

Portfolio

/ Rongchen Gao /

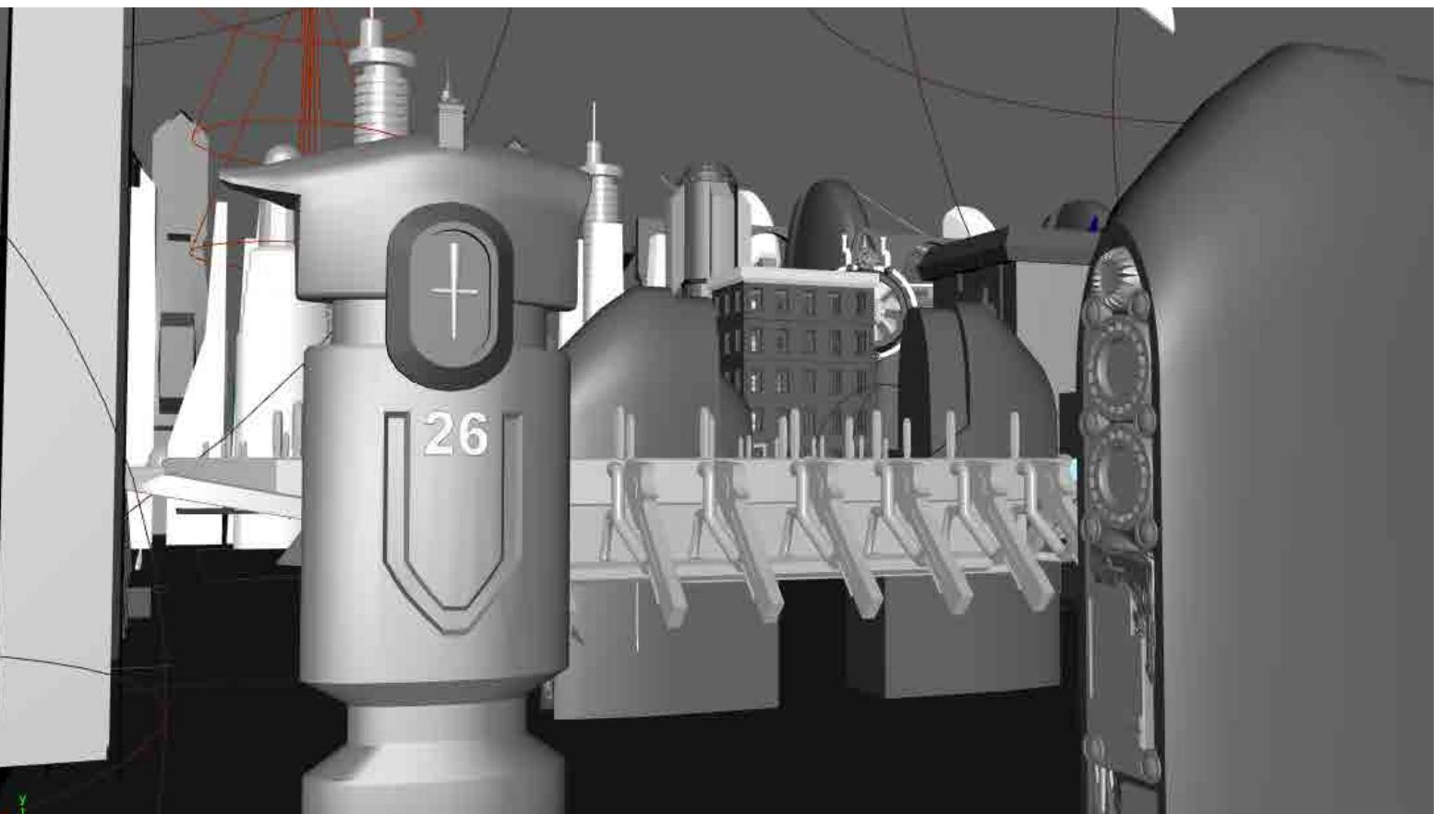
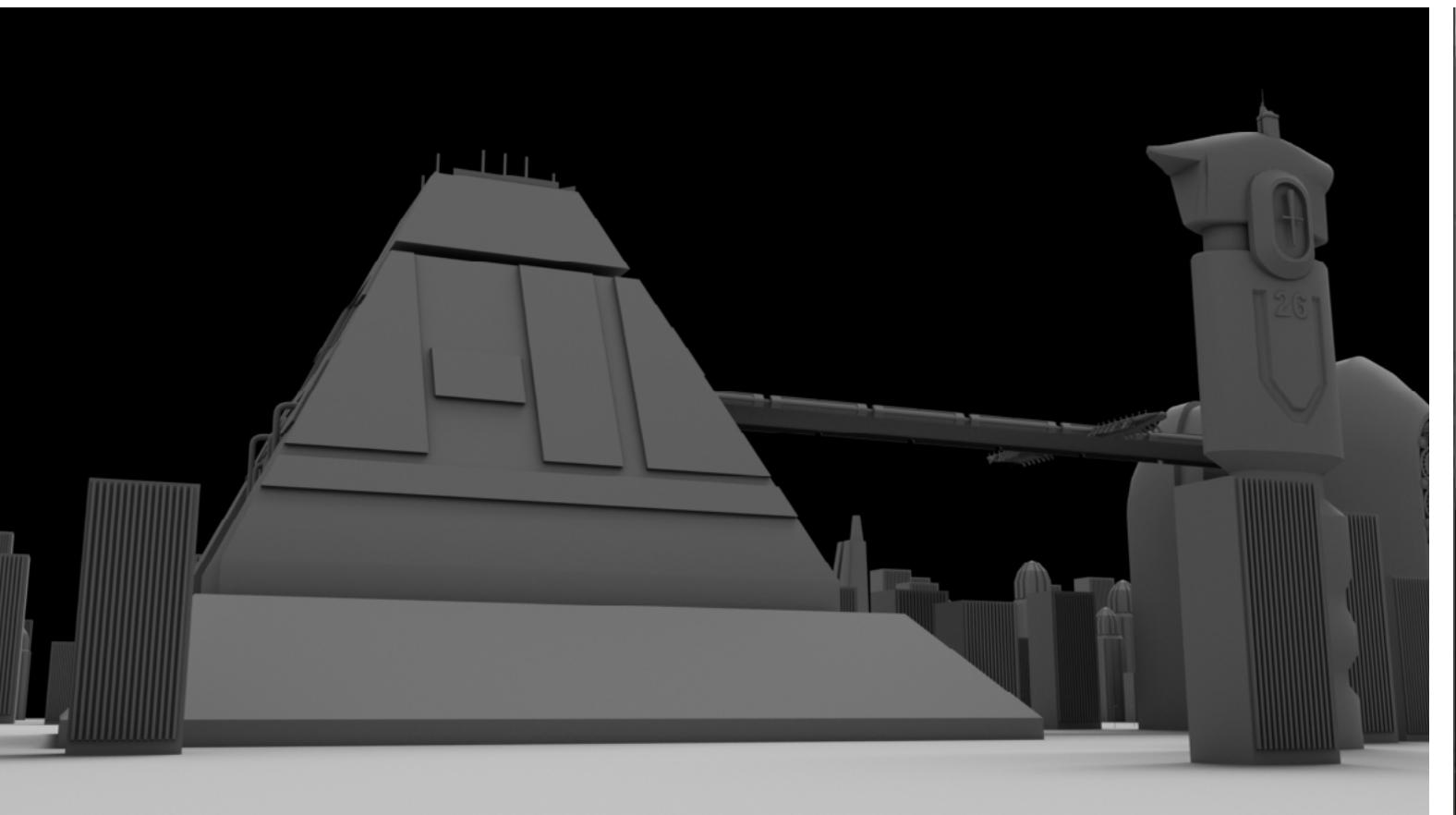
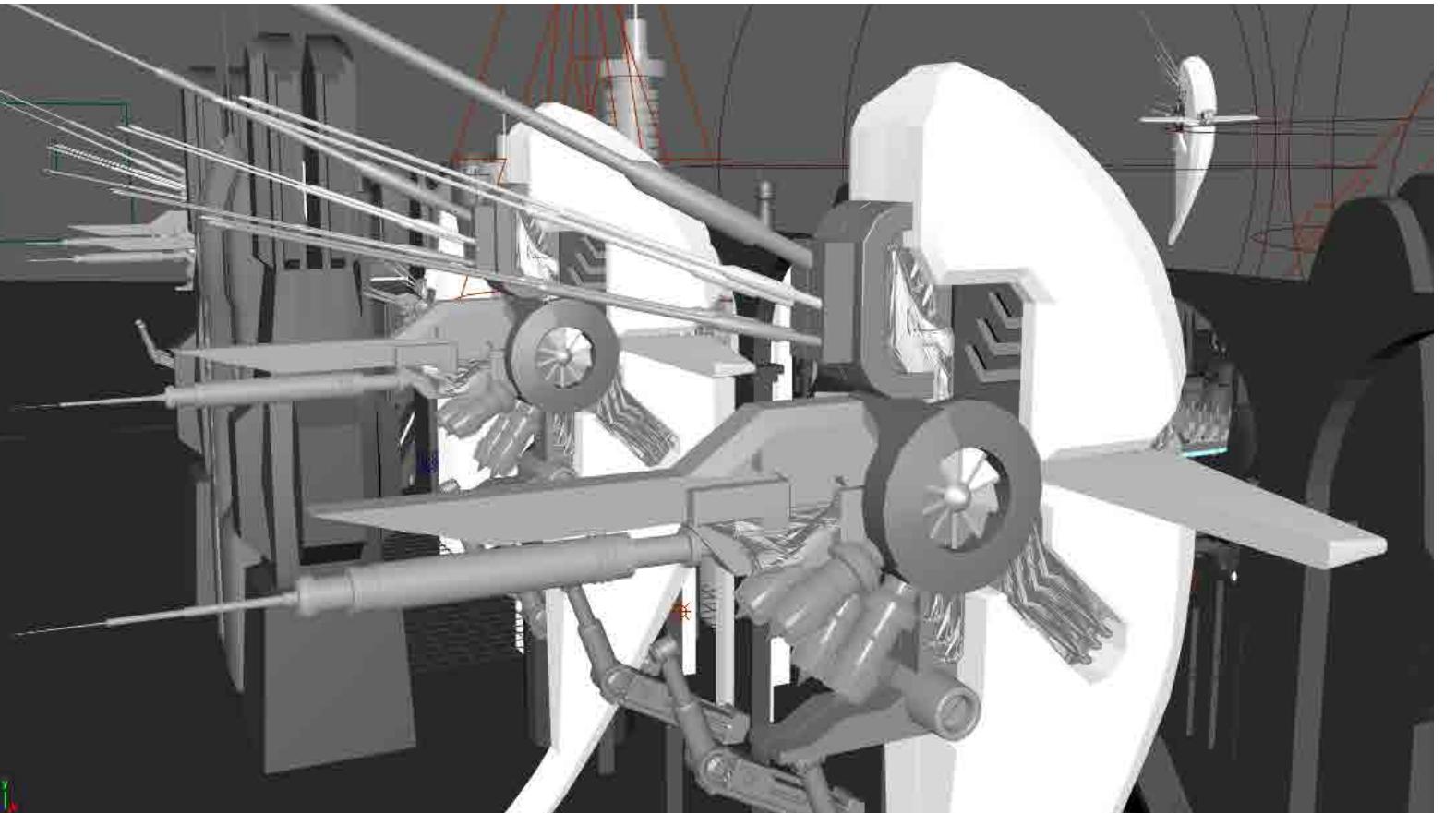
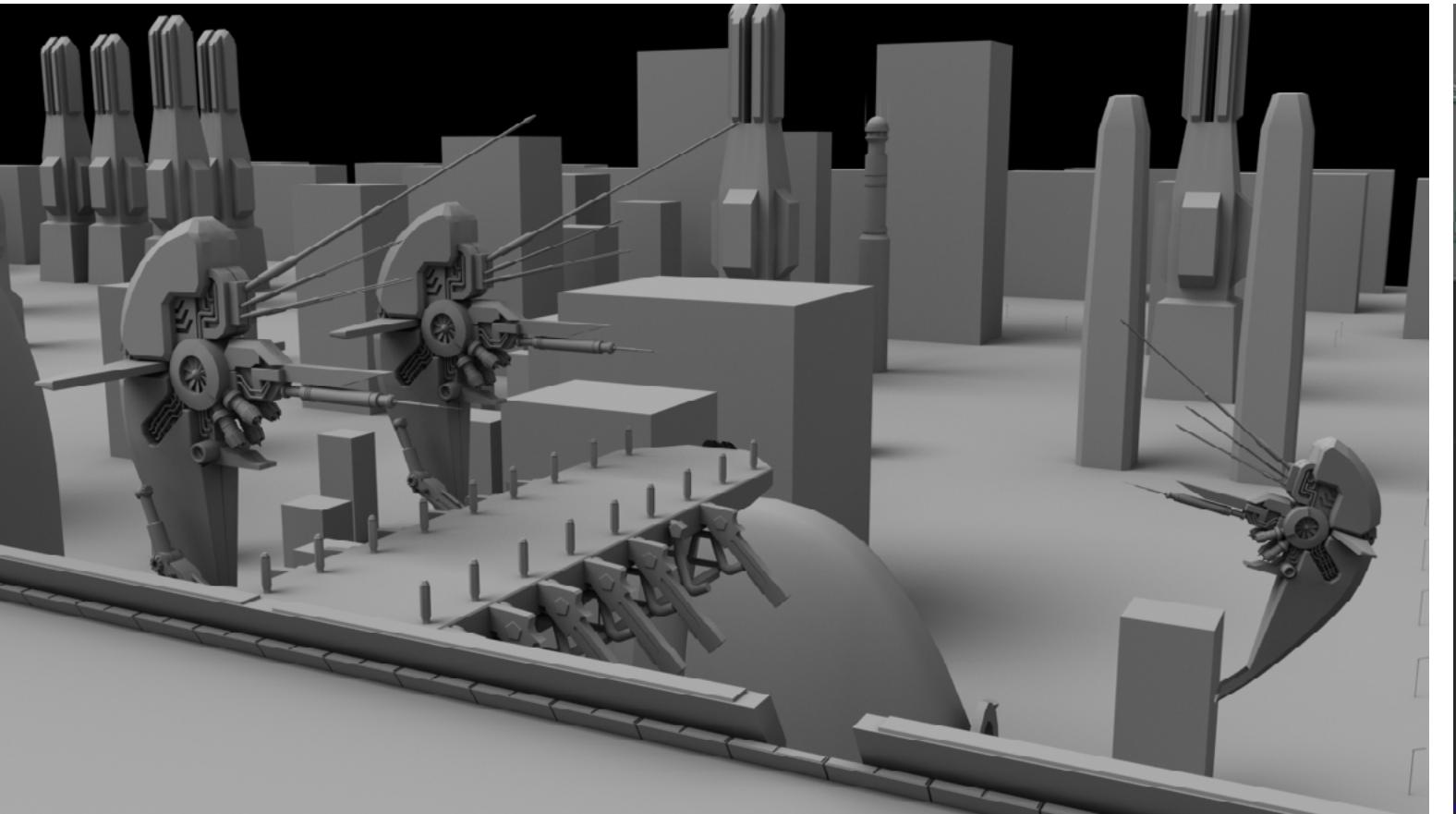
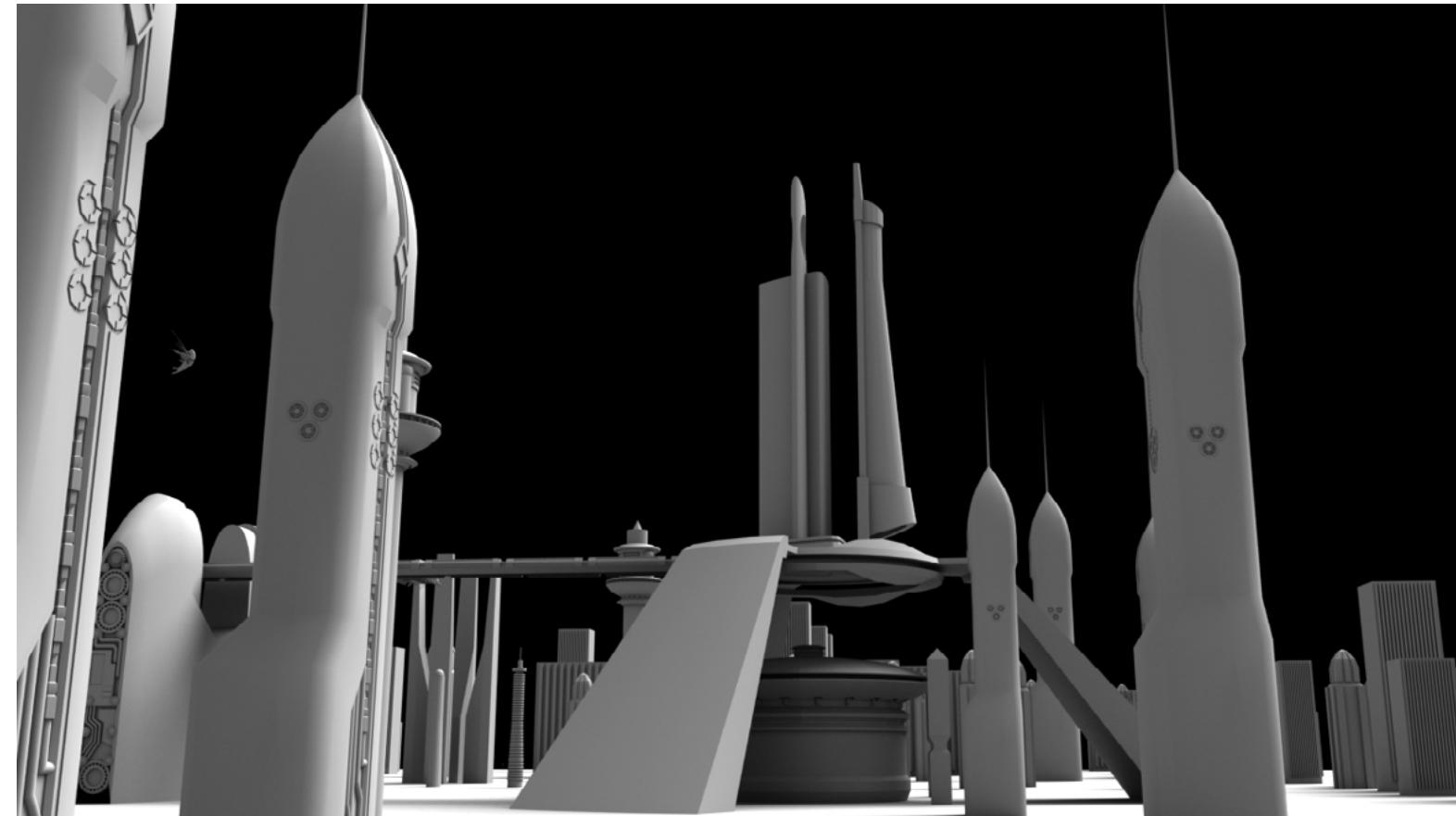
01

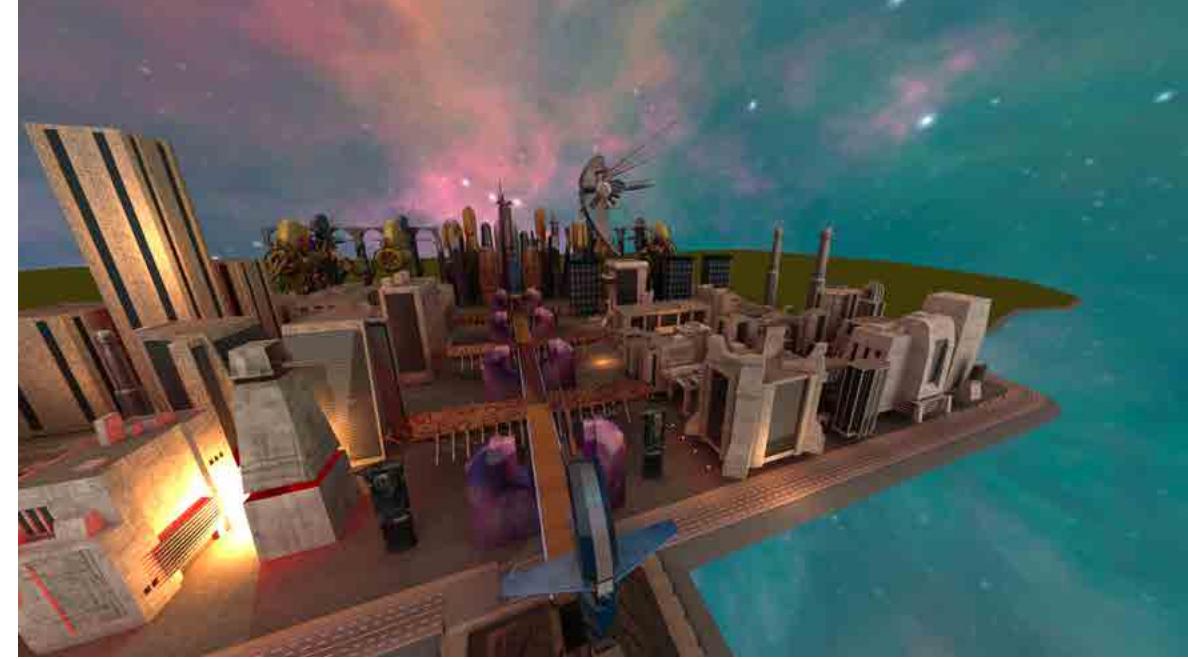
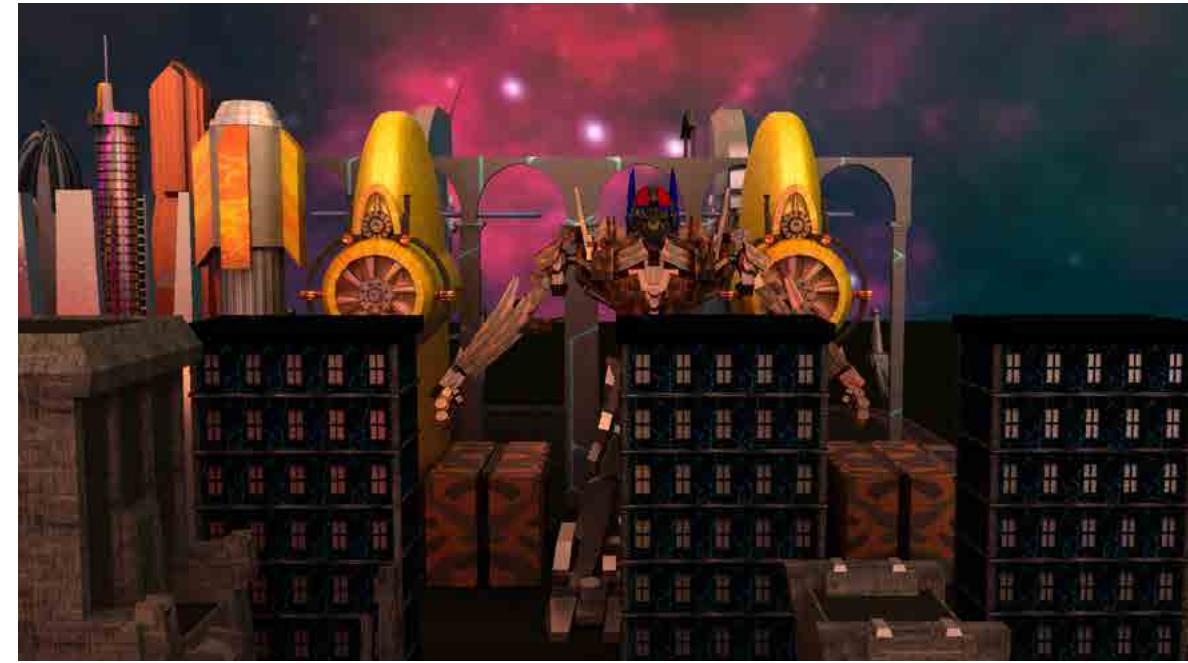
3D Model:
Sahara's Miracle



Through the deserted future city and icy high-tech buildings, the work presents the illusion of the earth after its destruction in a slightly cyberpunk-style picture: the earth splits into countless fragments, the Sahara desert becomes the largest fragment, and float into space. Mankind has built a high-tech future city on this fragment-a place that integrates living areas, central command areas, industrial areas and military areas. A sophisticated aircraft and a complex control center were established utilizing Autodesk Maya to show the high-tech level of human beings in the future, while the dark colors of the picture show the barrenness and loneliness unique to the main high-tech cities.

● Design Process



● Video <https://www.youtube.com/watch?v=LFAIEdczSYE>

The humanoid fighter Jaeger in the video is a giant guardian of human cities, and its design inspired the movie "Pacific Rim". The giant mech fighters in Pacific Rim need two drivers to respond through telepathic cooperation, rather than AI technology. Behind Jaeger is the author's thoughts on the relationship between future technology and humans. Because the "Transformers" series are the perfect interpretation of the future mech style, Jaeger's mech shape and appearance model is designed based on Optimus Prime. Because the robot's head has the best field of view, Jaeger's head is designed as a cockpit, and the driver can then use the entire mech's central area. Jaeger's bionic design gives it deadly legs and hands, and it can move quickly and fight any intruder in a short time.

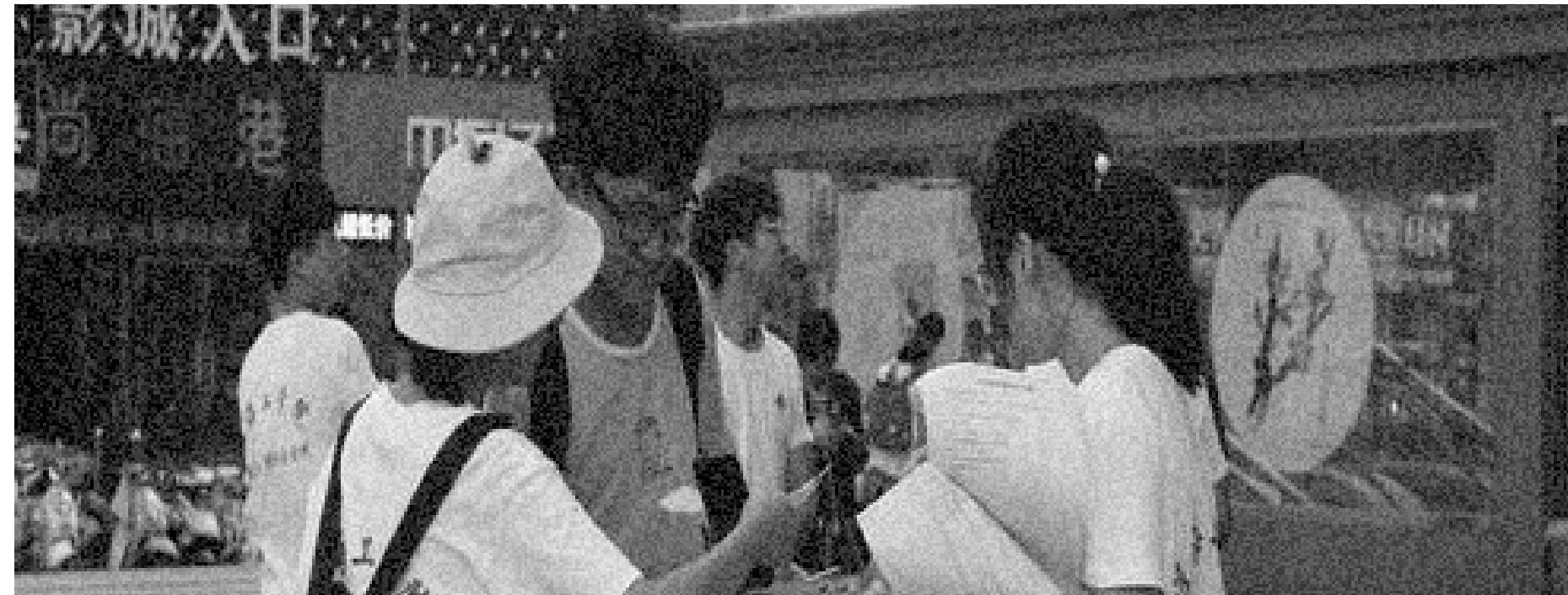
02

What Beauty Costs

In 2018, with the development of internet finance, the traditional financial model was changing. P2P, O2O and other online and offline service platforms that are closely related to the Internet sprung up, and online loan emerged. As a new financial platform, online loan has the advantages of simple procedures, convenient and fast, and diversified platforms. These online loan platforms cater to the consumption needs of many college students and are very attractive to college students, so online lending is gradually becoming popular on Chinese campuses. However, at the time, China's laws and regulations on online lending were incomplete, and many criminals took advantage of the loopholes difficult to monitor on the Internet to issue illegal loans in the name of online lending to conduct online fraud. They use low thresholds to seduce university students to register and borrow on those illegal online loan platforms. University students can borrow a lot of money just by using their personal information as collateral, which has made many people feel relaxed, but only to find themselves deeply trapped in usury traps.



● Research Context

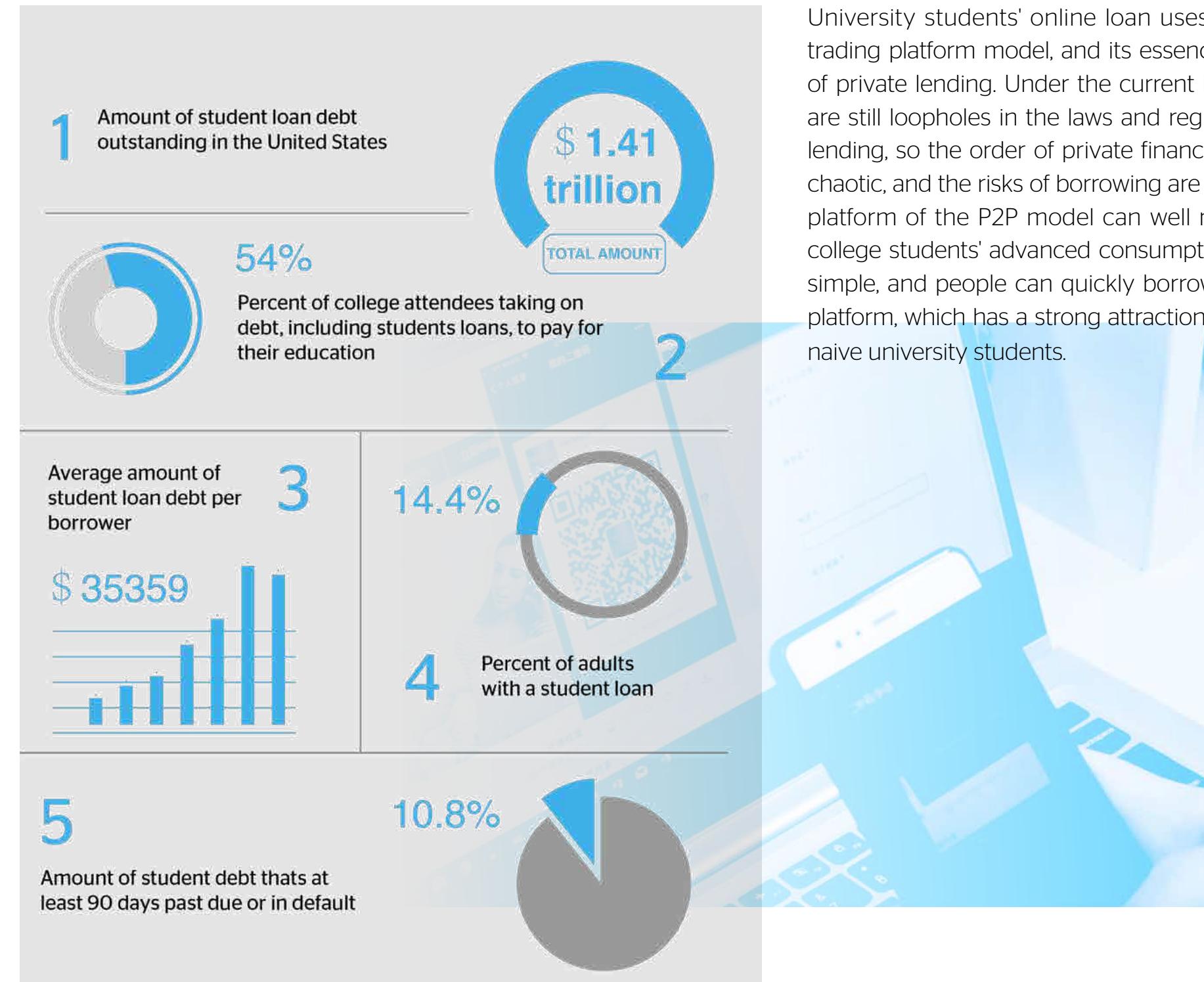


Case Study

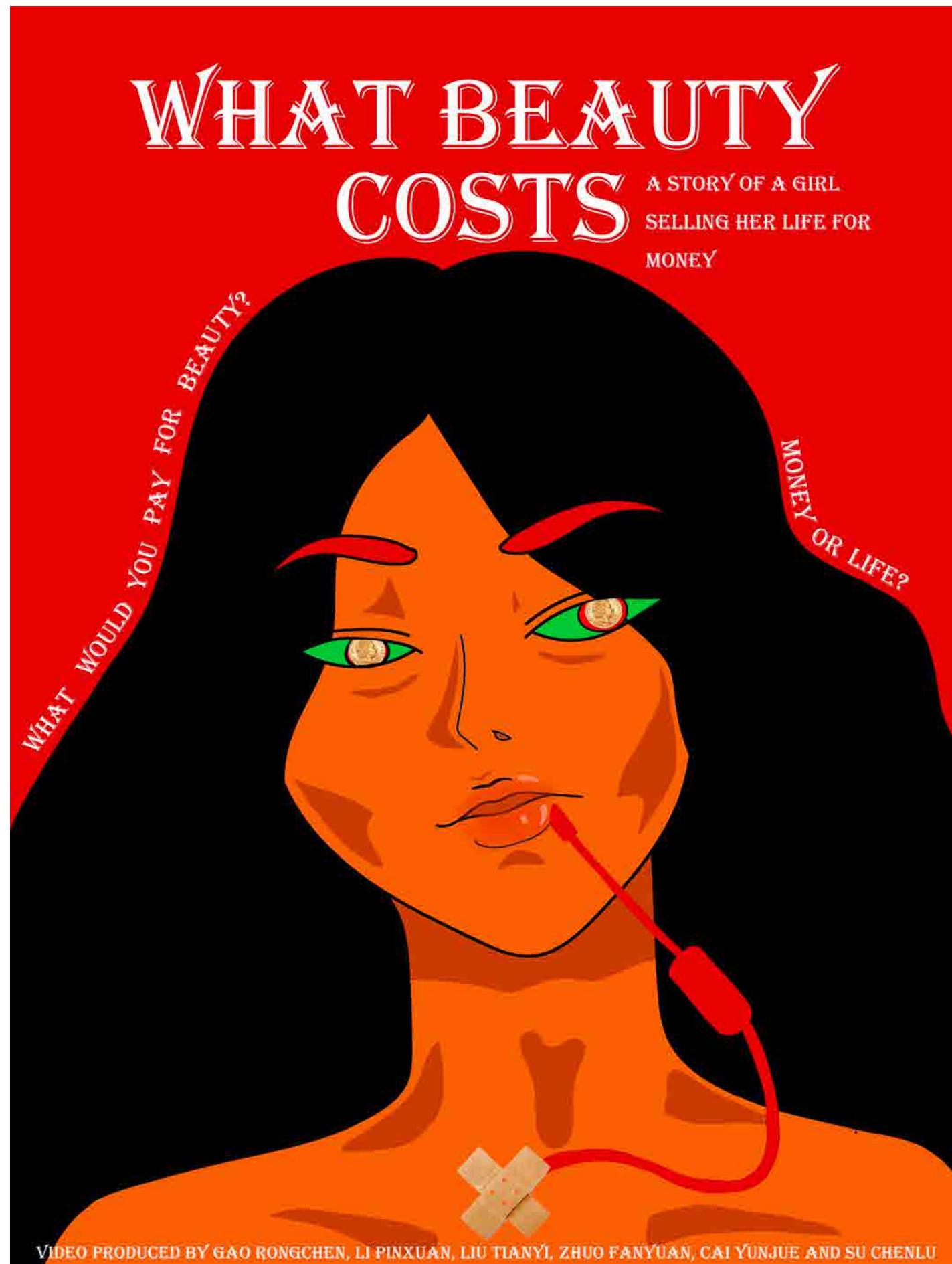
Mao, a female college student in a university in Leshan, Sichuan, 20 years old, was from Shizhong District, Leshan City. In 2018, she loaned 7,000 yuan on an online platform and actually got 4,500 yuan. In order to repay the loan, Mao had to borrow more from other similar platforms, and fell into a vicious circle of borrowing and repaying. Eventually, Mao's 7,000 yuan debt changed into 360,000 yuan. Because of her inability to repay, Mao was harassed, intimidated, and slandered by the telephone of the "collector" of the online loan platform. In desperation, she had to call the police for help.

After investigation by the police, it was found that many similar online loan APP platforms are controlled by a company in Nanchang, Jiangxi, using the false shopping platform as a guise to induce the victim to borrow money. And in the case of obtaining a corresponding penalty and security deposit, the company collects increased debt with a contract that does not benefit the victim. When the victim is unable to pay, the platform introduces the loan company or individual to repay the loan to the victim. The victim was afraid under the threat, harassment and intimidation of the criminal many times. She was forced to sign false loan contracts with other loan companies or individuals, and was charged with every kinds of fee, such as "liquidated damages", "guarantee money", and "intermediary fees".

Student Loans in 2019

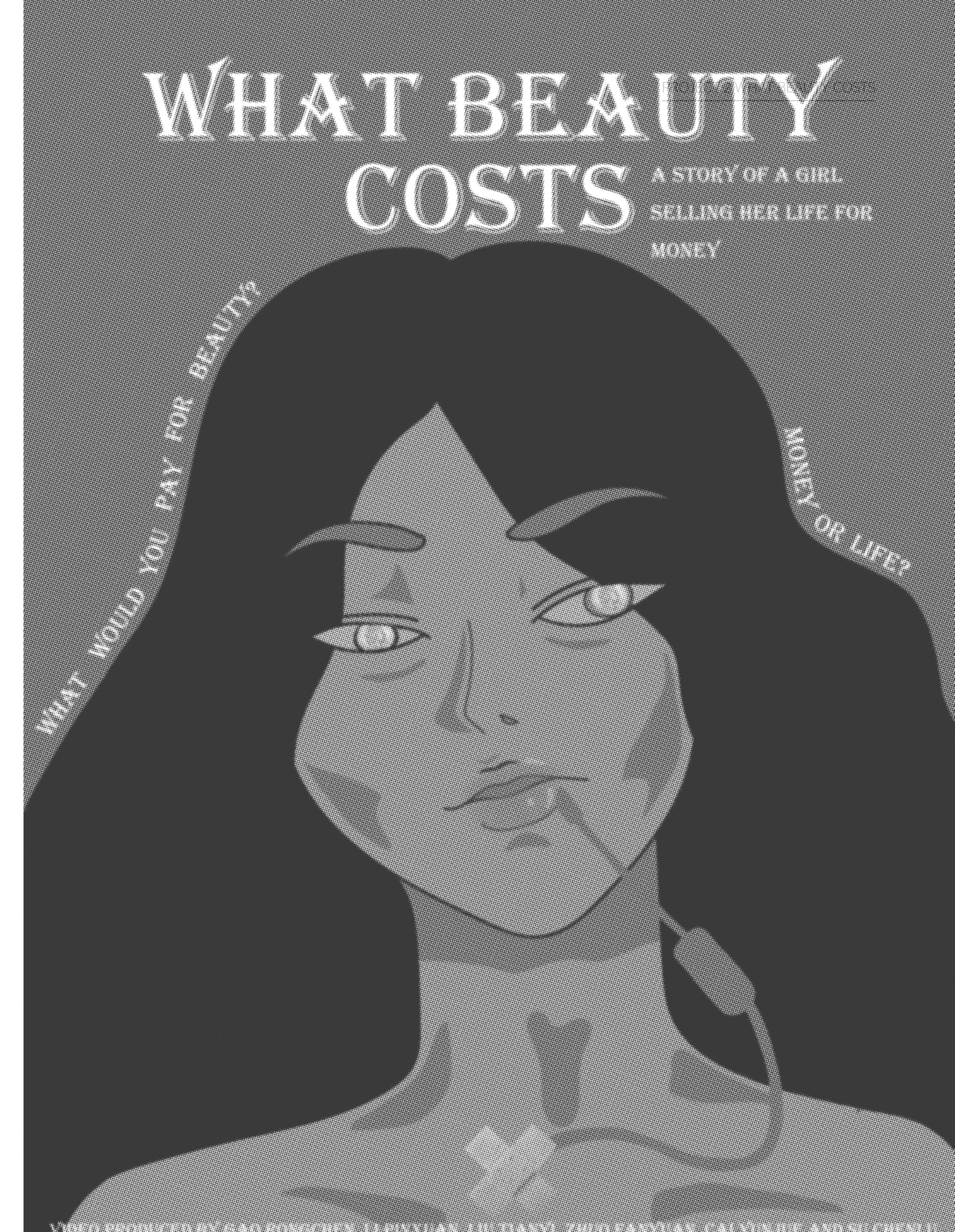


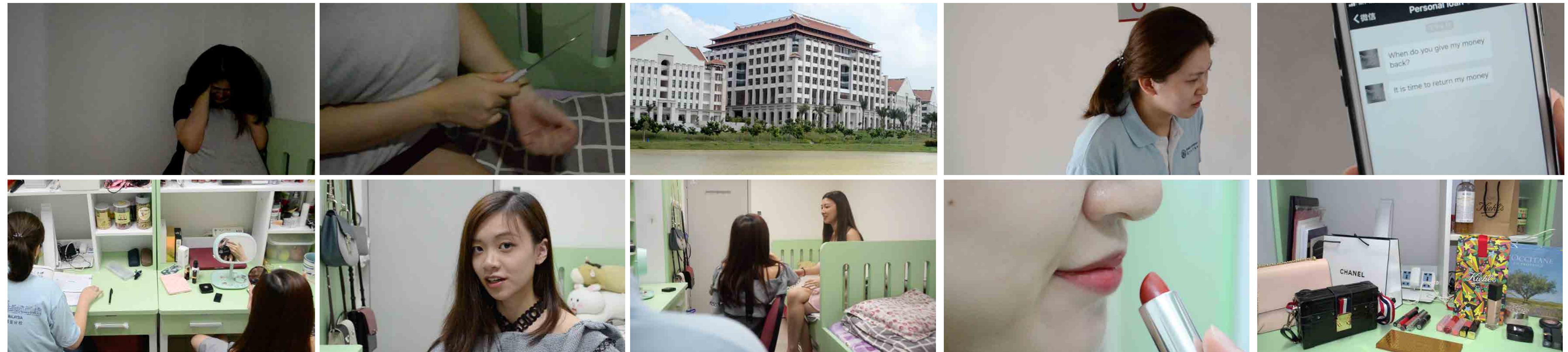
University students' online loan uses the network P2P trading platform model, and its essence is still the scope of private lending. Under the current legal system, there are still loopholes in the laws and regulations on private lending, so the order of private financing behavior is still chaotic, and the risks of borrowing are huge. The financial platform of the P2P model can well meet the needs of college students' advanced consumption. The process is simple, and people can quickly borrow money from the platform, which has a strong attraction and temptation to naive university students.



● Poster Design

To echo the theme of this microfilm, a few details were designed in this poster. Firstly, the girl on the poster has green eyes. This is to indicate that she is jealous. Secondly, there is a coin in each of her eyes. This shows that she longs for money. Thirdly, the lip gloss she uses comes from her own blood. This means that she consumes her life to become beautiful. This poster was created utilizing Adobe Illustrator and Adobe Photoshop.



● Video

"What Beauty Costs" is an online microfilm. The story is adapted from the story of a female college student in a real case in Sichuan, China. This film tells the story of Lily, a female university student from the countryside, who bought cosmetics and luxury goods through online loans in order to compare with her rich roommate Tiffany. She found that she owed more and more, and could not repay the loan, and eventually chose to commit suicide. I hope this video will raise public awareness of the social issue of university students' online loan and warn people of the risks of illegal loan.

Video link: <https://www.youtube.com/watch?v=2HgkDHOocs4>

Reference: In the collaboration, I'm in charge of directing, acting, stage managing, editing, makeup and music.

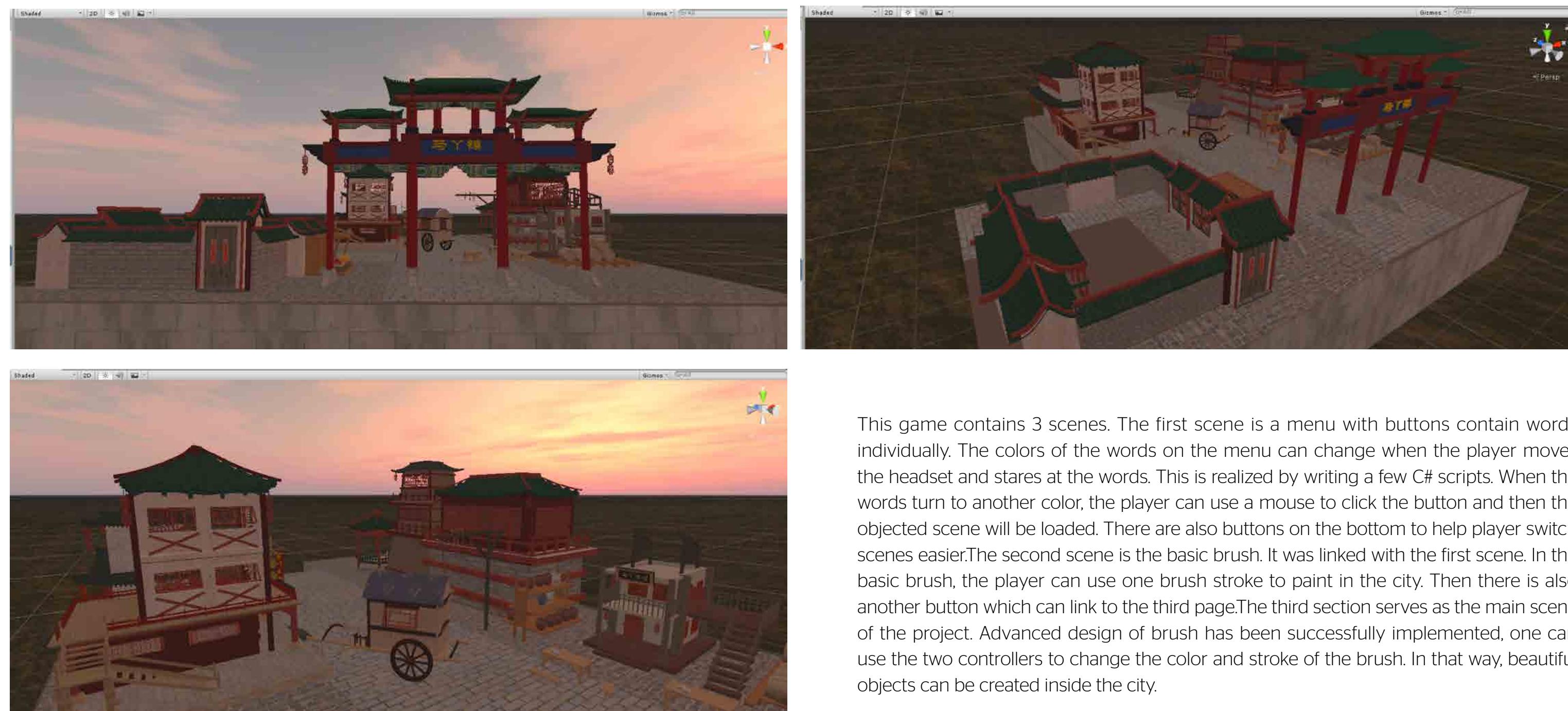
03

City Painting

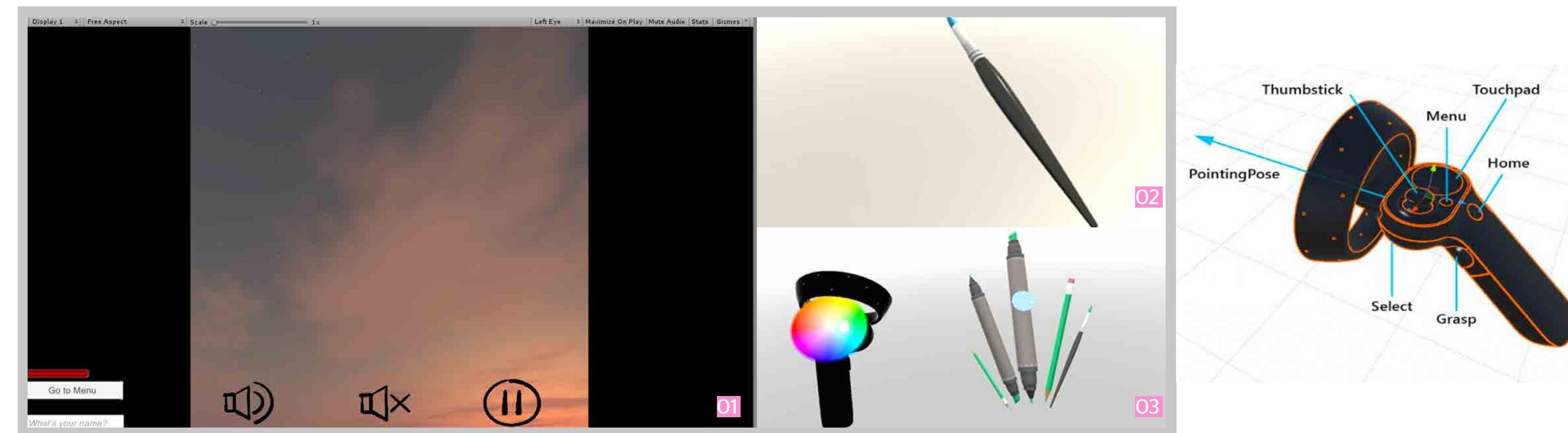
A 3D rendering of a traditional Chinese city street at sunset. In the foreground, there's a wooden cart with a blue canopy and a single large wheel. Behind it are several traditional buildings with dark green tiled roofs and white walls. One building has a balcony with red railings. The sky is a warm orange and yellow.

City Painting is a Unity application based on Windows Mixed Reality. It allows players to immerse themselves and paint inside a city while wearing VR glasses. Unity, Visual Studio and Windows Mixed Reality were utilized to develop the application. While the imported city scene was modelled using Autodesk Maya. The players could draw in the space around them, immersed in the 3D world. The lines left by the brush can make up a 3D painting. City Painting is an open game which empowers the players to creative without limited. It leaves endless possibility to the players, which is the most fascinating part of this game.

● Game Design



This game contains 3 scenes. The first scene is a menu with buttons contain words individually. The colors of the words on the menu can change when the player moves the headset and stares at the words. This is realized by writing a few C# scripts. When the words turn to another color, the player can use a mouse to click the button and then the objected scene will be loaded. There are also buttons on the bottom to help player switch scenes easier. The second scene is the basic brush. It was linked with the first scene. In the basic brush, the player can use one brush stroke to paint in the city. Then there is also another button which can link to the third page. The third section serves as the main scene of the project. Advanced design of brush has been successfully implemented, one can use the two controllers to change the color and stroke of the brush. In that way, beautiful objects can be created inside the city.



04

Happy Sheep Village



This work is inspired by the village of Giethoorn in the province of Overijssel, which is located in the northwest of the Netherlands. My mother used to travel there, and I saw the photos she took and was very yearning. I was impressed by a small wooden bridge in the village in the photo. It straddled a thin river and a small wooden boat passed under it. So I decided to use Autodesk Maya to perform 3D modeling to reproduce the rivers, wooden houses, boats and wooden bridges in Giethoorn and the village, showing the village's natural style.



● Character Design

Because the name of this village means sheep's horn, I chose a little lamb as the main and sole character of the film. The shape of the lamb was inspired in part by "Shaun the Sheep", but I gave it personality, and it stood on both legs like a human and wore a scarf. The village is full of flowers and trees, and also green plants, because it is a natural environment for the sheep to live, and sheep and grass is always the best combinations of a natural sunshine hill.

- **Video** <https://www.youtube.com/watch?v=loddgZCTn3M>

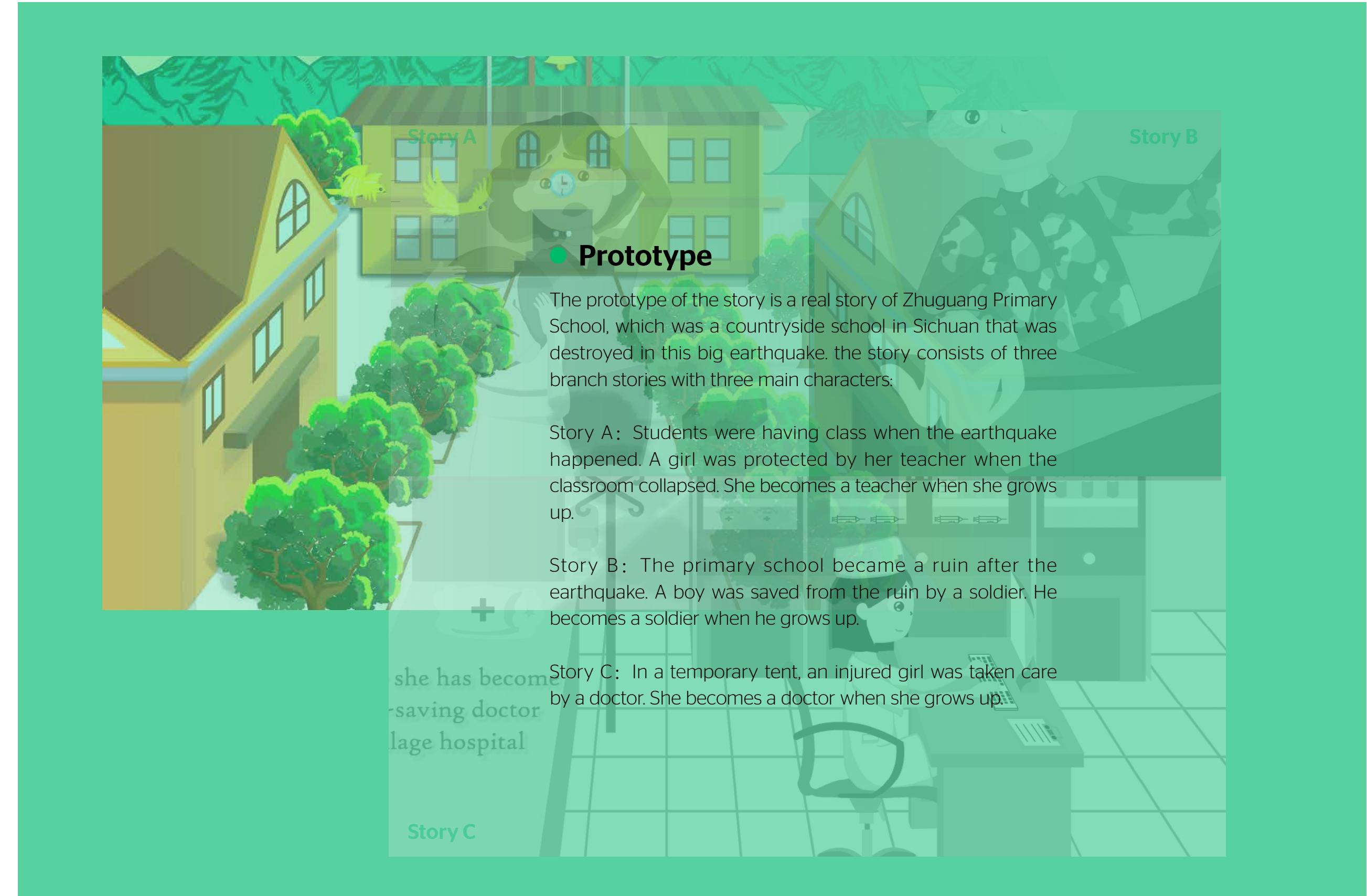


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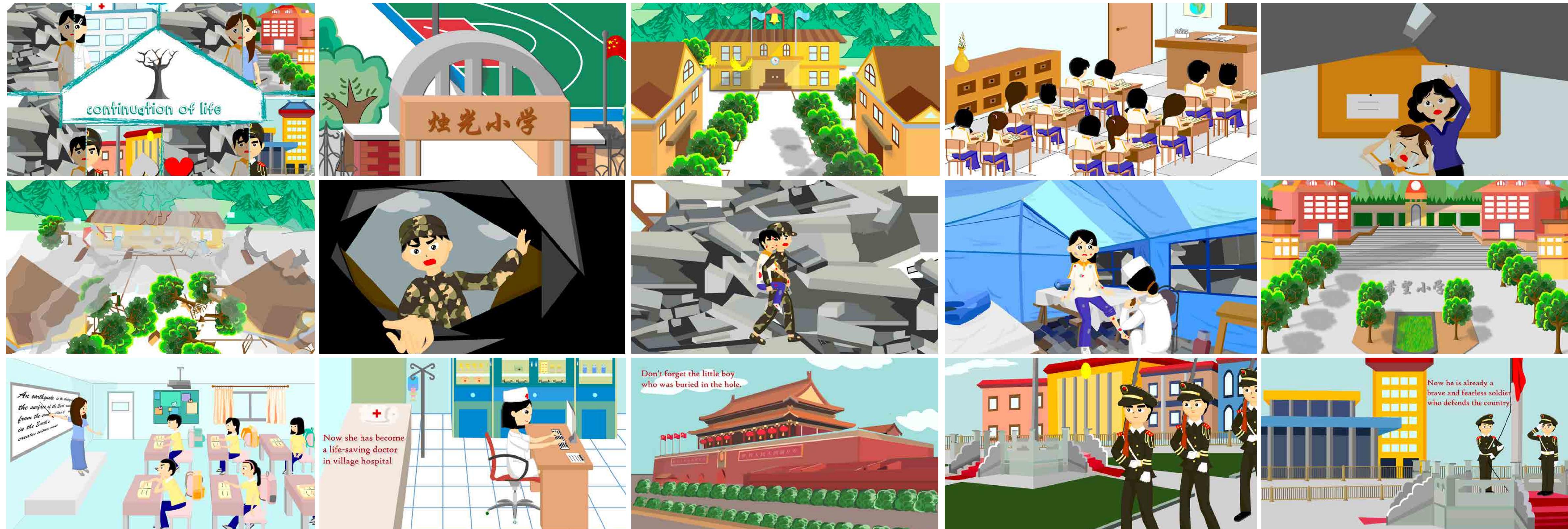
Continuation
of Life



2018 is the 10th year of the big earthquake happened in Wenchuan, China, 12th May, 2008. This was a nightmare for China because it killed nearly 70,000 people and everyone got mournful and sank into great sorrow. Many touching stories happened during the earthquake relief process. Large number of children was helped and rescued during the earthquake. After growing up, they took up the same job as those who had helped them, passing on selfless love and responsibility. This echoes the title this animation: Continuation of life. The main purpose of making this animation is to memorize people killed in the earthquake, while praising how brave could human be to fight against the nature and the spirit of people helping each other in a disaster.



● Video

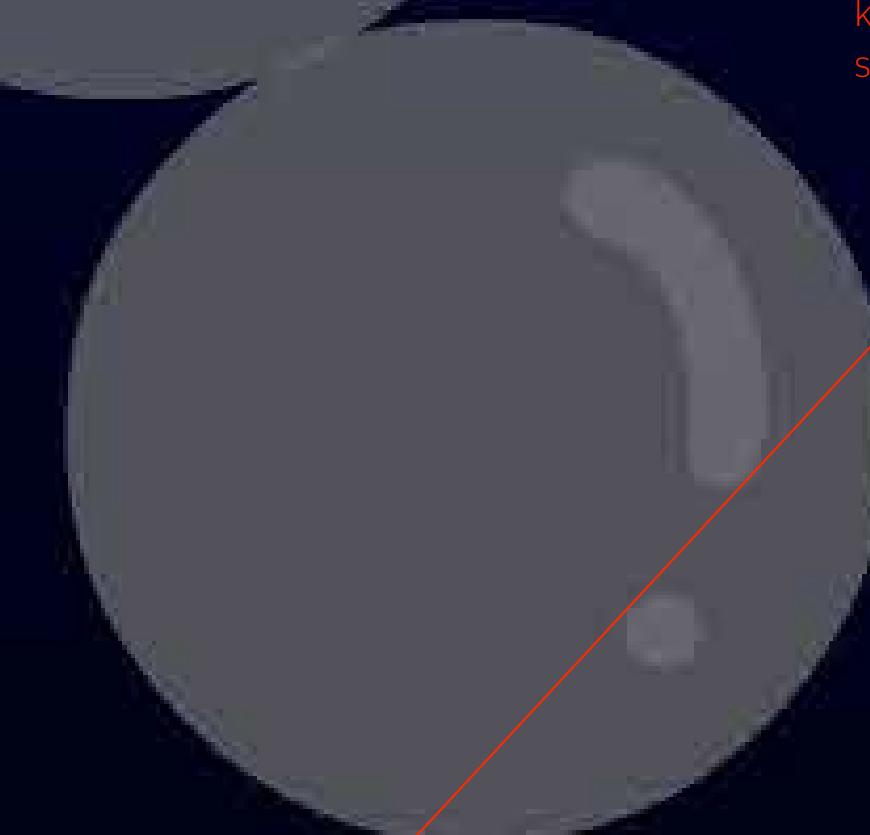


Video link: https://www.youtube.com/watch?v=w_6QIYIHDOk

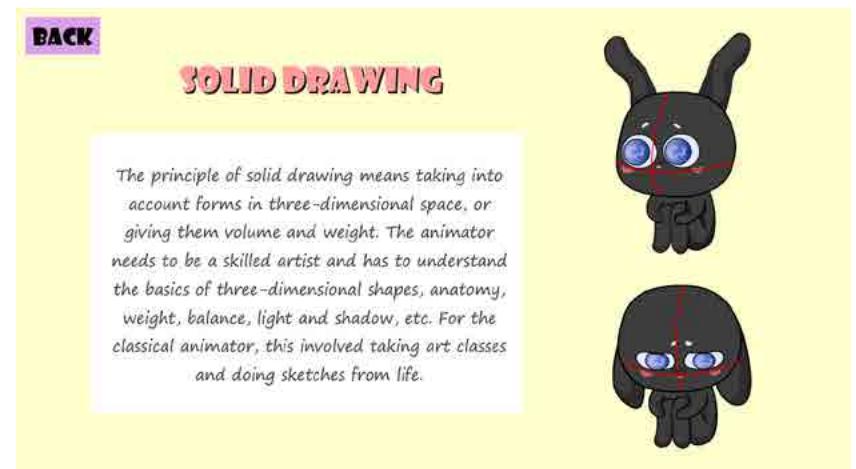
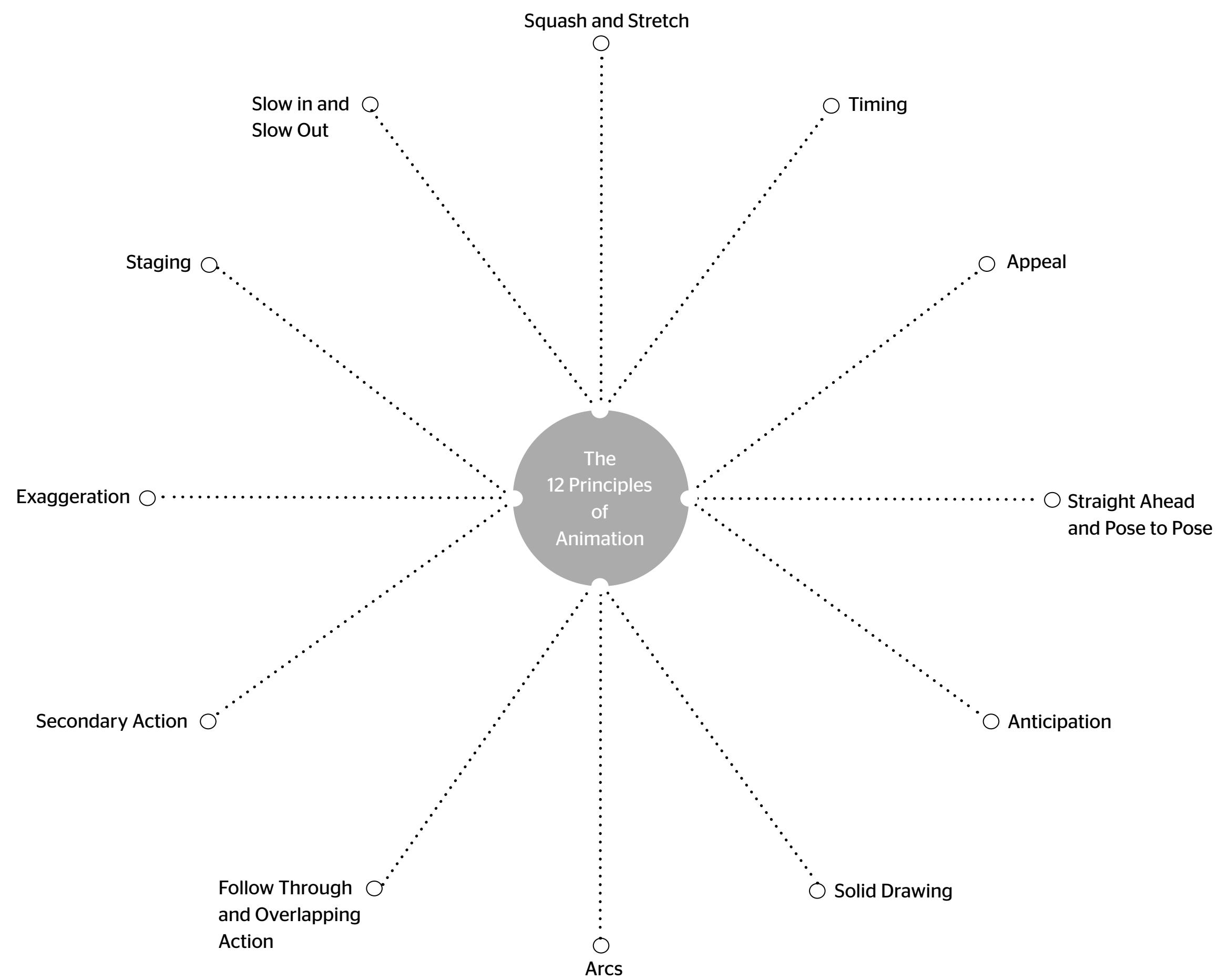
Reference: In the collaboration, I'm in charge of character design and animating

06

Toddy's
Adventure



"Toddy 's Adventure" is an animation basics education video, which is an interactive 2d animation mainly provided for students who are interested in animation. "Toddy 's Adventure" introduces the 12 principles of animation by telling a bunny, Toddy's adventure in the forest. It explains basic animation knowledge through interesting stories, and helps students learn basic animation knowledge.



● Video <https://www.youtube.com/watch?v=1UOZCl04pec>

This video tells a story of a black rabbit Toddy who gets lost in a dark forest. He is scared and cold. But then he comes across a little glowing fairy. She asked Toddy if he wants to fly. Before Toddy realizes what's happening, the fairy flies into his body and disappears. Then Toddy's body starts to float. Toddy flies into the sky and flies over the rainbow, but then drops into the sea. It is so dark and cold in the sea. With his deep breath, Toddy wakes up and sees his mother. He realizes that he is only having a bad dream, so he cries and runs into his mother's hug.

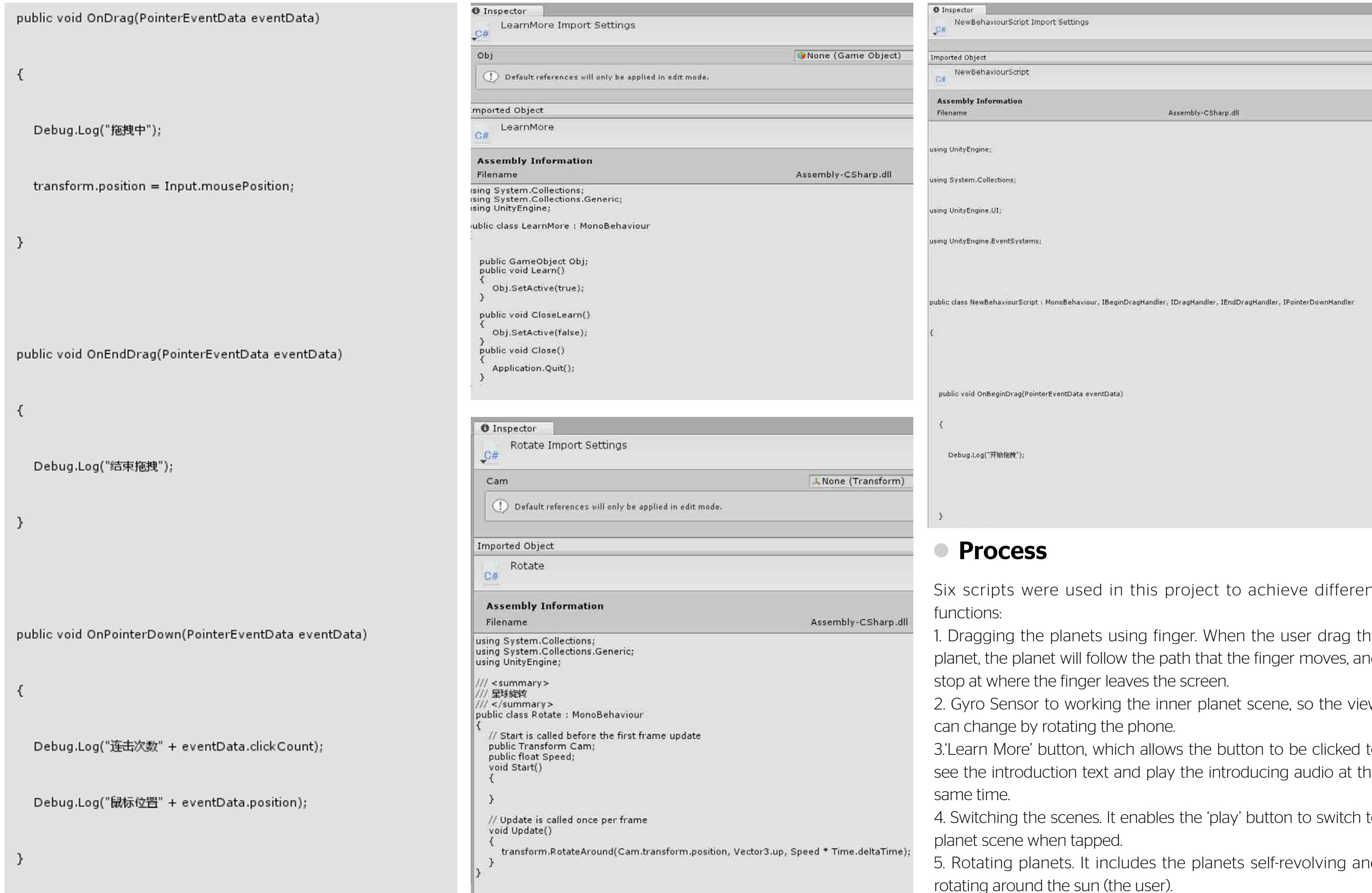
The animation starts with a menu, from which the audience can choose to watch the animation or select a specific chapter to learn any principle of animation. Each chapter contains part of the animation, which helps the audience understand each principle of animation in more detail together with text explanations. After the animation video, viewers can choose to go back to the first-level menu of the learning mode, select the second-level menu of the chapter, or replay the animation. A back button was designed on each principle's introduction page to ensure that viewers can smoothly navigate this work.

07

Hello
Universe

Hello Universe is an Virtual Reality Android App developed with Unity which contains Solar System simulation and introduction. It introduces the eight planets in the solar system with text and audio introduction. The VR technology provides the players with an immersive experience on the phone. Interaction between the players and the phone makes this application more attractive and playable.

This application includes the eight planets in Solar System, self-revolving and rotating around the user. At home page there is a 'Learn More' button and a 'Play' button. The 'Learn More' button shows a paragraph introducing the universe, with an audio reading it. The 'Play' button leads the user to the scene with the eight planets. There is an introduction audio that could be played. Gyro Sensor was used in this application, so when the user changes the position of the Android phone, the view changes in the displayed scene. The rotating planets and can be dragged by the user's finger, which provides more fun.

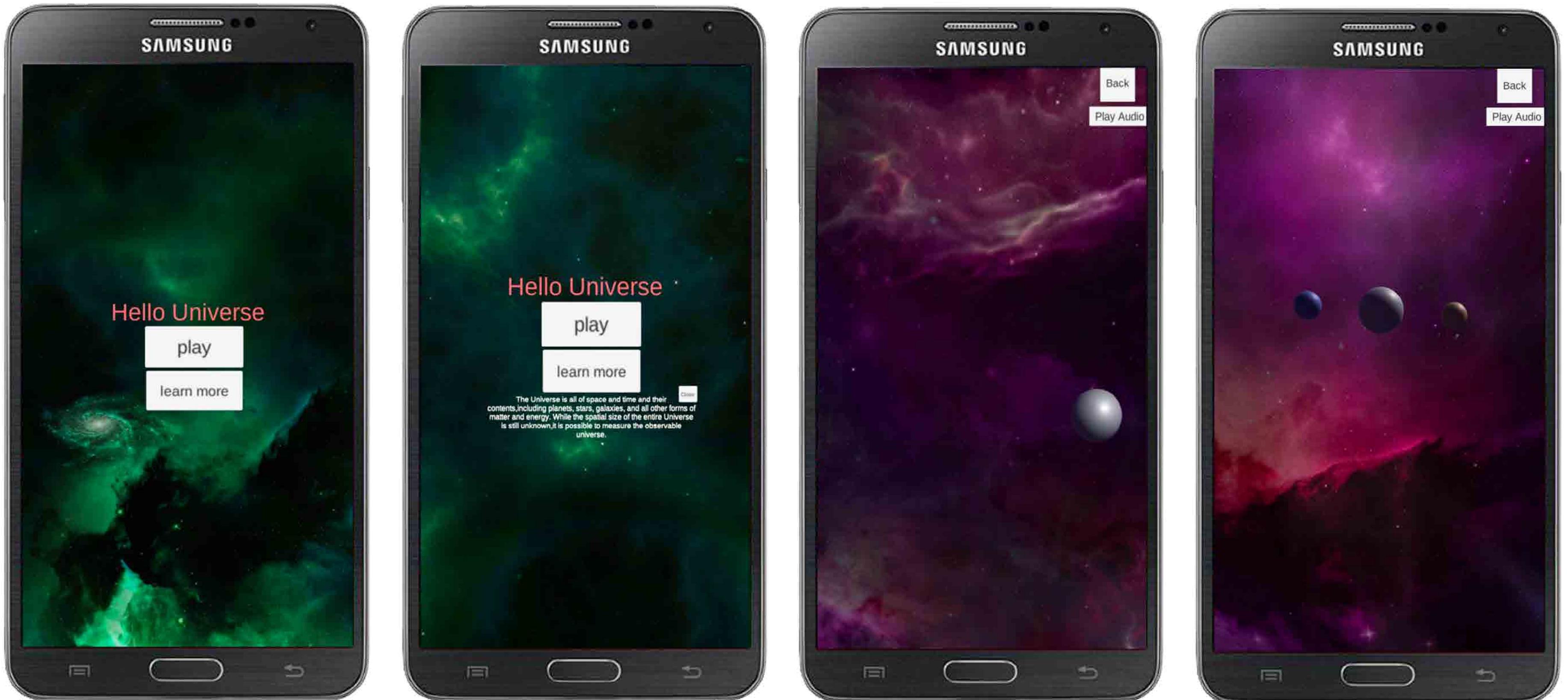


● Process

Six scripts were used in this project to achieve different functions:

1. Dragging the planets using finger. When the user drag the planet, the planet will follow the path that the finger moves, and stop at where the finger leaves the screen.
2. Gyro Sensor to working the inner planet scene, so the view can change by rotating the phone.
- 3.'Learn More' button, which allows the button to be clicked to see the introduction text and play the introducing audio at the same time.
4. Switching the scenes. It enables the 'play' button to switch to planet scene when tapped.
5. Rotating planets. It includes the planets self-revolving and rotating around the sun (the user).

● Game Design



Reference: In this project, I'm in charge of UI and UX design, and the initial idea of the project.