

YONGZHE HUO



PORTFOLIO



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THIS IS MY ART!

PROJECT 1 - DIGITAL GAME



GAME DESIGN & 3D Modeling: Yongzhe Huo
Programming: Siyuan Fan

INTRO

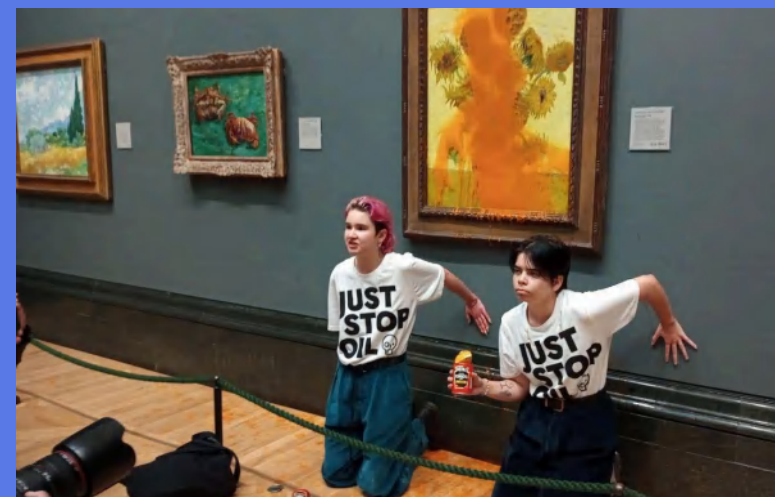


Incorporating elements of fantasy into a realistic style, the courageous resistance of the masterpiece (player) is a defense of one's own performance art. It showcases a strong stance against such wrongful actions and condemns the malicious overflow of the present era of social media and the internet.



Inspiration

I'm a fan of classical paintings. Although I'm not particularly skilled at drawing, visiting art galleries is one of my few hobbies. The inspiration for this project came from news I saw about so-called environmental activists damaging famous paintings.



Moreover, not only famous paintings but numerous other artworks have also been damaged. On October 24th, at Madame Tussauds in London, self-proclaimed "environmental activists" from the group "Just Stop Oil" smeared a chocolate cake on the wax figure of King Charles III.

Just the day before, two German radical environmentalists threw mashed potatoes at Monet's famous painting "Haystacks" in the Barberini Museum in Potsdam, Germany, also causing widespread attention, uproar, and shock.

Idea Development -

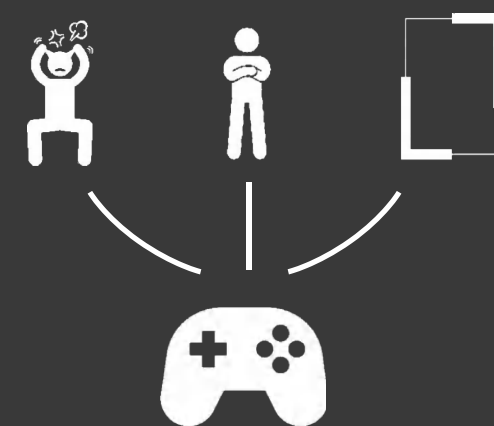
I want to use this game project to satirize the hypocrites and foolish followers who seek attention under the guise of environmental justice.



When I started designing, I encountered several important questions:

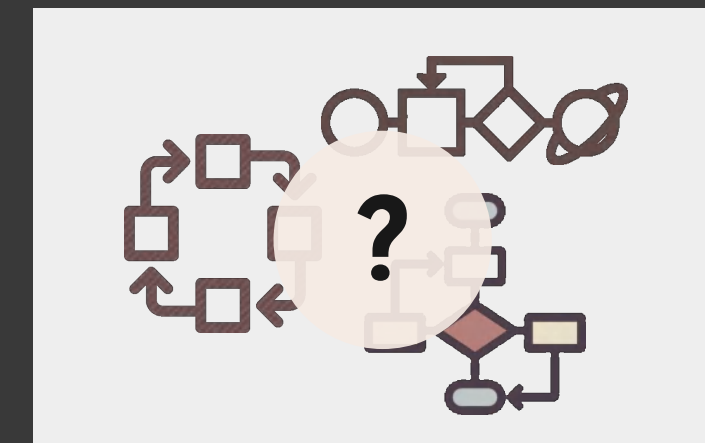
01.

To highlight the theme, should players take on the role of protecting the famous paintings or the ones damaging them?



02.

Based on the first question, how should the gameplay and flow be designed?



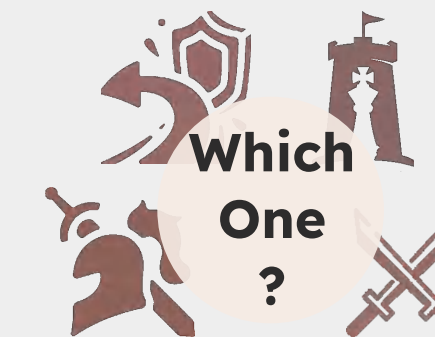
03.

Should the famous paintings be involved in the battle?



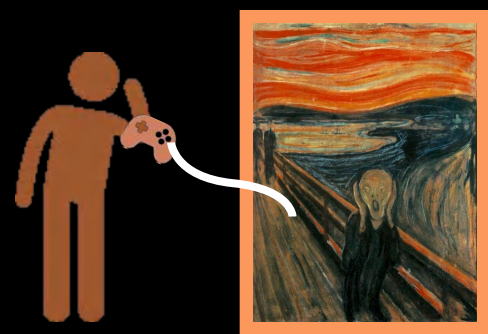
04.

Should the gameplay involve combat, tower defense, or role-playing?



Game Design and Iteration

Because the concept raised some clear questions, after further reading news reports, I decided that players would portray the famous paintings.

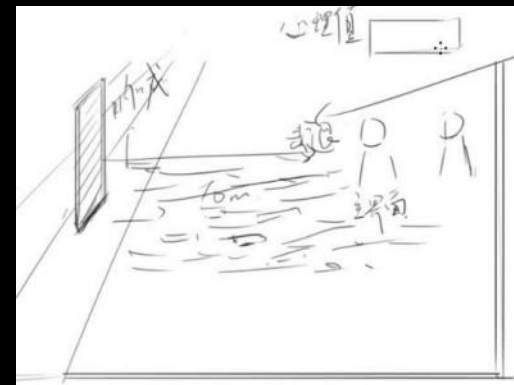
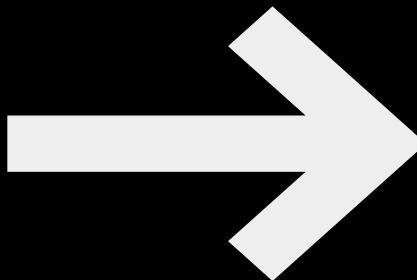


Players portray famous paintings

VS



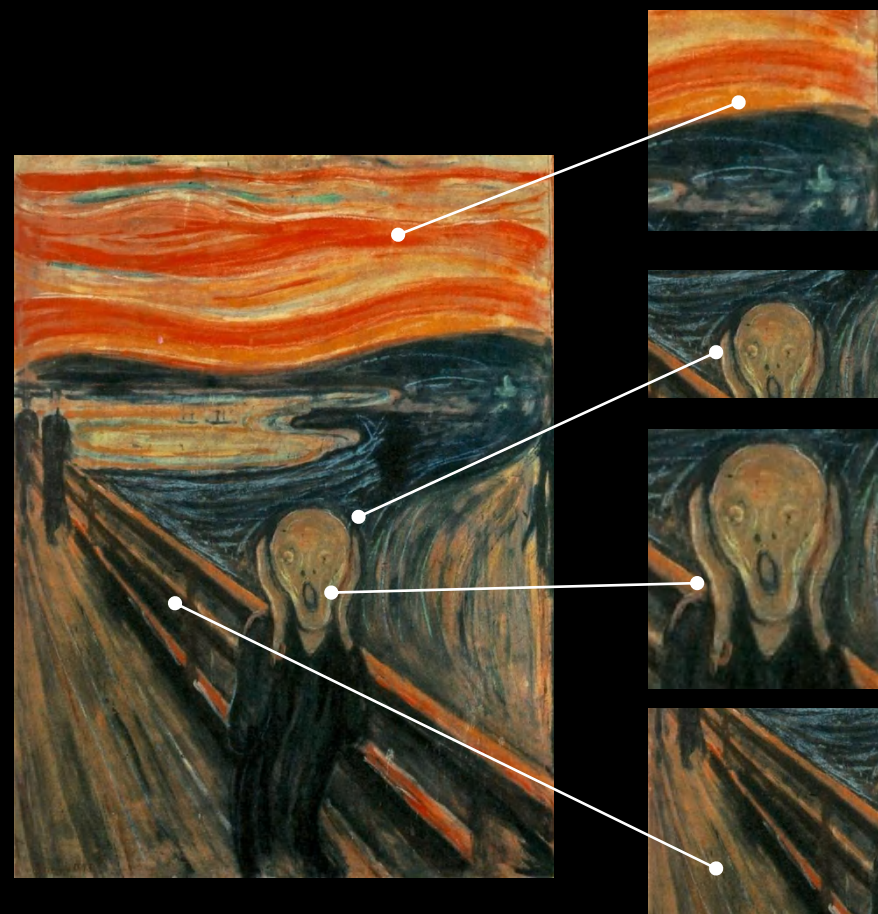
Enemies intent on destroying them



A simple draft when designing skills and rounds



Ultimate Skill



Particle Effects (Screen Background Extension Impact): The Screamer channels the brushstrokes of colors from the sky and lake in the background, presenting them as a fluid that can disperse and repel solid objects (like swords).

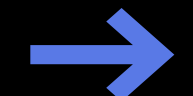
Stare Down: This is a prerequisite for triggering the Sonic Attack and a way to accumulate energy for subsequent attacks.

Stare Down: This is a prerequisite for triggering the Sonic Attack and a way to accumulate energy for subsequent attacks.

Stick Attack (Melee Awakening Skill): Awakened by the damage inflicted by the destroyers, this melee attack allows the player to control the Screamer, who turns around to pull off a wooden stick from the half-destroyed bridge behind them. The stick is then used for close-quarters defense against unarmed destroyers.

VS

Flying-type ranged item attack.



It fills the energy bar for the Sonic Attack skill.

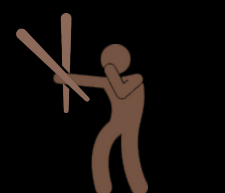


VS



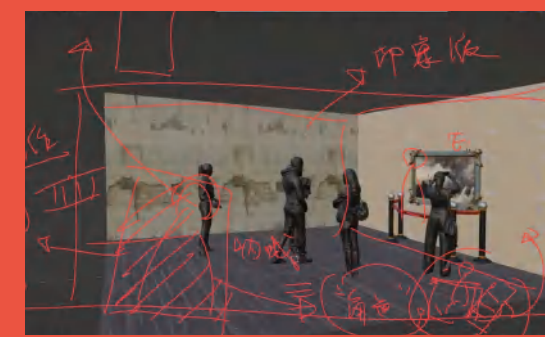
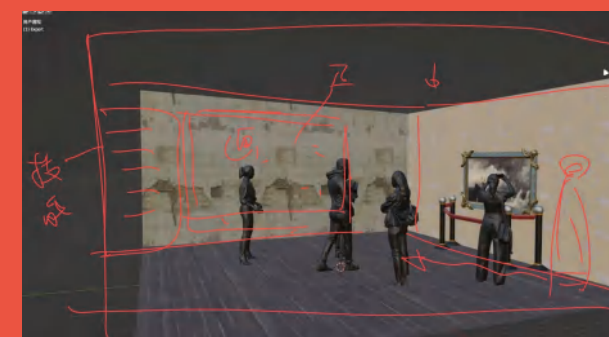
When the energy bar is full, releasing the Sonic Attack skill can repel all enemy attacks.

VS



Melee weapon-type attack.

Game Scene Design -



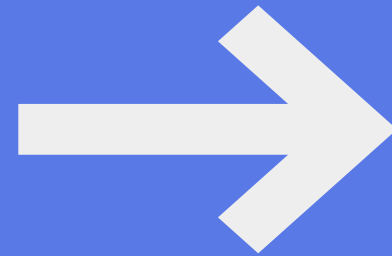


ART STYLE

At first, I wanted to use a more stylized visual art because it could better serve the theme of satire. However, when I juxtaposed them with the artistic style I envisioned for the famous paintings, I found them to **be quite discordant**.



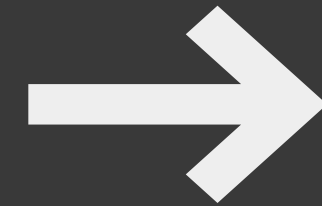
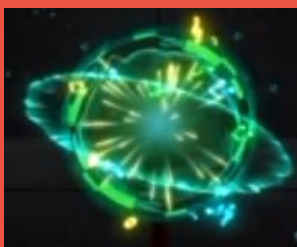
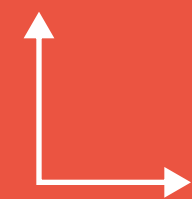
VS



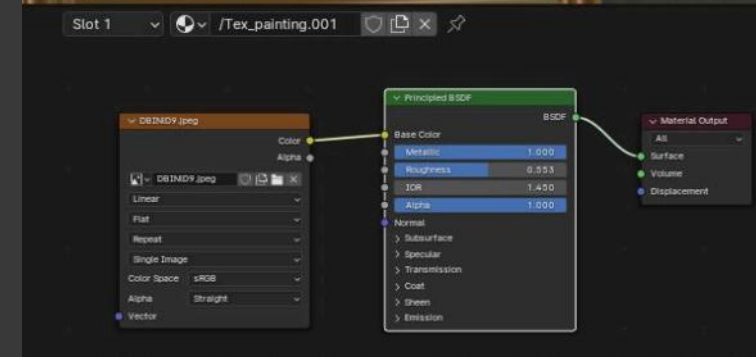
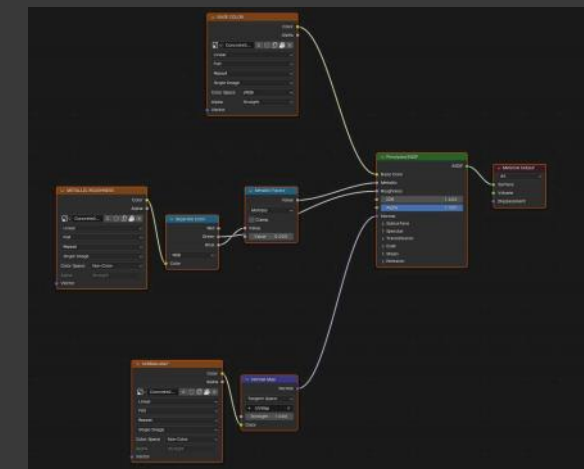
Therefore, I opted for a realistic and classical art museum setting. While the paintings themselves retained their original appearance, for the skill effects, I aimed for a stylized and exaggerated approach. In the subsequent art development, I hope to find a way to **balance all the different elements**.



Use this as a reference for special effects, animations, and skills.



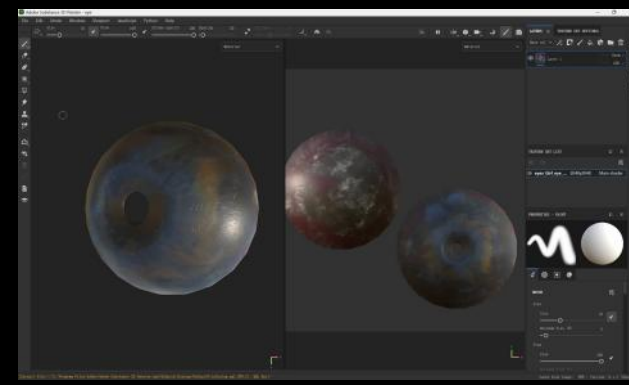
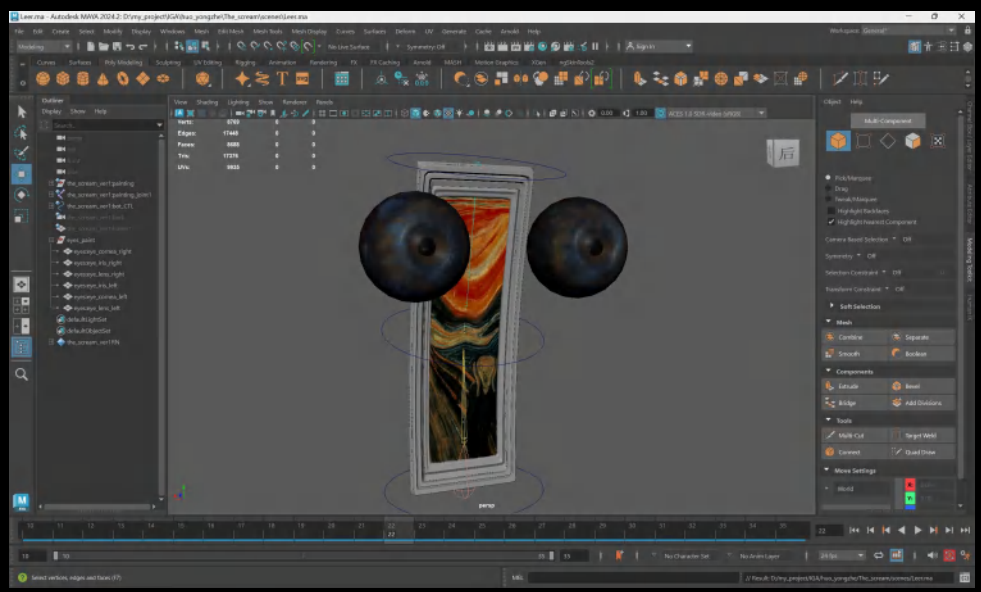
To make the environment look more realistic, I used shaders that are better suited for a realistic style when creating textures.



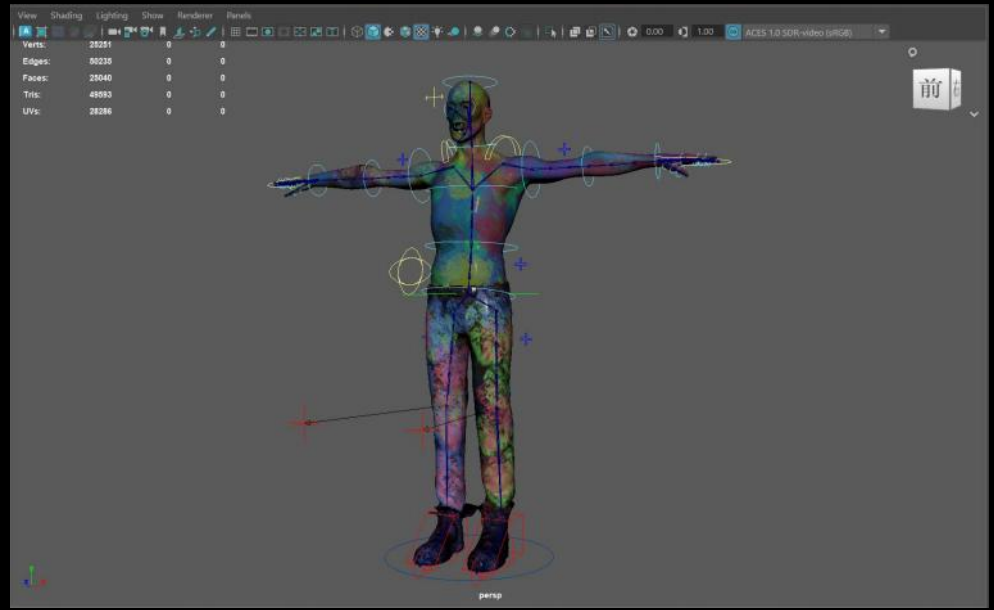
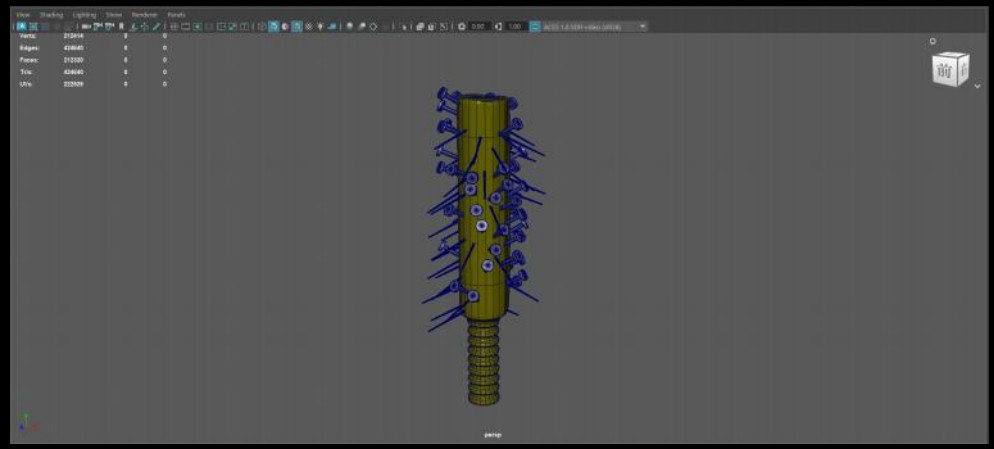
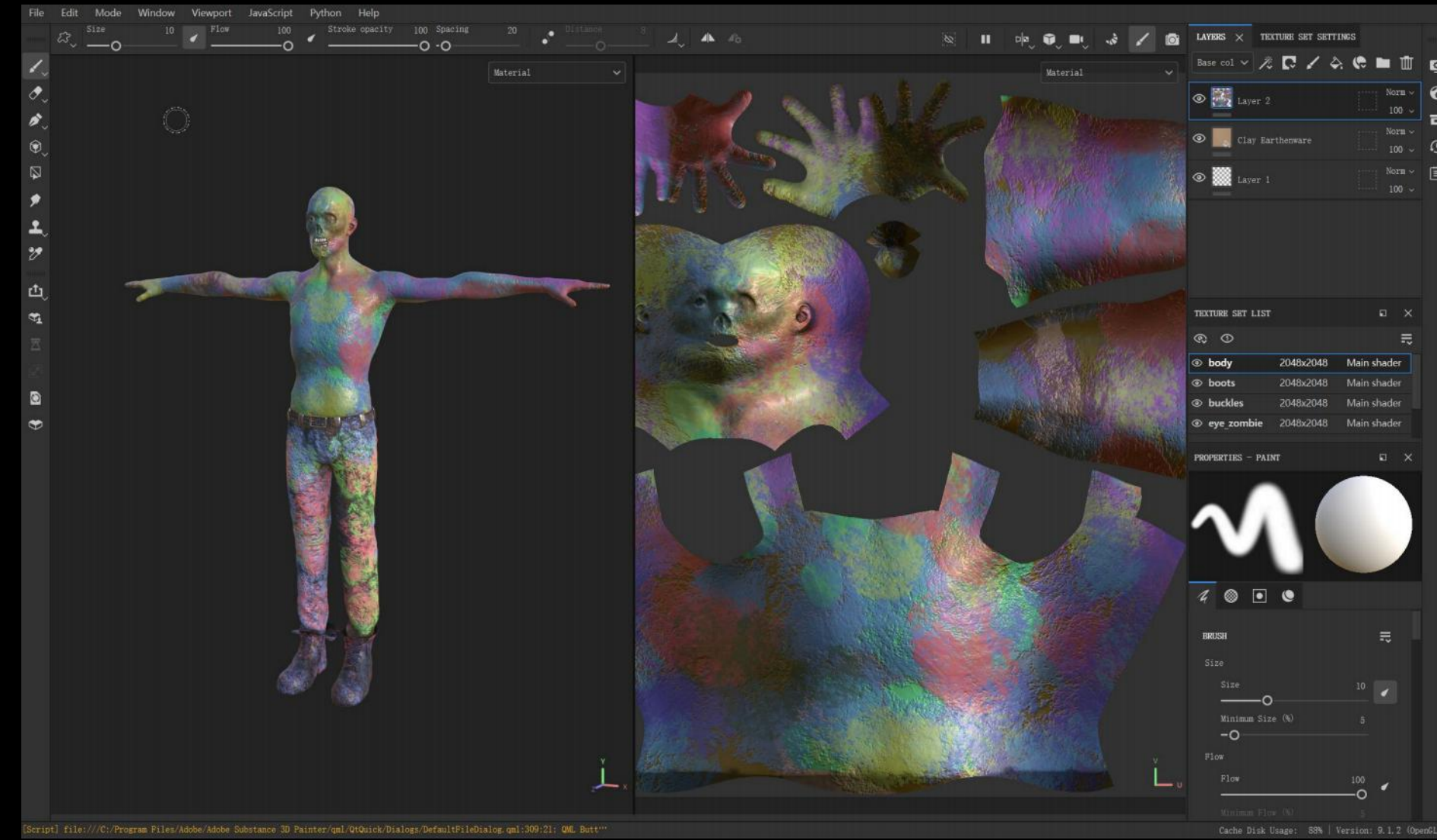
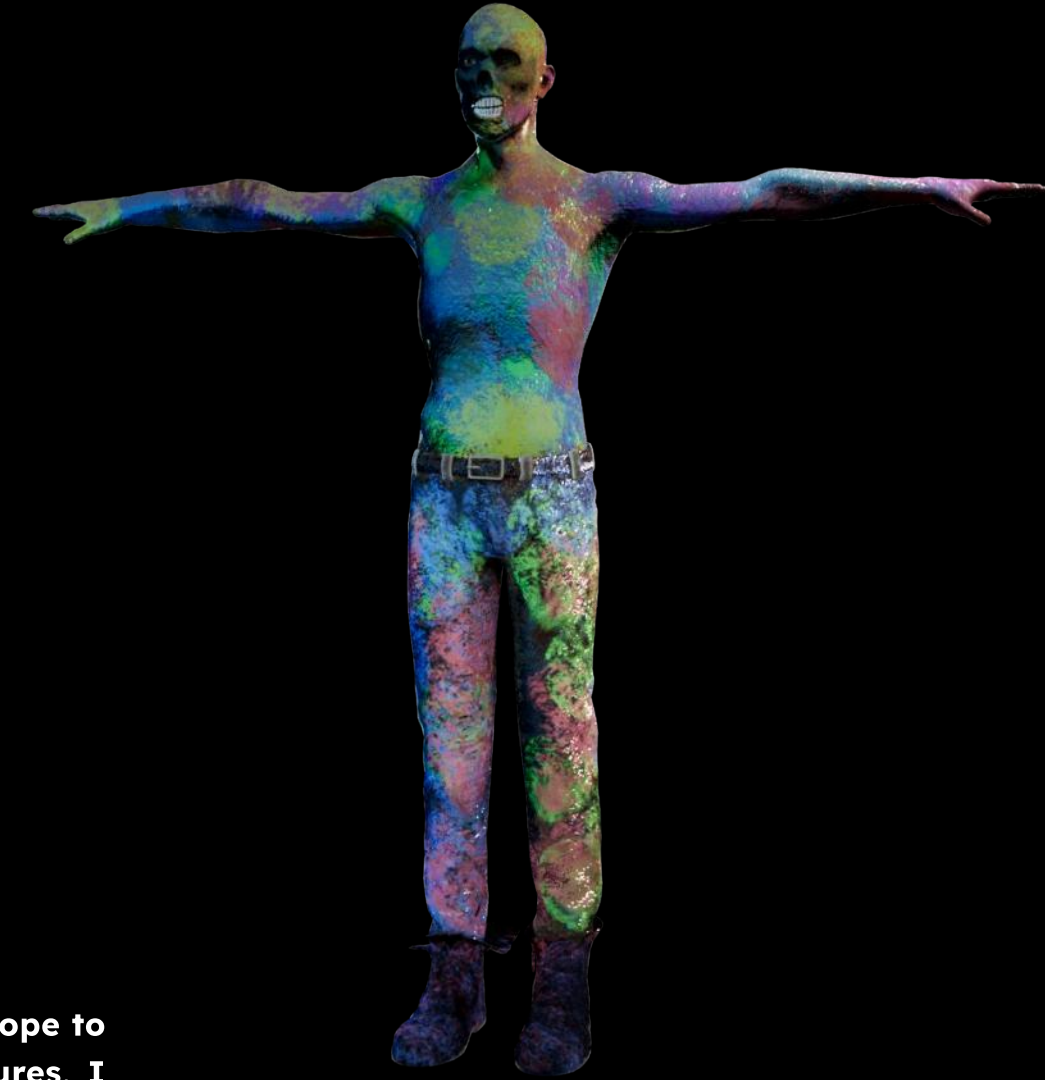
Similarly, I utilized textures to create models of famous paintings.

ART DESIGN

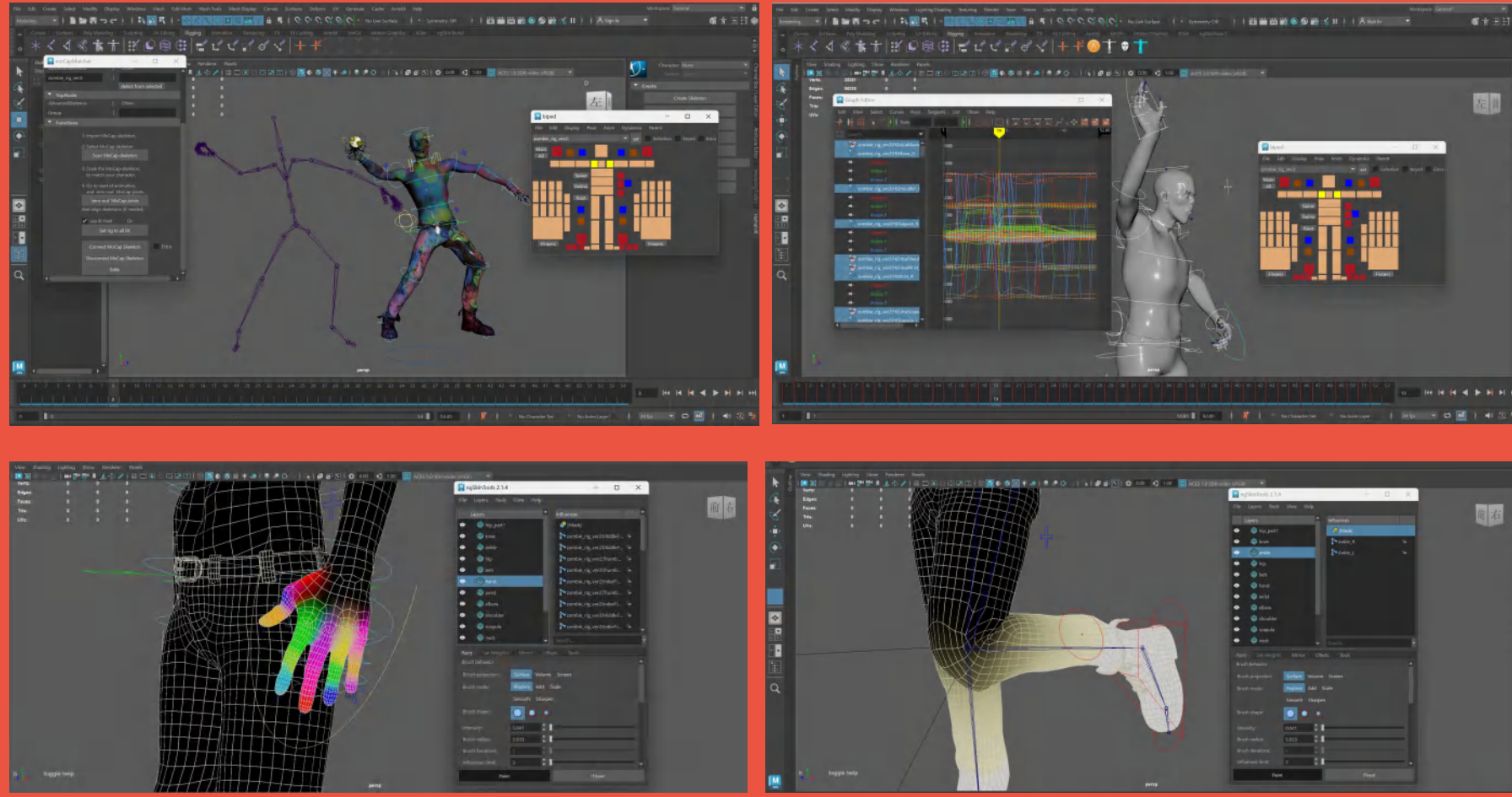
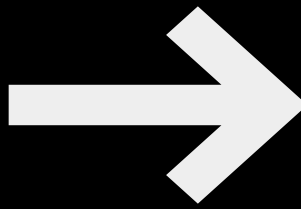
At first I wanted to create special effects directly in the engine, but some skill effects still require art resources, so I now create art resources in blender.



Camouflage style textures, I hope to distinguish them from realistic scenesle textures, I hope to distinguish them from realistic scenes

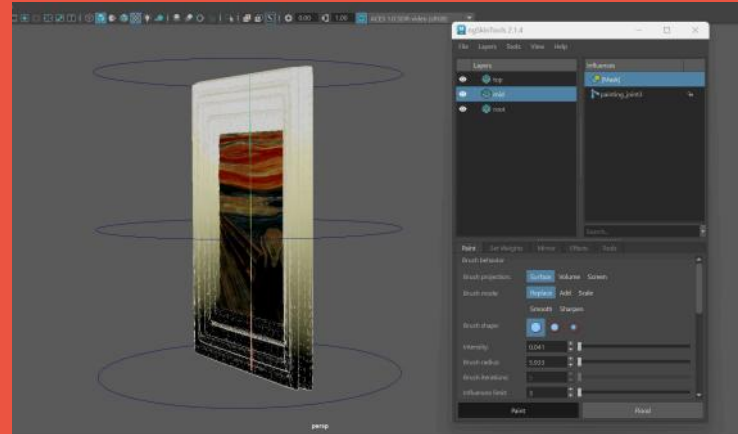


ANIMATION

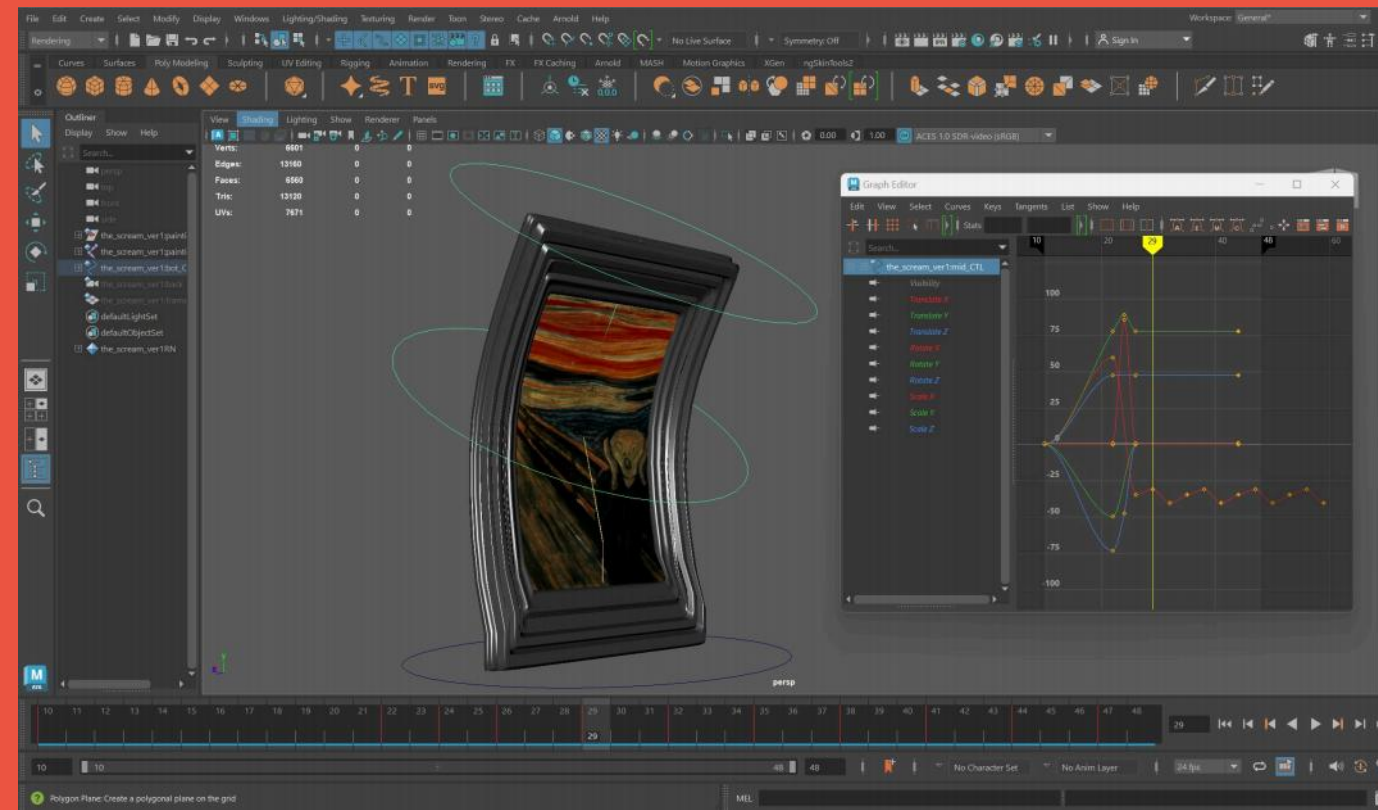


Making weights and animations

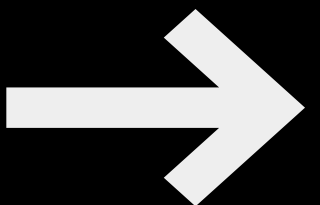
When animating the famous painting, I encountered some problems: most of the skills are actually completed by special effects, but some skills still need to be bound to the painting and animated. But he is not as easy to make as a character, so overall I referred to some stylized animation production methods.



(Work in progress)

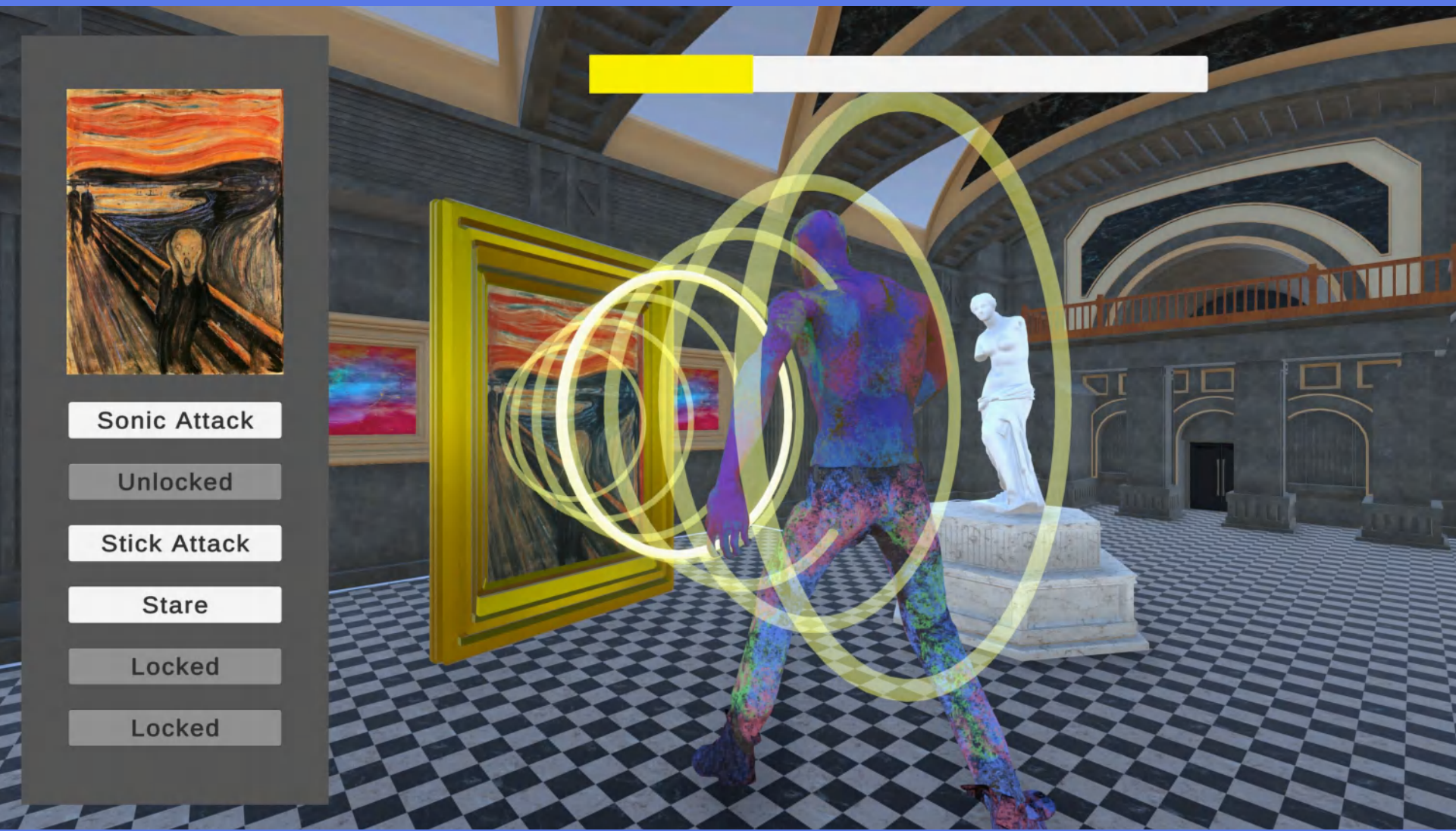
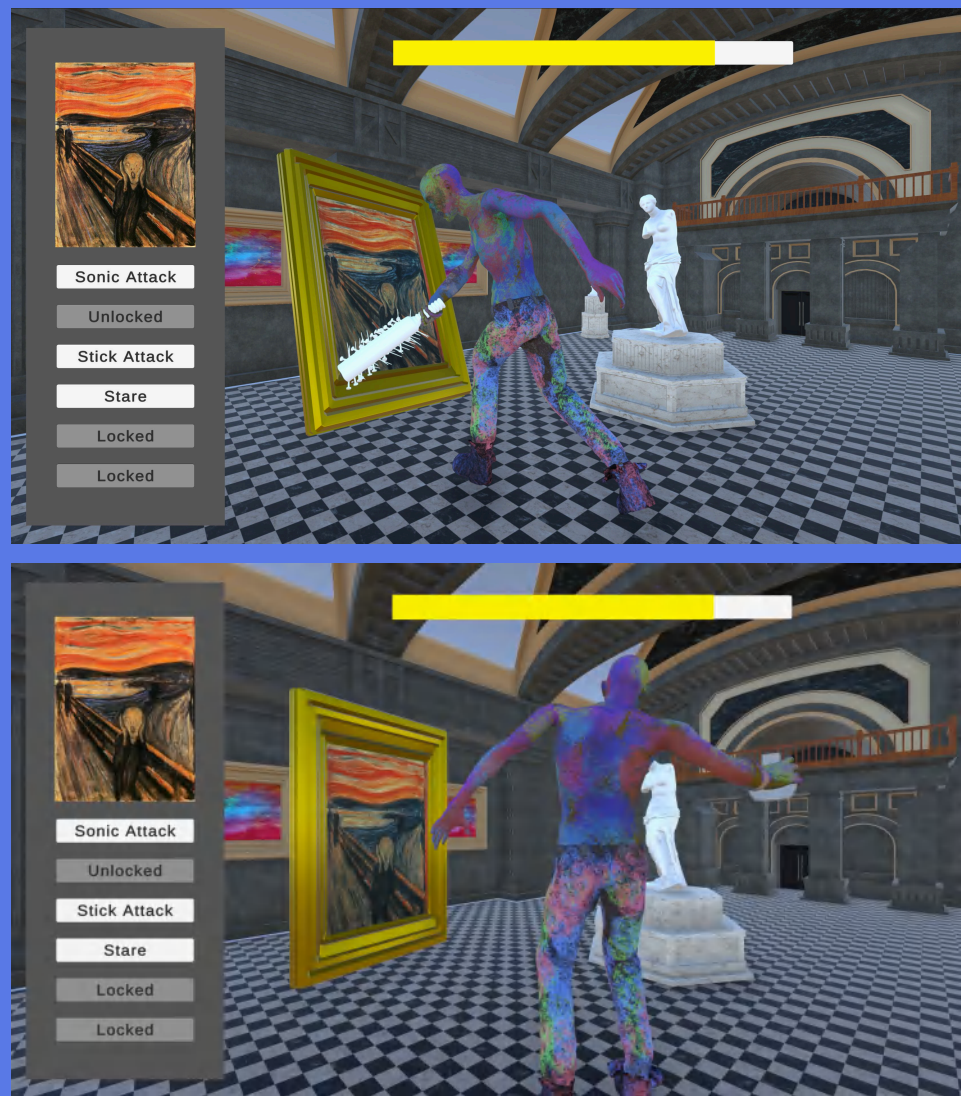
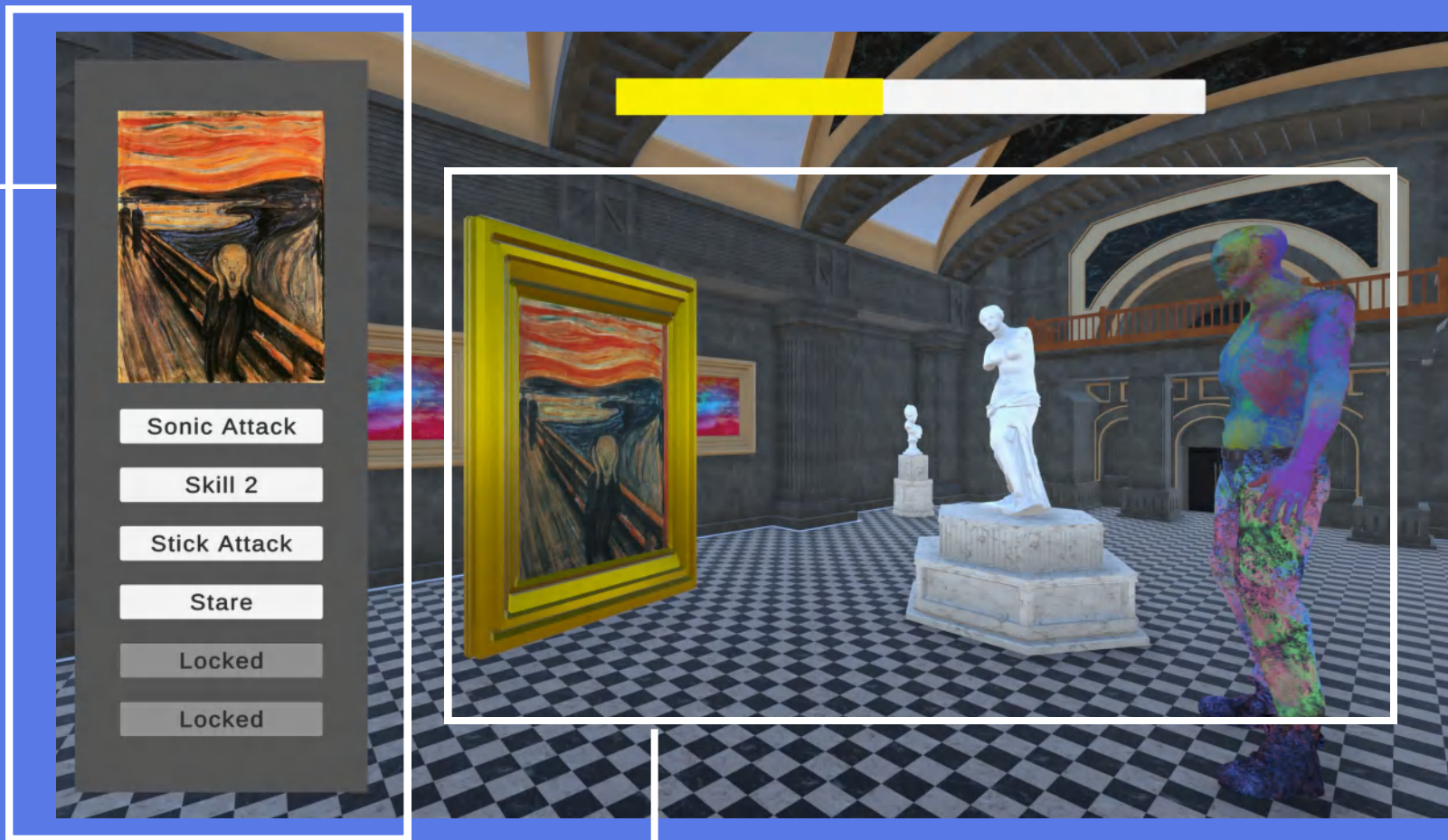


FINAL
DISPLAY



Player's skill operation area

Screen display
and
enemy prediction area



GROW UP

BOARD GAME

Game Design: Yongzhe Huo

Visual Design: Jiaqi Deng

People grow up with their fathers around and it's no different for me, there are inevitably good and bad memories between fathers and children. In this game, the player will play the role of a father and try to help the child grow up, in the process, let the child and the father understand each other and work for a better future.

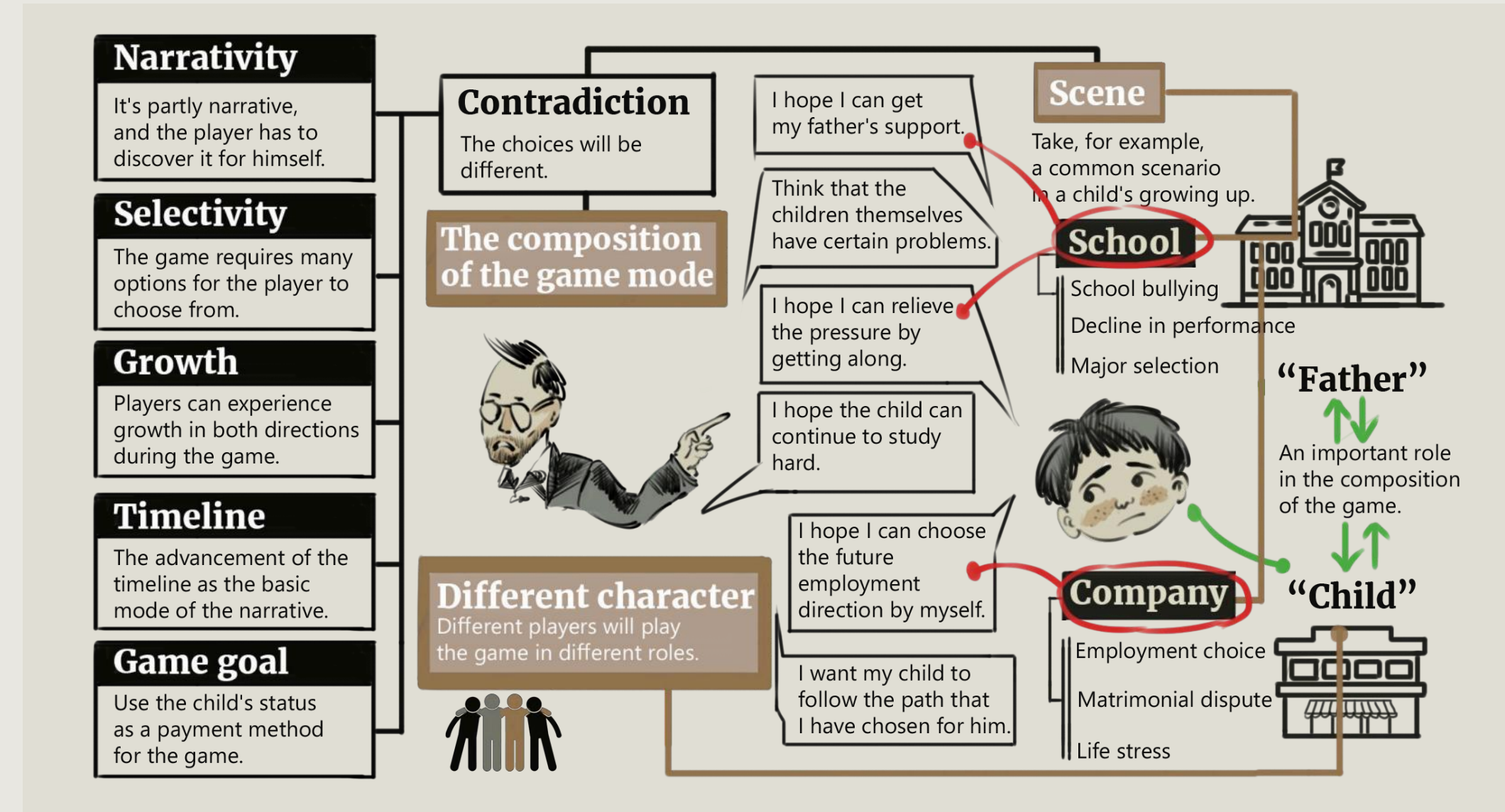
Brainstorm

A choice between father and son

In the same situation, the choice between father and child will often be different, and the lack of communication environment will often drive a wedge between father and son.



I wanted to show how the father's choices affect the child.

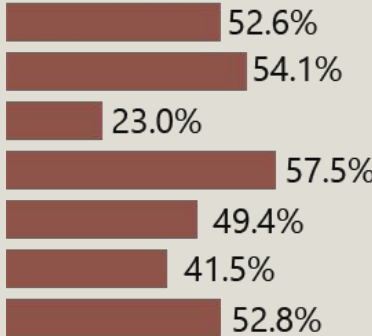


Research

High pressure period

According to the survey, the student period is the most concentrated period of parent-child conflict in Chinese families.

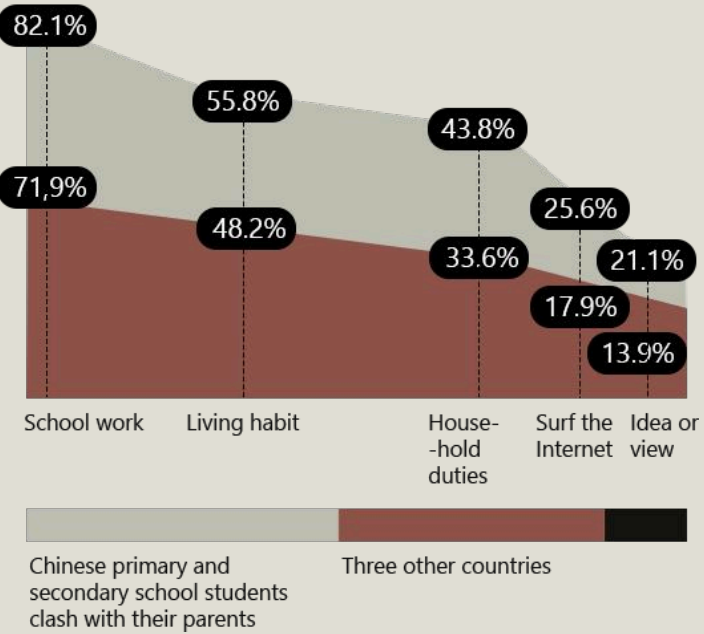
Development of network



57.5 percent of students have been misinterpreted

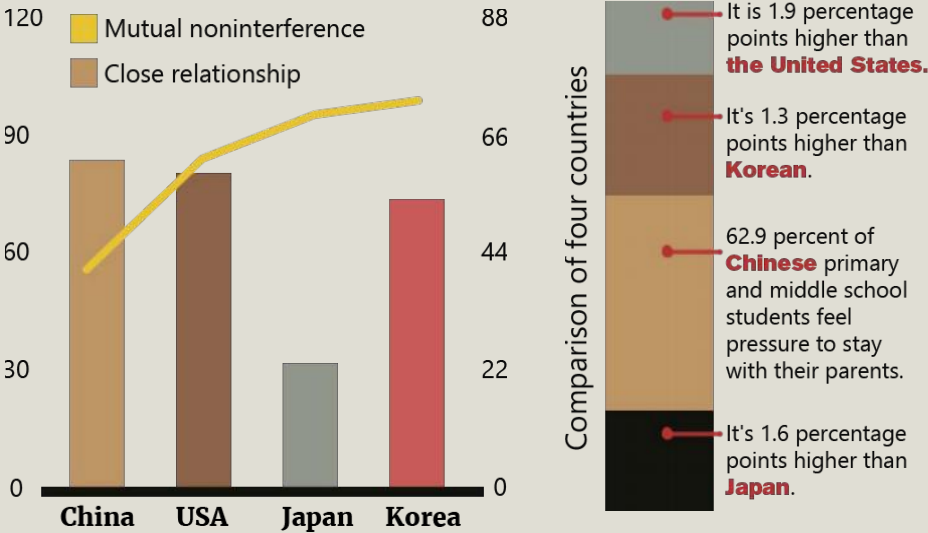
8 to 23 percentage points higher than the other three countries.

Cause of conflict



High pressure period

57.5 percent of Chinese students are misunderstood by their parents when looking up information online, 8 to 23 percentage points higher than the other three countries.



There are still some parents used to criticize the negative way to motivate their children.

Design Logic

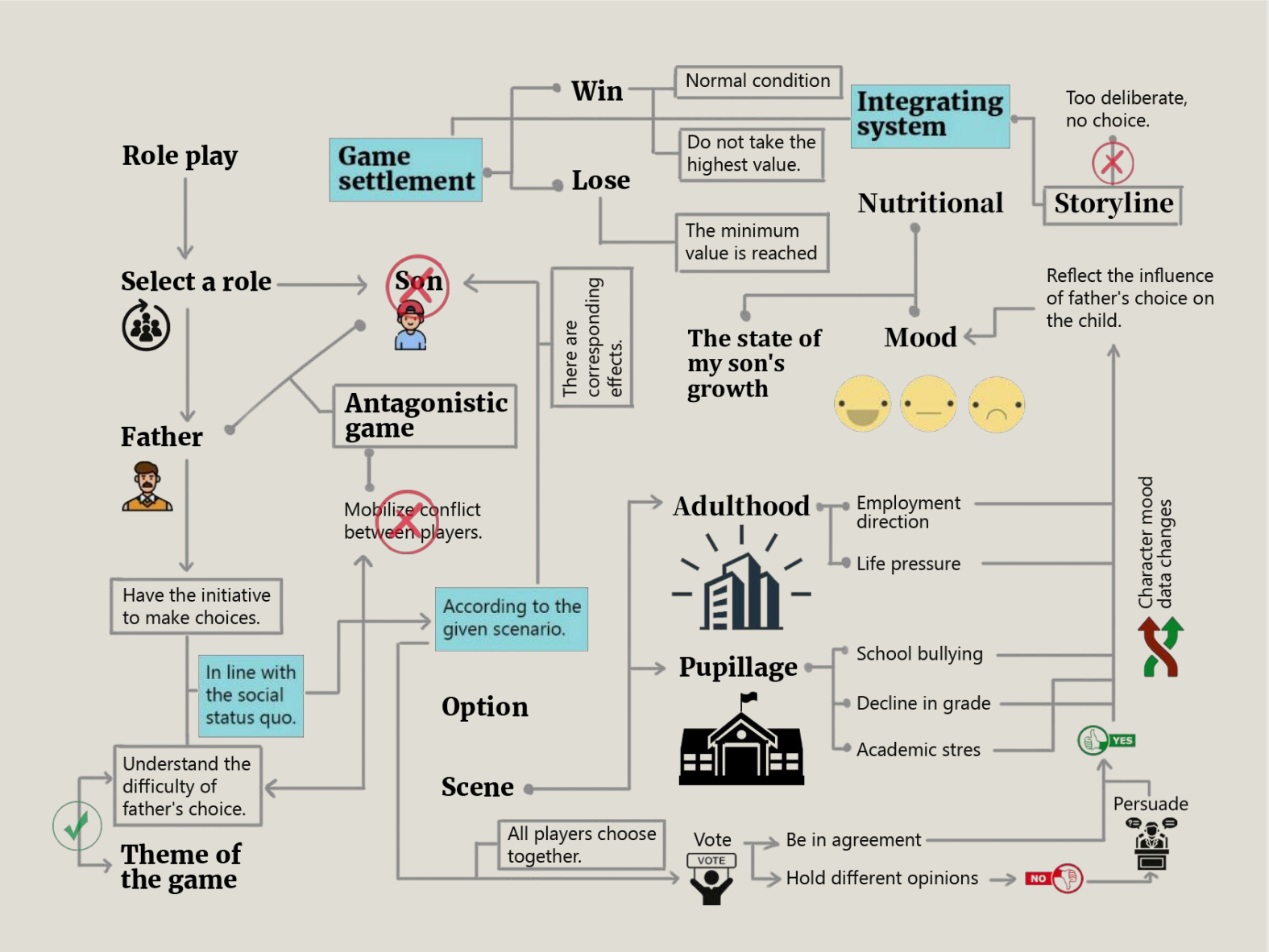
Concise narrative

I wanted the player to feel some emotional feedback while playing, so I designed scenes from my life as elements of the game.



Integration mechanism

In the game, the judgment of the player is determined by the current mood state of the "son" character in the game, and the game is settled as a failure when the mood of the character is reduced to the lowest point.



RULEBOOK

Game Background

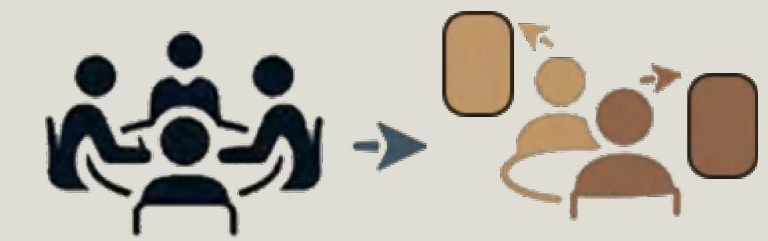
There will be different players playing different fathers in the game, and everyone needs to make appropriate choices for the children in the game, how will everyone make choices?

Game Standard Configuration

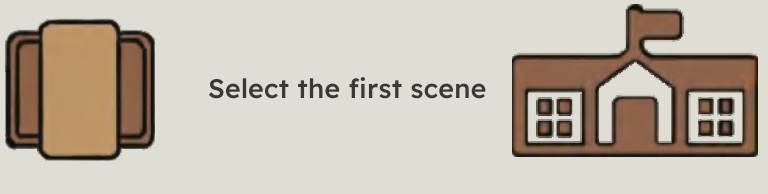


Before the game starts, players need to prepare the above parts so that the game can proceed smoothly.

Game Flow The following process showcases how the player normally completes a round in the game.



Each player chooses their own character card. Players need to determine the personality of the father they are playing based on the **information** on their character cards, and make decisions in the game based on that **personality**.

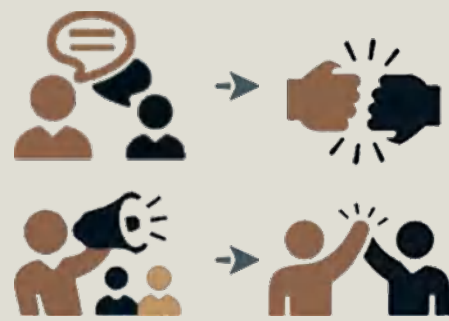


Each player takes turns speaking his or her decision based on the role he or she plays.



Difference of Opinions

Debate sessions are needed when players disagree on a decision.



Players are required to vote on different decisions after each round of speaking, and finally choose one of the execution decisions.



The player moves different markers to the scoreboard based on the current options.

Settlement mechanism

When the marker reaches the upper limit of the score board, it needs to be noted, and when the marker exceeds the upper limit, the game settlement **fails**.




When the last scene is opened, the characters on the field do not appear unexpected conditions after the game is over for victory.

Ending

By nature, the game does not have a completely standard victory ending, and at the end of the game, the player can observe the situation of the child on the field, and **the player will reflect on the process of growing up** and understand the difficult decision making as a father, which is what I want to express.


Art Display

Classification of Game Materials



Character card representing “Father”


There are four cards representing Father, each representing four characters with different personalities.



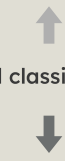
Scenario-related cards

1. Conflict with classmates in the dormitory
2. A problem with a classmate turned into a flight
3. The child is homesick in the dormitory

A Scoreboard used to calculate scores



Statistical classification of data



- Morality
- Mood
- Kinship
- Stress

Art Reference



Retro Style

The retro style of illustration symbolizes a memory of the past and can remind players of the time they spent with their father when they were young, which is suitable for the art style of this game.



Block print

I chose the style of woodcut to enhance the impact and recognition of the picture while reducing the workload of drawing cards.

Development (The steps are illustrated in detail)





A. Think it is the child's own problem and criticize.

MOOD	0
STRESS	+1
KINSHIP	-1
MORALITY	-1

B. Immediately confront the parent of another classmate.

MOOD	+1
STRESS	0
KINSHIP	-1
MORALITY	-1

A. Need to educate their children.

MOOD	+1
STRESS	+1
KINSHIP	0
MORALITY	-1

B. No regard for the present status quo.

MOOD	-1
STRESS	+1
KINSHIP	0
MORALITY	0

MOOD

STRESS

KINSHIP

MORALITY



Adjustment And Generalization Of Style

Because it may involve the production of a large number of cards, it is unwise to choose a high-precision drawing method. I have compared many retro style card games on the market, and after comparison, I found that their characteristics show the following points:

1. Concise style is easy to draw in large quantities.	2. Unified painting style to improve visual experience.
3. High recognition makes it easy for players to compare cards.	4. The differentiation of numerical information is obvious.

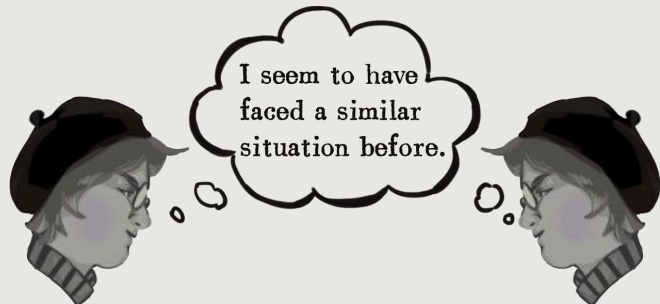
Production



Further Development

A richer plot line.

- At present, many scenes in this game are only from my own research on my life and the lives of the students around me, and I believe that there are more events that can be added to the game. I also hope that some options in the game will remind players whether similar scenes have occurred in their own lives, and if they can resonate with everyone, it will be the most perfect thing.



I hope that this game will be educational and that players will learn something from it.

PROJECT 3

CHARACTER DESIGN

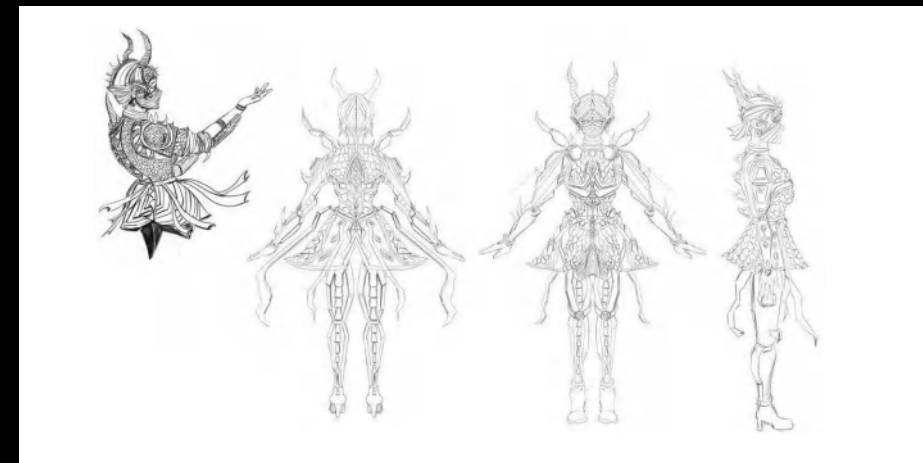
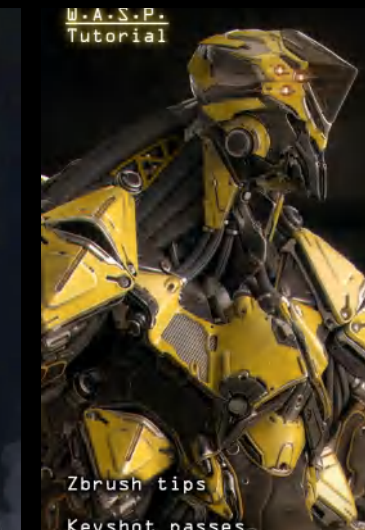
INTRO

The inspiration for this character comes from a scene exercise I drew myself. In this personal exercise, the character has the characteristics of a Chinese dragon in his clothing.

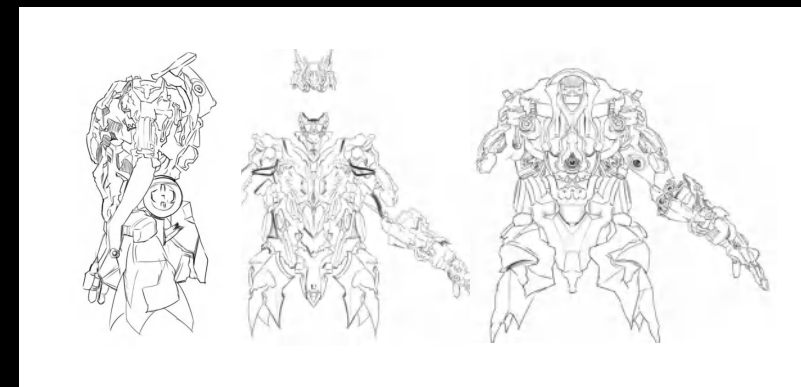
Character background setting: She is set as a female warrior of the dragon tribe. After reaching the common goal of protecting the earth with humans, she got married and underwent the transformation of human future technology, adding modern mechanical armor to the original body.



CHARACTER REFERENCE & DESIGN

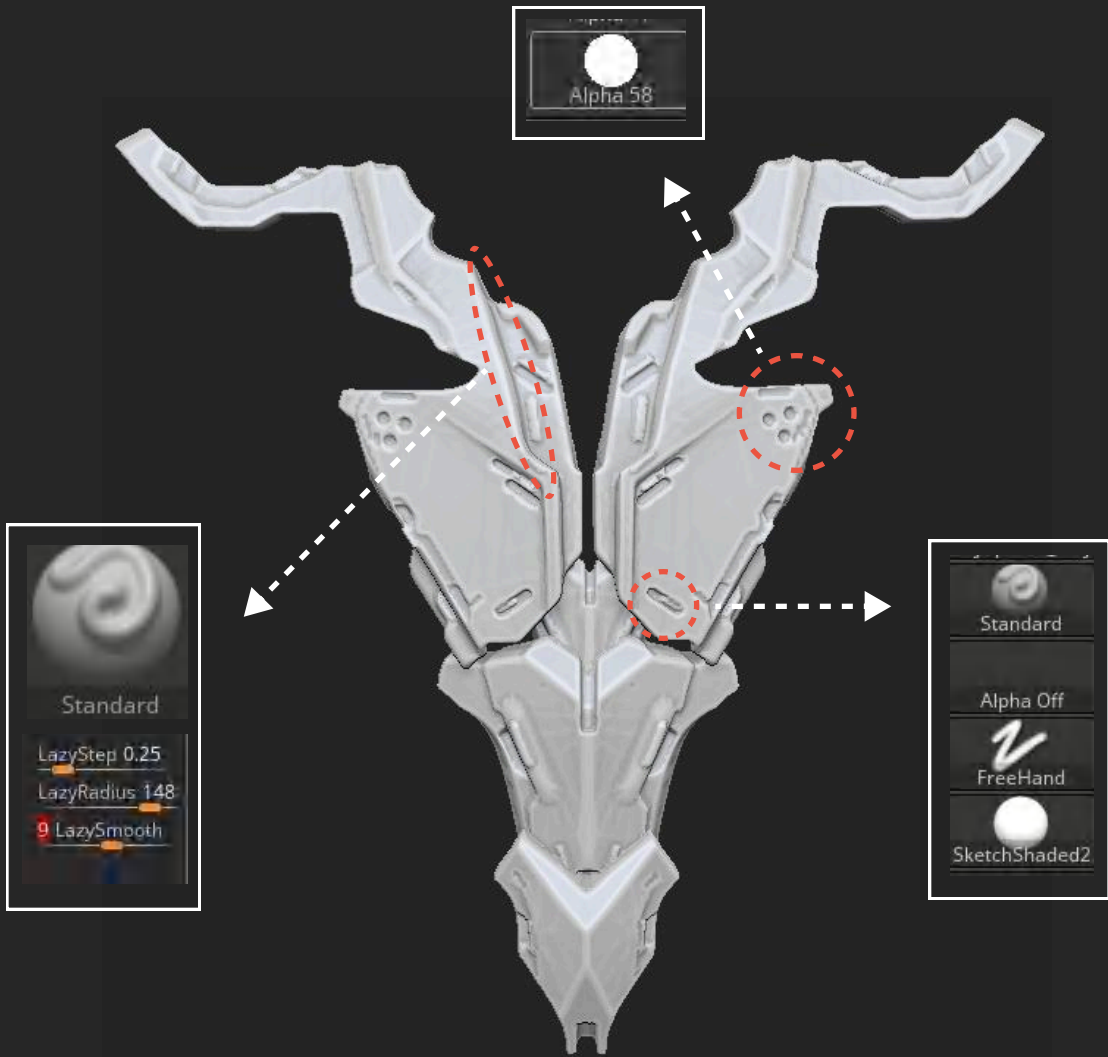


Character Original Design: Dragon horns with Chinese dragon characteristics are added to the helmet, combining the dragon horns with modern machinery. The middle crystal is the source of the dragon horn energy. Armor: The armor has been modified twice. The initial armor had a large number of technological scales embedded in the breastplate and skirt. The overall armor looked relatively single.

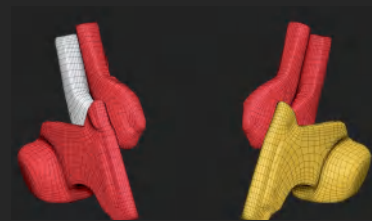


However, the new armor has been integrated and upgraded based on the original armor, simplifying the complicated scales, and using large areas of nanomaterials to fill important parts to provide more effective protection. All the armors were injected with golden energy fluid to cover them in stripes. The overall performance has increased exponentially compared to the first generation armor.

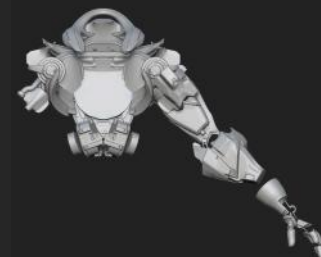
3D MODEL - MAKING PROCESS



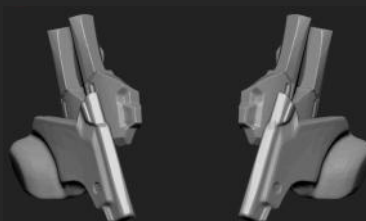
A1- I sculpt the basic shape then
Slice the contour



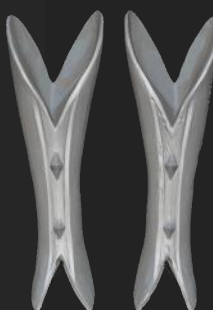
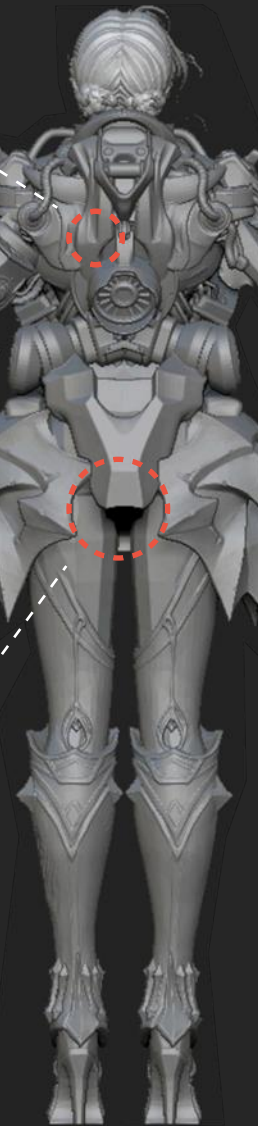
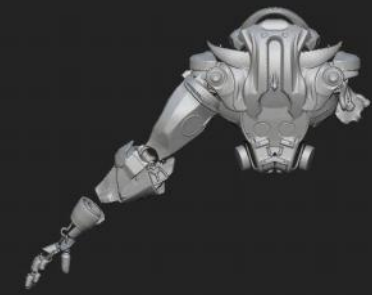
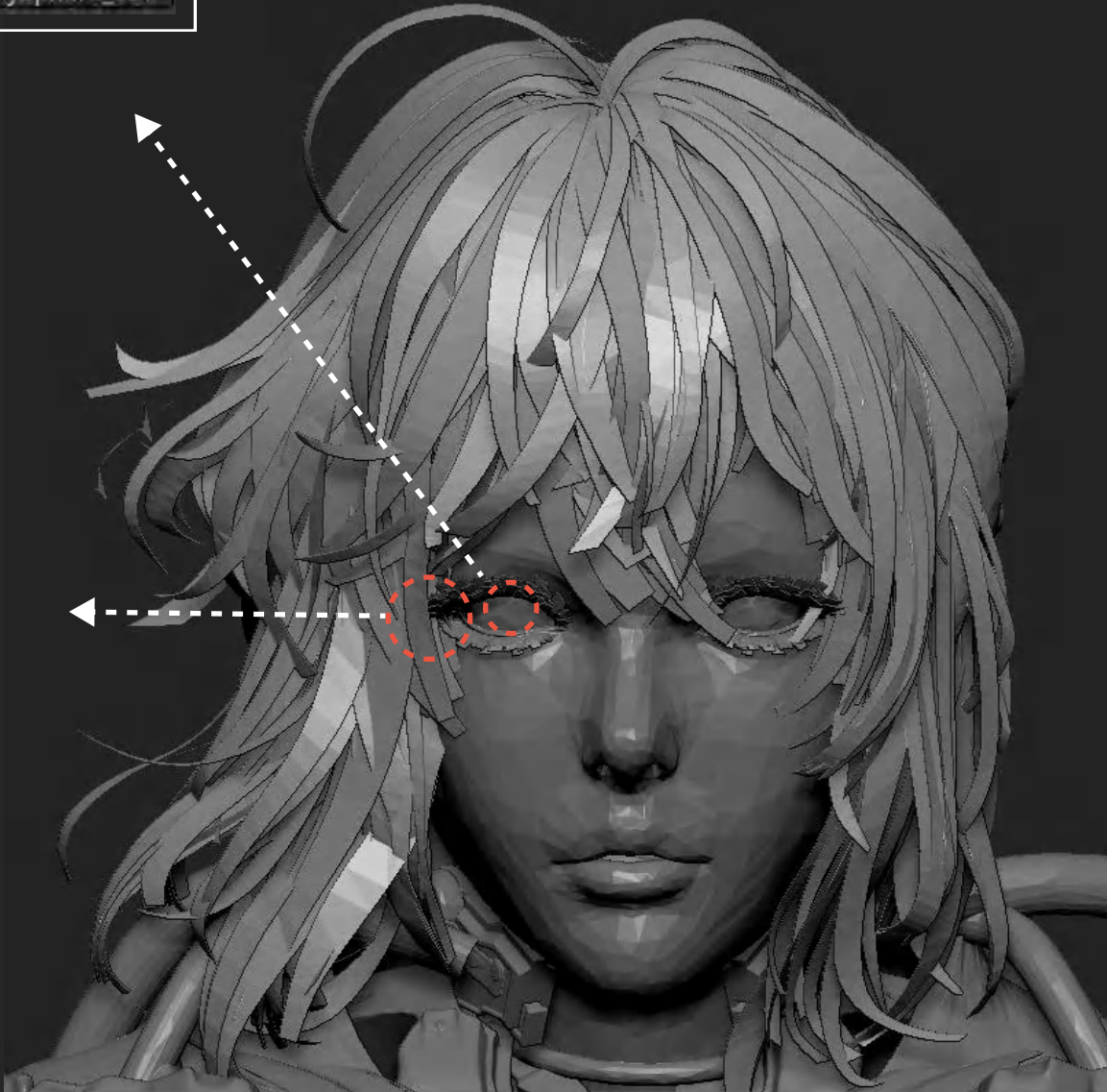
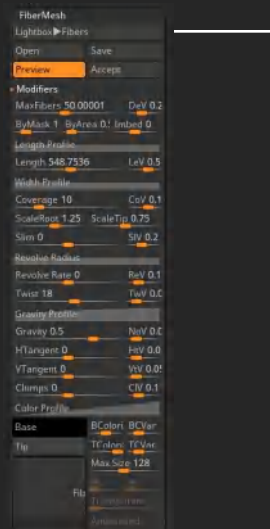
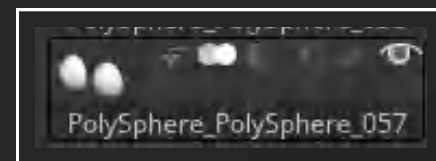
A1- I sculpt the basic shape then
Slice the contour



A1- I sculpt the basic shape then
Slice the contour



A1- I sculpt the basic shape then
Slice the contour



RIG CHARACTER

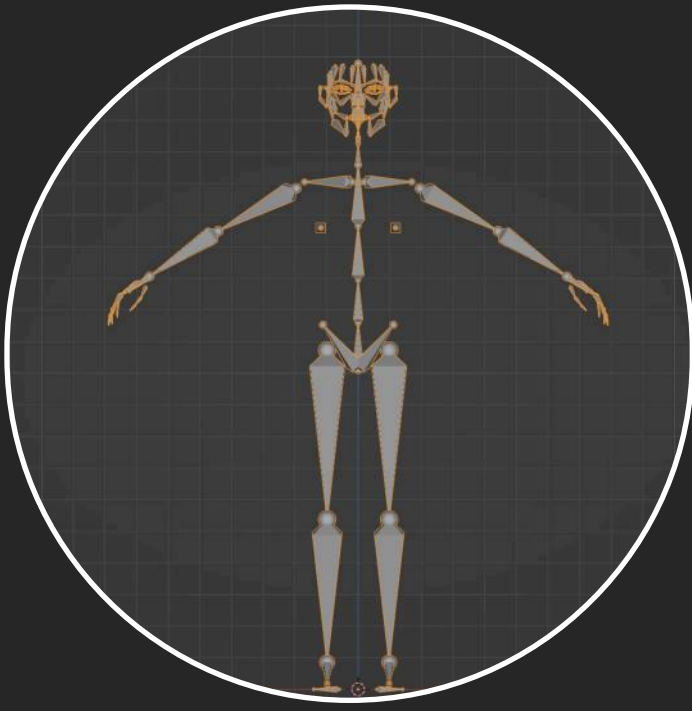
STEP 1.

I use Meta-Rig here, this will simplify my workflow in Blender



STEP 2.

Get a Meta-Rig and then pose it to fit my character.



STEP 3.

Pose Every Bone Correctly

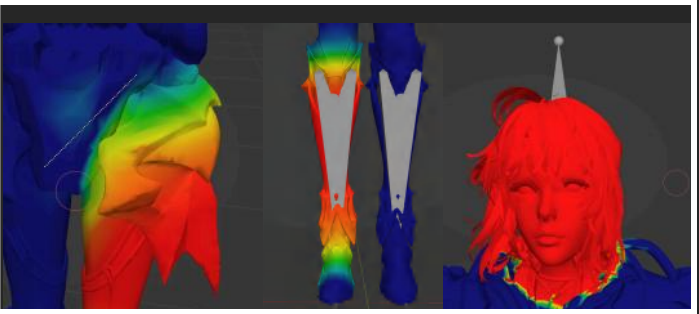


STEP 4 .

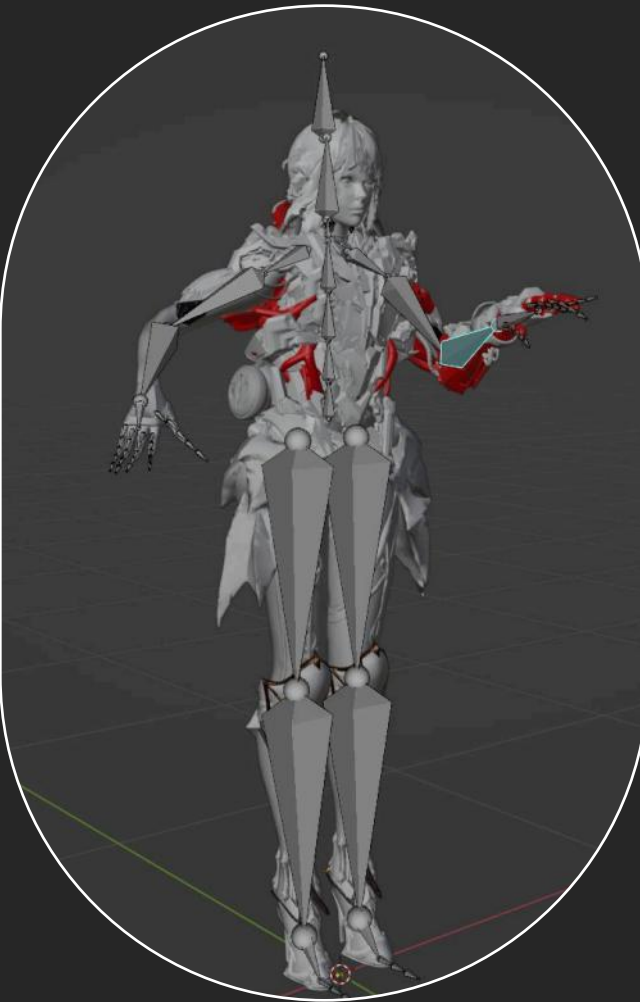
In fact, it was very painful for me to draw the weights because the automatic weights generated by Meta-Rig were not accurate for my model with external armor. For example, when I raised my arms, it would cause severe stretching.



(Adjust the auto Weight Paint)



(Check the position mode)



READY TO BE ANIMATED!



ANIMATING PROCESS (UNREAL ENGINE WORKFLOW)

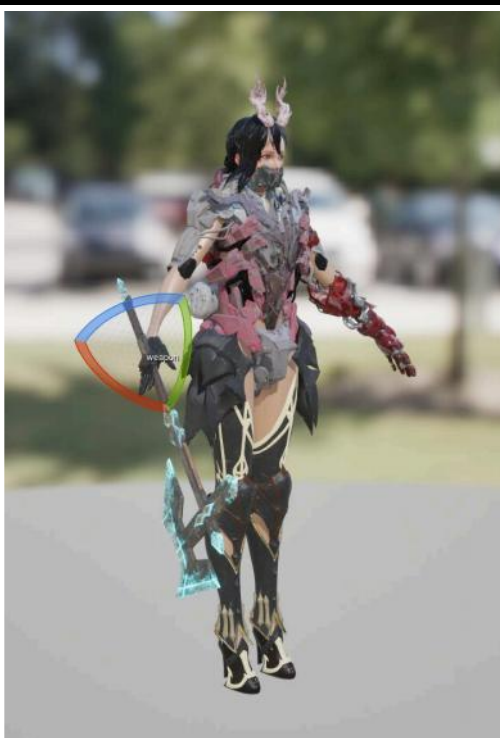
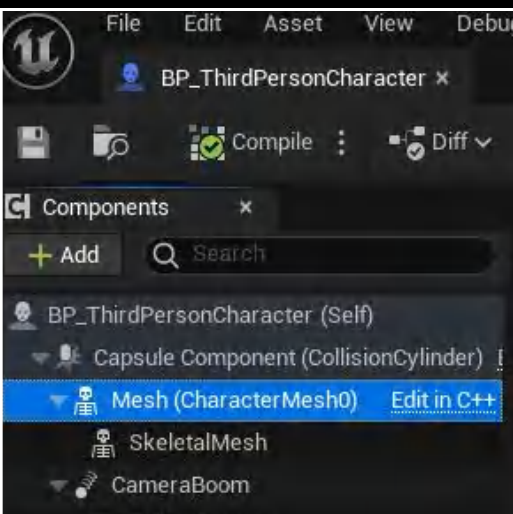
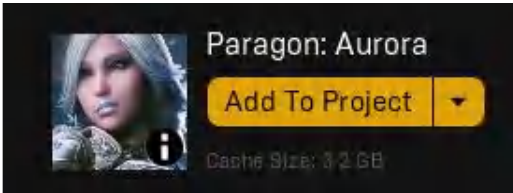
STEP 1.

Import my character into UE



STEP 2.

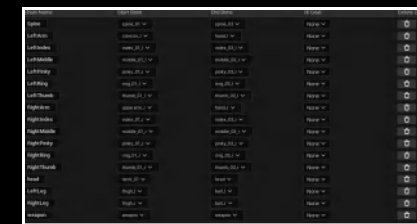
Here I choose to use Paragon animation assets



Add weapon socket

STEP 3.

IK Retargeter



IK Bone Chain

STEP 4.

In fact, the workflow of IK redirection is not too difficult for me, thanks to Paragon's standard assets. During the actual operation, although I used Paragon's free animation assets, I also added some for myself. Weapons and attack effects. This is still a challenging job for me.



STEP 5.

Check If it is playable in game mode



PROJECT 4

FREAK CIRCLE

BOARD GAME / GROUP PROJECT

Core Game Mechanic Design: Yongzhe Huo

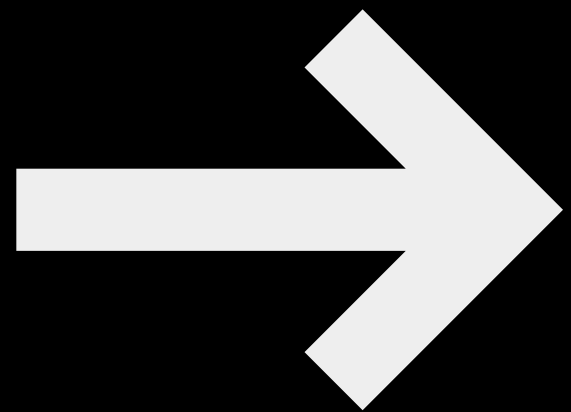
Facial Art And 3D Modeling: Jinglei Yu

IP Design: Zixuan Lei

Manuals And Game Items: Zhouzhou Hong



BACKGROUND STORY



Quaint guys accidentally crossed into a parallel world. The regulation of the parallel world is that species cannot be completely symmetrical, so when they crossed, some of the things on the minor freak animals were taken away by time and space.

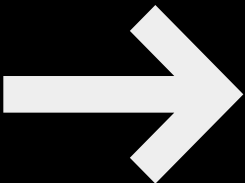
They were so scared that they hurriedly inquired about the whereabouts of their things. They learned that their things were found and collected by an antique shop, which is a blind box antique shop with a history of more than 300 years, they asked the owner of the antique shop for their own things.

As they were anxious to return to the Meta universe, each quaint guy chased after each other and wanted to be the first to get their own things. But the boss was an old robot dog. He places these things into quite a few boxes. He was also confused. He couldn't remind what was in each box, and everyone could only buy one at a time.

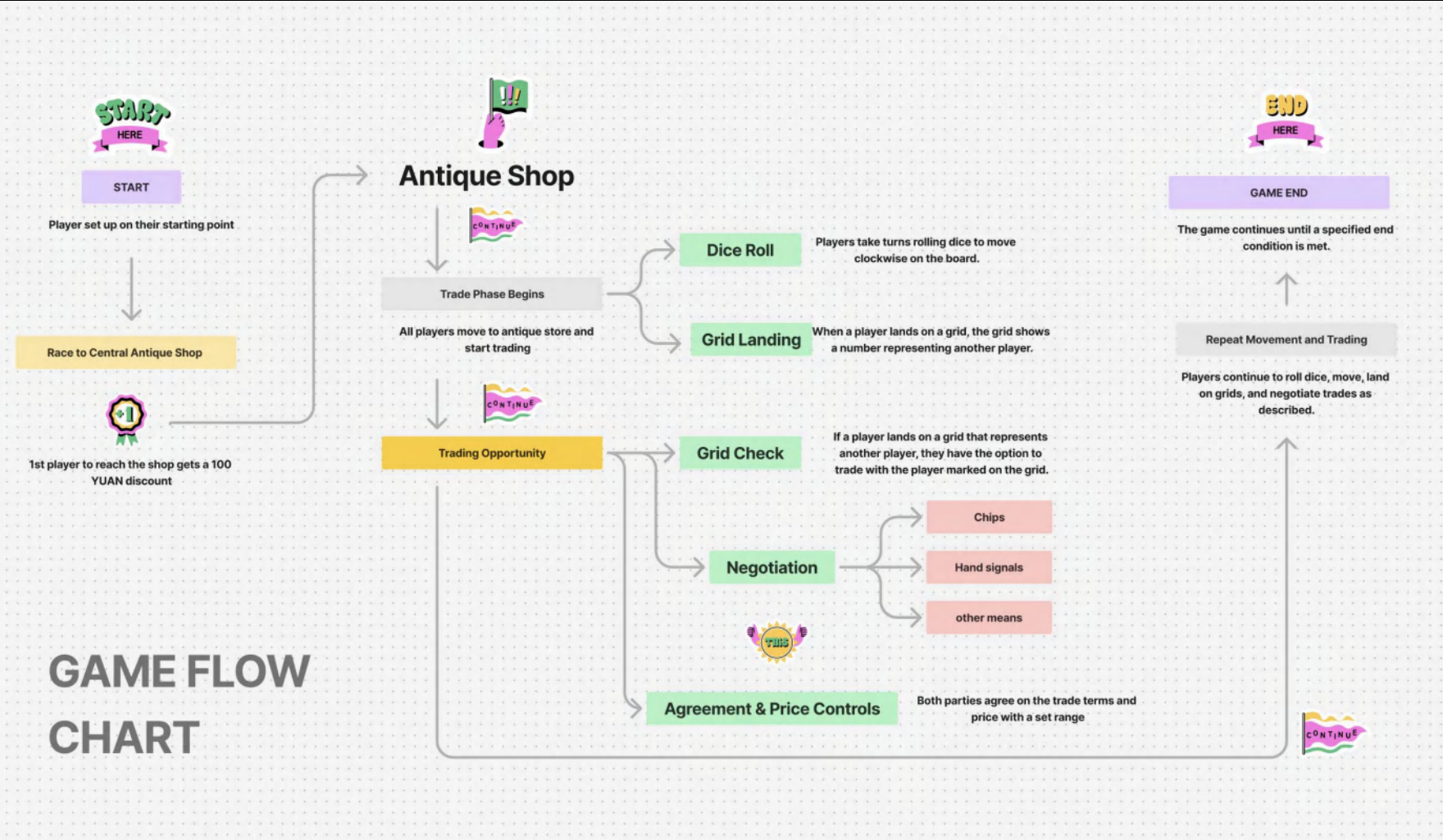
The strange guys couldn't help it, after opening the blind box, everyone found that they had taken something that did not attach to them. After getting something, every monster wanted to make an army of money from others, so they traded with each other to spare no efforts to recover their ordinary state.



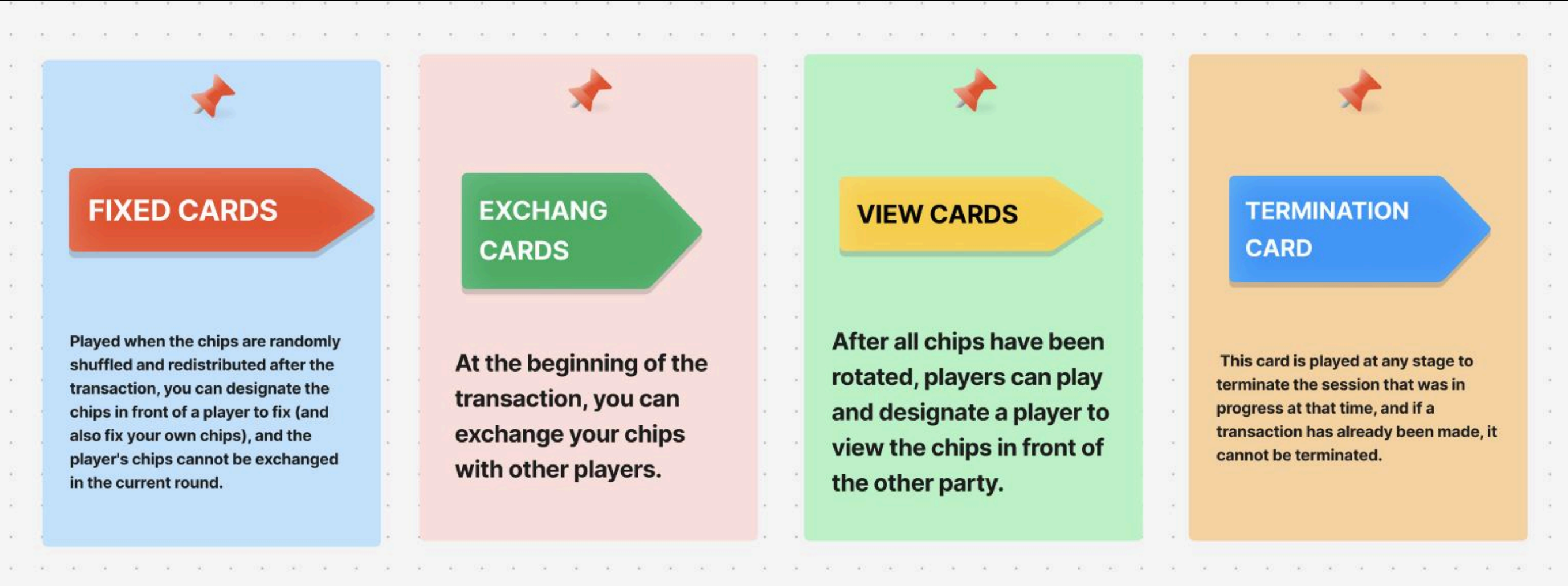
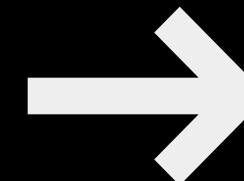
Game Design



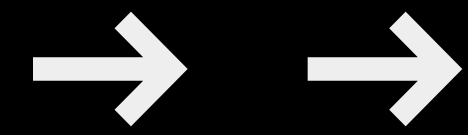
At the start, each player receives a unique, hidden character IP. Players compete to reach the central antique shop first, gaining a 100 yuan discount on essential items. After purchasing, players proceed to the trade phase. Players roll dice to move clockwise on the board, landing on grids that correspond to other players. They can negotiate trades with those players, using chips or other methods, with all transactions requiring mutual agreement and price control within a set range. The goal is to amass the most wealth while concealing one's true objectives.



Card Features

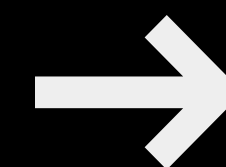
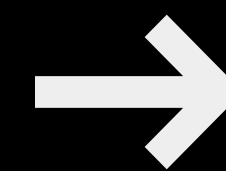


The Production Process





IP DESIGN



PROJECT 5

FUTURE CITY

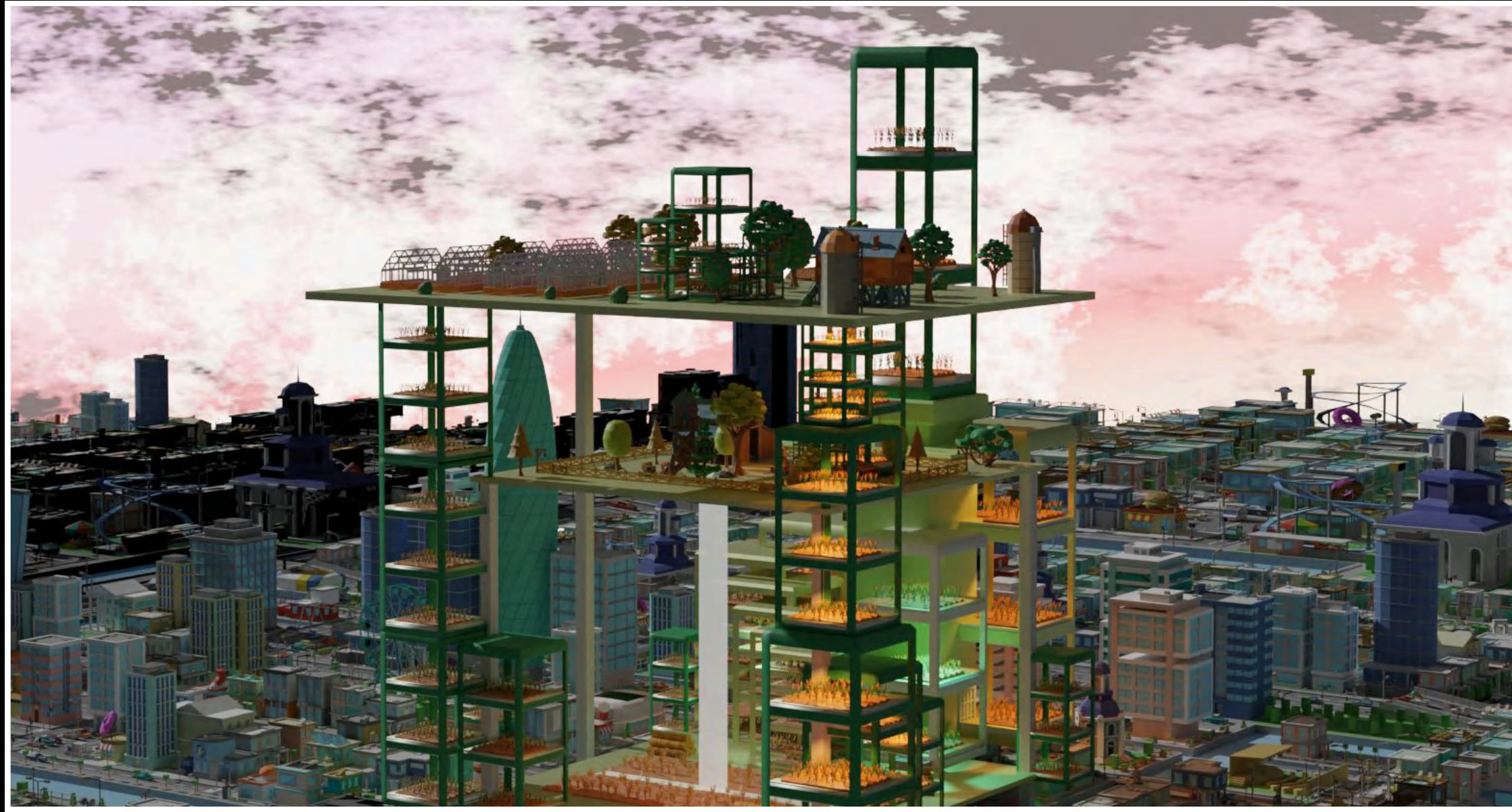
3D MODELING & SPECULATIVE DESIGN



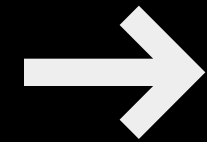
INTRO

This is a model that I build which showcased the design and concept for the operational structure of a future city.

This modern agricultural demonstration model for the future city showcases a highly integrated vertical farming system, embodying the vision of achieving sustainable agricultural development within limited urban space. The structure in the model is arranged in layers, with each layer cultivating different types of crops and equipped with modern agricultural equipment. The model employs a multi-tiered design, not only maximizing the use of vertical space but also optimizing the growing environment for crops through technologies such as lighting, irrigation, and climate control.



DESIGN FEATURES



The model not only showcases the potential of future urban agriculture but also provides a forward-looking reference for current urban planners and policymakers, inspiring them to consider the role of agriculture in future urban development.



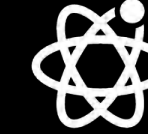
1. Spatial Efficiency

This model maximizes the use of limited urban space through the concept of vertical farming, tightly integrating agriculture with urban life. This design is particularly suitable for cities with scarce land resources, effectively alleviating the demand for large tracts of land typically required by traditional flat farming.



2. Sustainability

The agricultural system showcased in the model likely employs technologies such as automated irrigation, environmental control, and renewable energy, reflecting the concept of sustainable development in future urban agriculture. By precisely controlling the use of resources, it reduces waste of water and energy, and also minimizes the carbon footprint.



3. Technological Integration

Future urban agriculture will increasingly rely on high-tech methods, including the Internet of Things (IoT), Artificial Intelligence (AI), and automation systems. The integration of these technologies not only improves the efficiency of agricultural production but also reduces reliance on manual labor, potentially leading to higher economic benefits.



4. Harmony Between Urban and Natural Environments

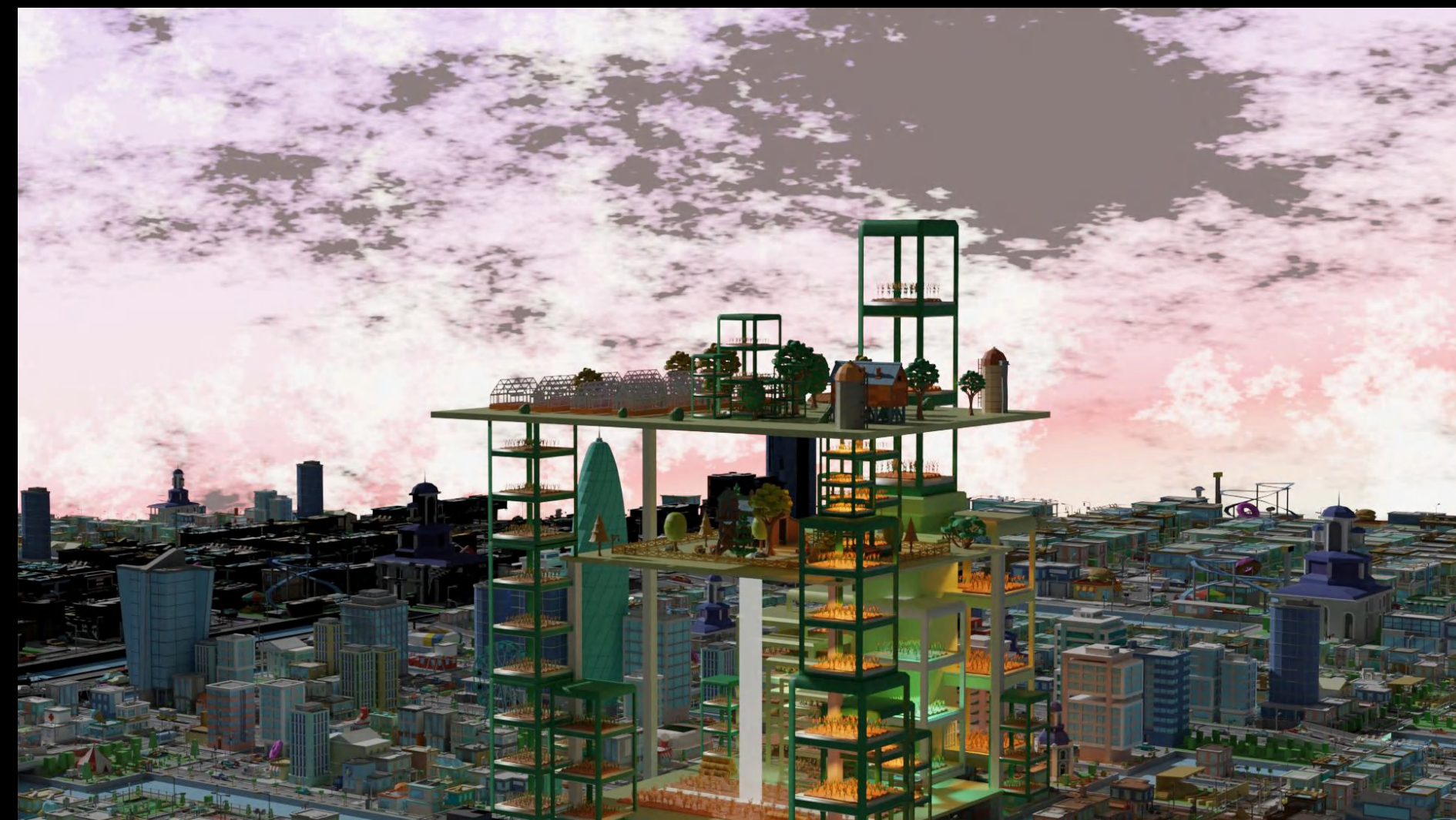
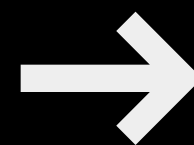
This model also demonstrates the integration of urban architecture with natural ecosystems. Vegetation and crops not only provide food for the city but may also improve air quality, offer psychological comfort, and enhance the connection between residents and nature.



5. Challenges and Prospects

Although the future of urban agriculture is promising, there are still challenges to overcome in its implementation, such as high costs, technological complexity, and integration with traditional agricultural supply chains. As technology advances and economies of scale are realized, these challenges are expected to be gradually resolved, making urban agriculture a vital component of global food supply.

DISTANT
VIEW



DETAILS

