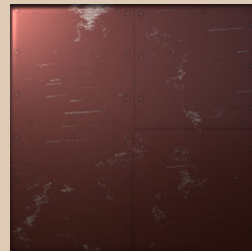
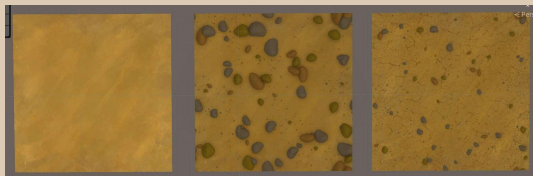
Barrel shoot out



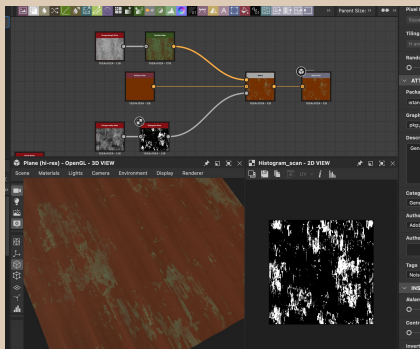
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spot	100	0010FA		91.65854	9.879888
Point	100	FFFFFF	Turn on and off		0.6354752
point	100	FFFFFF	Turn on and		0.6354



## ART / LIGHTING

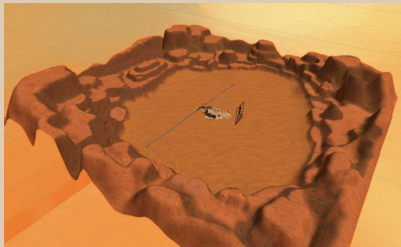


Texture work and Assembly by Patrick Esmerado



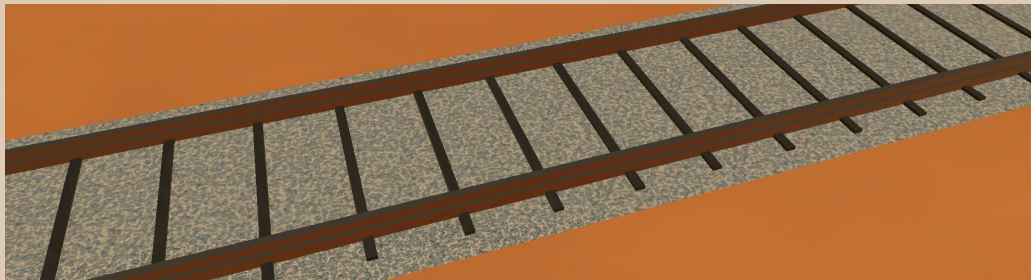
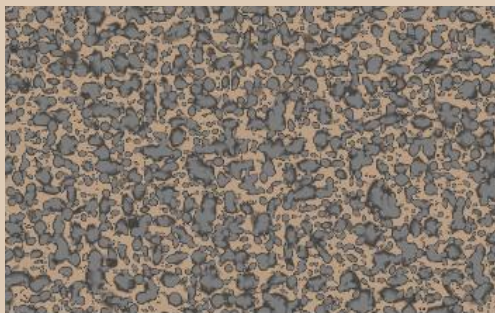
## ART / LIGHTING

Terrain  
Sculpting  
By **Jeffrey  
Sickles**



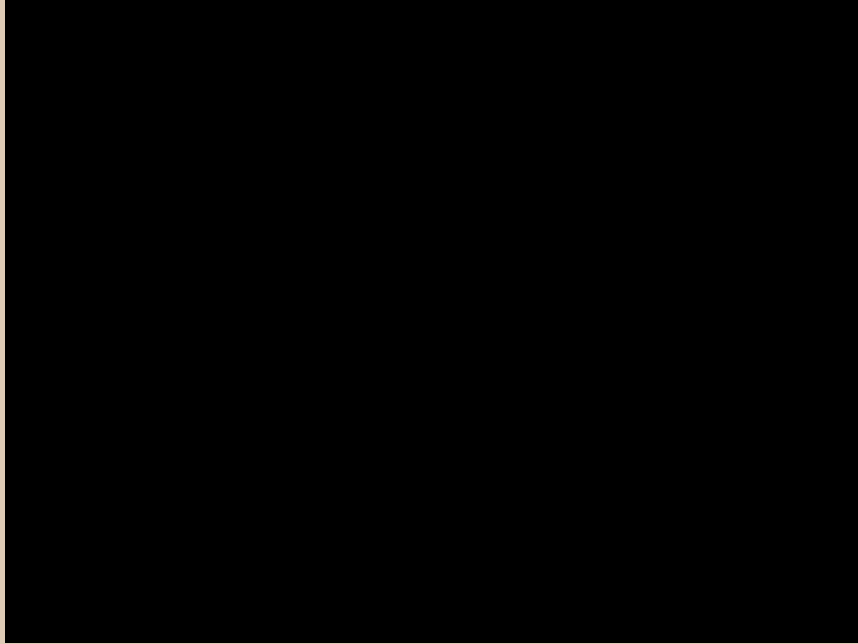
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Textures by **Bassil Abuhuzeima**



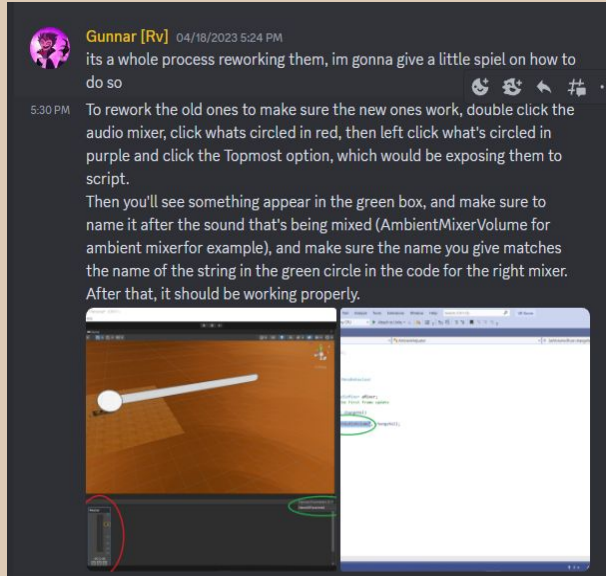


## **PROGRAMMING / SCRIPTING**



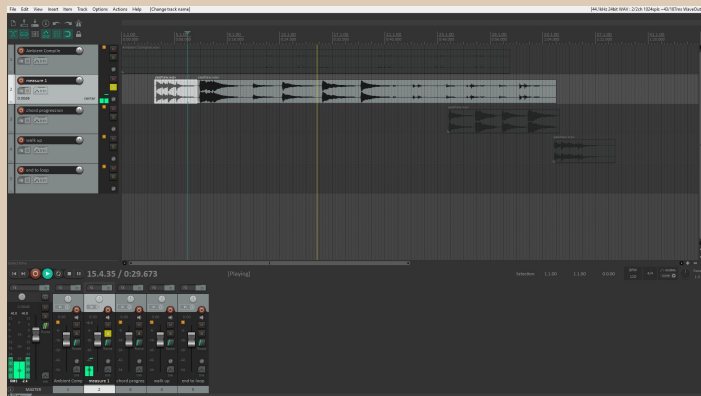
Lead / Main game programming - (Teleportation, Event triggering, Player movement) by  
**Lane Ackerman**

## PROGRAMMING / SCRIPTING



Main menu / Audio mixer / UI programming by  
**Gunnar Hunt**

## **SOUND / AUDIO FX**



### **Audio by Isabella Dela Pena**



**Ambient Music**



**Panel 4 (Standoff)**



**Windmill**



**Panel 5 (Wagon)**



**Panel 6 (Gold Panning)**

### **Audio by Patrick Esmerado**



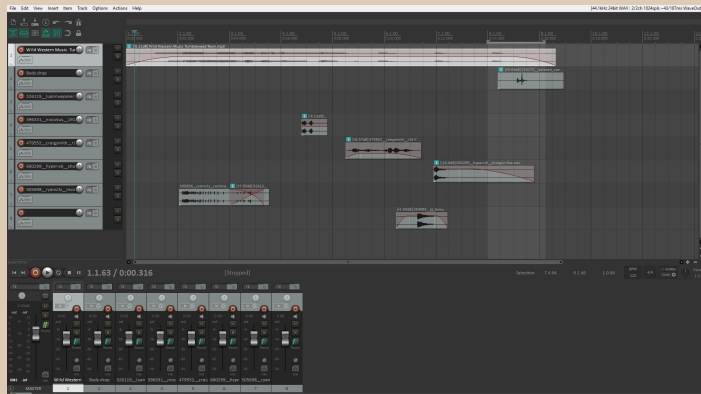
**Hangman Panel**



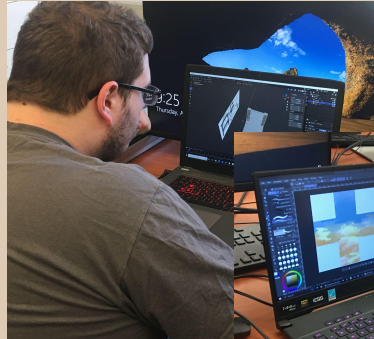
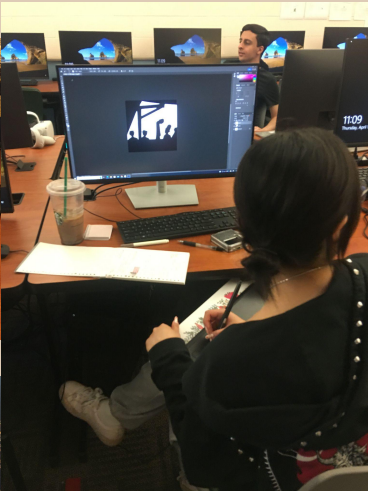
**Saloon Panel**



**Blacksmith Panel**



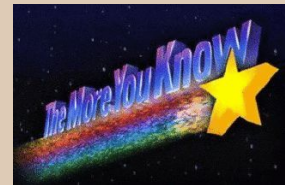
# TEAM PHOTOS



## THE GOOD, THE BAD... THE UGLY...



## What we learned



***TIMELINE:*** (technically audio started during spring break 3/07/23) but officially **3/16/23 - 4/27/23**

- ★ **GROWING PAINS!!!** - for many of us, this was our first time working in a group. This was our first big project as a class. We all had different skill sets and had to figure out a way to work together. We also had to learn how to communicate with one another effectively, and on top of that, learn about VR technology.
- ★ **ORGANIZATION** - Because we had a month and some change, organization was **IMPORTANT**. We had to know exactly what we needed to get done, what was broken... etc. All of our schedules were different as well, so waiting on people to provide assets delayed our production time. We had to know exactly what we needed before our next in person meeting.
- ★ **ERROR MANAGEMENT / BUG FIXING** - Not only did we have to balance our personal lives and other school work alongside this project, we also had to deal with setbacks. Major setbacks like things not working in game, or the actual game crashing on us, set us back hours of work, and we had to come up with fixes either with the time remaining, or sometimes on the fly.
- ★ **EXPANDING OUR SKILL SETS** - It's fair to say that going into this, none of us knew what kind of abilities we needed to push forward with such a large project. We only had the knowledge that stemmed from our personal interests, combined with some basics from our program's pathways. We still had gaps to fill, and so...
  - We learned new programs and tools - Photoshop / Blender / Substance Designer
  - We did research on things we needed to build assets - used references and concepts to bring our ideas to fruition

**All of these things in turn helped us see our individual weaknesses - but what really came down to it was how we chose to grow past it. We started this projects as students, and came out of it as a real development team.**

## THE GOOD, THE BAD... THE UGLY...



What we suffered with  
The horrors of technology and teamwork...



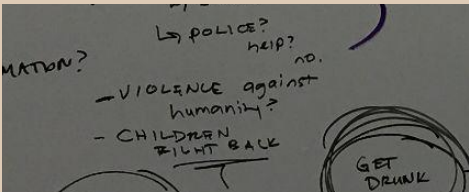
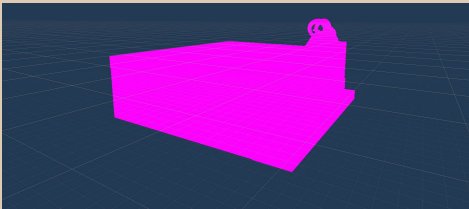
**TIMELINE:** (technically audio started during spring break 3/07/23) but officially **3/16/23 - 4/27/23**

- ★ **IMPLEMENTATION ISSUES** - We ran into issues when implementing assets because we were not working in the same pipeline.
- ★ **VISUAL HORRORS**
  - PNG issues with white lines surrounding decals
  - Improper UVs - Textures wouldn't wrap properly around 3D models
  - Skybox tearing
  - PINK !! GREEN !!! SHINY TERRAIN ?!!!
- ★ **TESTING is important**
  - Something breaking most of the time - needed to run tests to make sure things were working
    - But we could only work on the project 1 at a time... and we couldn't test in VR unless we were in class.
  - Outside sources to tell us what we could have done better
  - We tried to account for every outcome we could imagine
- ★ Life... in general...

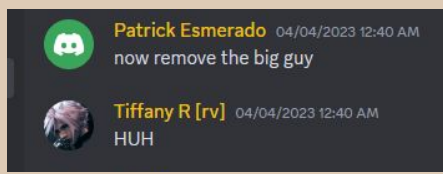
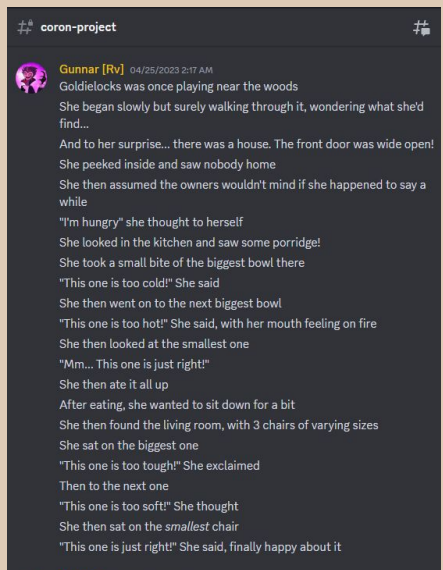
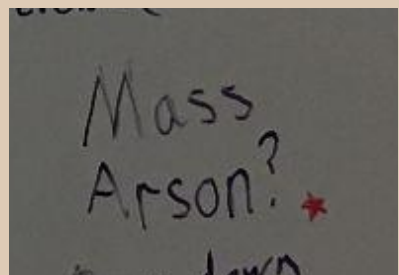
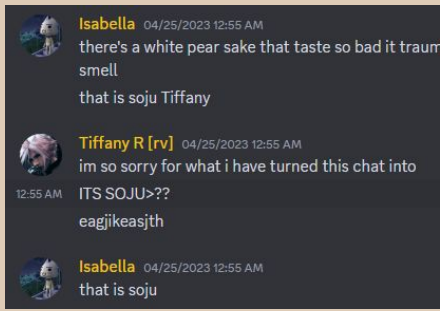
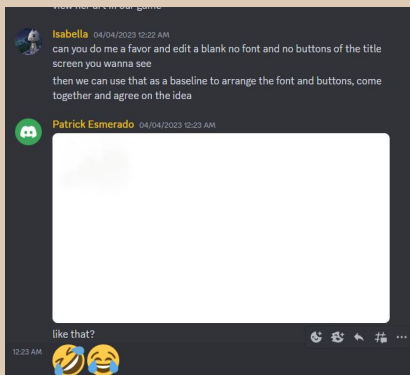
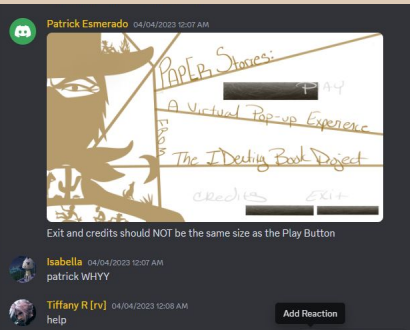
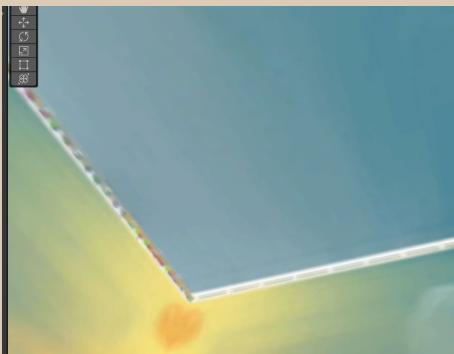
Nevertheless, this was a great learning experience.



## BLOOPERS



patrick is jesus confirmed?



## BROUGHT TO YOU BY...

### GDEV290 class of 2023:

Bassil Abuhuzeima  
Lane Ackerman  
Salvatore Anzalone  
Isabella Reinn Dela Pena  
Patrick Esmerado  
Gunnar Hunt  
Maxwell Kosempel  
Marco Kruger  
Tiffany Rojas  
Jeffrey Sickles  
Skylar Solewater



## SPECIAL THANKS TO

The RVCC Tech services team - without you we would have no project to run!

Everyone who playtested our project

Rick, Sonia... and of course..

Béatrice Coron for letting us experiment with her wonderful work and trusting us to take on this project.

...and Professor Crosbie



## Credits

### Hangman Panel audio:

#### ***freesound.org:***

“Hanging1.wav” by jameswrowles  
“Neck Bone Snap” by Clearwavsound  
“Whip Crack” by CGEffex  
“Crowd/Mob/Riot Noise (Voices Only) - 14 people, 2 minutes HENRY VI” by FillMat  
“Cheer 1 short.wav” by jayfrosting  
“Pulling a lever.mp3” by A\_Kuha  
“Western jackdraw” by MrAuralization  
“Gnasher Death” by scorpion67890  
“Male death #2” by Audacitier  
“Alarm Bell” by SergeQuadrado  
“Wooden Door – Closing” by angelkunev  
“00920 man dying 1.wav” by Robinhood76  
“Choking” by Aquillx  
“Zombie Choking.wav” by mrh4hn

### Blacksmith Panel audio:

#### ***freesound.org:***

“Black smith OWI.wav” by Jarryd28  
“Anvil – sound effect” by JLopez5000  
“Fire Crackle and Flames 002” by FractalStudios  
“Fire\_Crackle\_01.wav”  
“Fire\_Burning\_0.3.flac” by Foleyhaven  
“Fire Auto – car on fire” by florianrechelt  
“DogGrunt.wav” by TobiasKosmos  
“Series of Grunts, Surprised Sounds, and Breaths – Male” by Iceofdoom

### Saloon Panel audio:

#### ***freesound.org:***

“Saloon Door” by Ramon\_Di\_Pasquale  
“Punch 2 – Heavy.ogg” by steveuk87  
“Wild West Saloon” by quadraslayer  
“Saloon piano, honky tonk” by vdublin  
“Card Deck Zip Sound” by el\_boss  
“Card Sounds” by uEffects  
“Dropping Coins” by 1histori  
“49. Poker chip shuffle.wav” by bterad2000  
“Bustle in the pub 2” by organicmanpl  
“people\_laughing\_outdoors\_001.wav” by Martina\_Leitschuh

### UI Guitar chord sound:

#### ***freesound.org:***

“Wild West Guitar” by quadraslayer

## Credits

### **Panel 4 audio:**

#### ***freesound.org:***

"Body fall 1.wav" by deleted\_user\_2104797

"Shotgun Glock.wav" by Luannwepener

"SFX\_Pistol\_Gunshot" by JG\_Booyesen

"1911 Reload" by nioczku

"R-15-74 Crowd Shouting and Clapping.wav" by craigsmith

"Revolver Spin" by ryansitz

"Shotgun Fire" by hyperx6

"Etnikbozuntu - E.wav" by spidervis

### **Panel 5 audio:**

#### ***freesound.org:***

"RockingChair2.aif" stvelalonde

"Boot & spurs.wav" CGEffex

"Cowboy.wav" by Shawshank73

"Bulls and cows in a field in Missouri, USA" by felix.blume

"COUNTRY-farm-yard" by CastleofSamples

"horse carriage 2-edited.mp3" by j\_o\_j

"1911 Reload" by nioczku

"neighing horse.wav" by soundlikewillem

"wagon cart on gravel" by Martineerok

"Hammer Cocking Back on Pistol (8)" by filmmakersmanual

"horse snort.wav" bruno.auzet

### **Panel 6 audio:**

#### ***freesound.org***

"Ketagawa03.mp3" by morewaves

"Footsteps; sloshing\_1-2.aif" domrodrig

"Metal Fork Hits 4CH (MS+ST)" by unfa

"Metal tube 3.ogg" by adharca

"Water Flowing Through Very Close Rapids 5" by yoyodaman234

"footsteps in wet coarse sand.wav" by bruno.auzet

"Pick axe striking rocks #2.m4a" by guyburns

"Coin Bag Pickup Drop.wav" by ralph.whitehead

"coindrop-sample.wav" by egill.ian1

### **Ambient Music/ Ambient Sound:**

Guitar and composition by Isabella Dela Pena

#### ***freesound.org:***

"Bird Chirp.wav" by hmoosher

"Hooded crow.wav" by straget

"Countryside" by brunoboselli