

Loot Box Simulator

Matthew Soohoo and Michael Soohoo
{Michael.Soo001},{Matthew.Soo001}@umb.edu
University of Massachusetts Boston



Figure 1: Picture of the Minecraft Theme

ABSTRACT

Loot box simulator is similar to the loot boxes we see in typical video games. However, the difference is that each roll is free in our simulator. You will be able to open your loot box in five different settings. While you roll, you also can play through a story about a random dude on earth named Sam who is suffering from loot box gambling addiction.

KEYWORDS

WebGL, Visualization

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1 INTRODUCTION

Loot box Simulator is important as there are currently problems with companies that use loot boxes within their games. There are some countries such as Belgium trying to ban in-game loot boxes as it is promoting gambling to kids. Also, even in countries that allow

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loot boxes, there are people who are spending their life-savings to get a specific item within game. They can't stop using their credit card. Loot box simulator is here to save people who are struggling to get over their addiction of opening loot boxes by desensitize them to the thrill. Matthew's part of the project was creating half of the themes, the box, the counter, and the title. He also created the animation of the box opening. Michael created the other half of the themes, the objects within the box (the probability of each item), and the story of Sam. Michael also helped created the floor that the box is on.

2 RELATED WORK

CS460 Assignment 3, CS460 Assignment 7, CS460 Assignment 8, Pokemon, Doom, Sonic, Minecraft, and Three.js [1]

3 METHOD

The main priority of this project is to create the loot box. We focused on making each side of the box. After we finished making the box, we focus on animating the box opening up. After finishing the box, we must focus on the contents within the box. After coding the object within the box, we must make specific shapes appear rarely. Besides the box, we must focus many different themes. These themes would affect the ground that the box would be on and the background. Once we finish with the different themes, we decided to write a sad story about a man named Sam.

3.1 Implementation

This portion of code is a part of the animation code for the box opening. So we created a counter so that the box could open but, could stop at a certain point. We placed this in the animate section of the code so the box could unveil itself. The box would translate the pertaining cube meshes until the counter reaches 500 in the speed of 0.5. Then, the box will stop, in which the camera will not show it unless you change the angle you are looking at.

```
if (counter <= 500){
  cube.position.x += 0.5;
  cube3.position.x += 0.5;
  cube4.position.x -= 0.5;
  cube5.position.x += 0.5;
  cube6.position.x -= 0.5;
  cube1.position.x -= 0.5;
  counter++;
}
```

3.2 Milestones

How did you structure the development?

3.2.1 Milestone 1. We tried to figure out how to implement a loot box onto Three.js. We looked at the past assignments we did for this class and figured out how to do it.

3.2.2 Milestone 2. We successfully made the box and animate the box opening. We were able to create the objects to appear inside the box and create the probability of specific items appearing. Also, we worked on resetting it to the next item without refreshing the page.

3.2.3 Milestone 3. We were able to create five different themes and the rumbling feature.

3.2.4 Milestone 4. We were able to write the story about a person named Sam dealing with loot box addiction and a counter as well.

3.3 Challenges

Describe the challenges you faced.

- Challenge 1: We found that one of the features that we used was not deprecated. The feature was known as ImageUtils, we had to use TextureLoader so we were looking into the API of TextureLoader. We found that their APIs are quite similar, however this was a challenge nonetheless.
- Challenge 2: We were trying to find a way to make the box open normally. We were playing around with the animation features and figured that we can make the box open sideways.

4 RESULTS

When you load the page, you will be able to see a box in front of you. If you do not like the current theme, you could change it and choose the theme you like better. Now, press the start button. The box should open and show you one of the six shapes. If you do not like the shape you got, you can reset it by pressing the reset button, unchecked the start button, recheck the start button. Then,

roll again. You could try the rumble feature which is just a doom gif in the background and doom music. As you roll more, you will see a story about a regular man on earth named Sam who fell into loot box addiction.

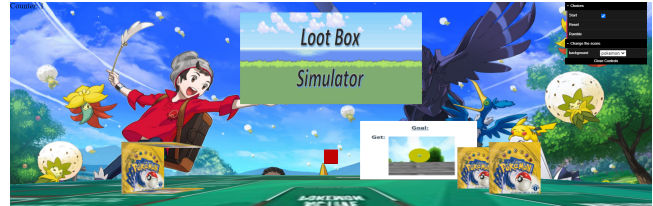


Figure 2: Pokemon Theme.

5 CONCLUSIONS

The project went well. We were able to show a system similar to the loot boxes you will see in a game that EA would put out. Although not as graphically impressive compared to those games, we are able to have a little fun seeing what shapes we got to roll from the simulator. We can also understand how addicting it is to spend your own money on a digital object you are not likely to receive.

REFERENCES

- [1] Ricardo Cabello et al. 2010. Three.js. URL: <https://github.com/mrdoob/three.js> (2010).