TT Games Design Challenge

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Introduction

Hi everyone, this is a video explaining a recent project I did to help my application for a job at TT games the well-known creators Lego games such as Lego harry potter, Lego marvel superheroes and Lego star wars the Skywalker saga. This project is similar to a design test, but I did not get given this design test by a company but challenged myself. I tend to do this when I'm applying to a studio that I'm particularly passionate about. I've played Lego games since I was a kid and have found memories of going to the local library with a friend to play Lego Star Wars as they had a Nintendo Wii which you could rent out for £1.00 an hour. So, whenever I see a position at TT games, I'm always keen to put together the best application possible.

For this design challenge I'm going to make something for Lego Star Wars the Skywalker saga. There's a lot of content already in the game the main nine films that make up the Star Wars universe are all covered in the main game. It felt a little unnatural to me to design content or a level that had already been made in the game so I was keen to find something that hadn't already been created but would still fit into the game. I am a big fan of Star Wars and always have been, so it occurred to me that there are many other stories in the Star Wars universe that aren't just in the core films for example the clone wars series, the rebel series, the Mandalorian and other Disney plus shows like Andor. The jobs I'm applying for our a level designer position and a world designer position so my project should demonstrate me designing a section of the open world and also a level.

Options

- Clone Wars
    - Ahsoka fight with Darth Maul
- Mandalorian
    - One off storyline
- Andor
    - The heist storyline

Here are the options that I came up with after a brainstorm. For the Clone Wars there's a great fight between Ahsoka and Darth maul that happens at the end of the show this could work as a boss fight in the game. The Mandalorian has many one off storylines throughout the show that I could use. And finally Andor

also has a number of storylines and locations that I could use. The heist storyline just to name one. But I think the clone wars takes the win here. Andor and the Mandalorian are fantastic shows but I grew up with the clone wars, so it has special place in my heart. And also, I think a boss fight with Darth Maul could be a really interesting thing to design.

Open World Design

- Open world section of Mandalore

This works well as an option as Mandalore is not in Skywalker saga so I'll have a blank canvas to work with.

Level Design

- Darth Maul boss fight with Ahsoka

For my Level I'll design a boss fight with Darth maul, have plenty of rich source material as the actual boss fight from the clone wars episode was incredibly well put together. It was choreographed and captured by motion capture. Which just goes to show the love and care that was put into this sequence.

I highly recommend if you haven't seen this and you're a fan of Star Wars you should definitely watch it. The first time I watched it I actually found a guide online and watched it alongside revenge of the sith I would watch a few minutes of the clone wars and then go back to revenge of the sith making the timelines as synchronised as they could be, it took something like 4 hours but it was a really cool experience.

Game Design Document

The first step in the process is to play the game and identify something that I can realistically create for this small project. As I progressed, I develop my own Game design document, take note of the game mechanics and the types of puzzles.

I laid out the puzzles that I found within the game, identified the different types of levels in the game and also listed the optional open world content.

But one thing I noticed was the pace of the game. It's fast I mean very fast and very dense lots happening at once. The story is very compressed this makes sense considering that they're trying to cover all nine films. But it means when I'm designing content for the game, I will need to make sure that it has a similar pacing.

Third person over the shoulder camera. Guns and melee weapons.

Puzzles

Description	Image
Cut whole through door (Requires Lightsaber)	

Force lifting coloured object into coloured socket. (Requires Force)	
Character scanner requires certain character to activate console. Player will then need to complete small mini game to unlock.	
Player destroys item that can then be rebuilt into a lever that will open up a door.	
Placing coloured components in corresponding coloured sockets, but this time one of the components was locked away and you had to use another component to open it up before completing the full puzzle.	

Open World Content

Fech quest, look for the items within a circle area.	
Kyber block in locked chest, player needs 2 batteries to open chest that are hidden in the local area.	
Destroyable objects.	
Gold containers.	
Silver containers.	

verticality lots of climbable buildings.	
Chase character slash Droid holding kyber brick.	
Players can grapple on orange bars.	
Player destroys certain number of the same item.	

Levels

(EP1) A BIGGER FISH - Character being chased by big fish.	
(EP1) THE BOONTA EVE CLASSIC – Pod race.	
(EP1) BETTER CALL MAUL – Boss fight.	
(EP1) Outmanned but not out-Gungan-ed	

(EP1) Now this is podracing	

Research TT Games

Design Goals

As part of my process, I think it's important to research into the game and the studio who developed it. The more I can understand about these two elements the more my designs will fit into the game. As part of this I like to establish design goals that represent my best bet of what the studio aimed to achieve with the game. On some of the behind-the-scenes footage Dawn McDiarmid a designer on the game said, "We wanted each planet to feel alive and unique". Additionally, Jonathan Smith Head of the game's development mentioned the teams aim of making the world feel alive. He said they achieved this through space missions, side quests and secret challenges throughout the open world. So, this is what I will base my design goals on.

- Each area of the game needs to feel alive.
    - The environment needs to be dense with NPC missions and secret challenges.
- Planets need to feel unique.
    - Having a unique look and visual style.

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- World Design
    - Two special brick mini game puzzles.
    - One climbing puzzle.
- Level Design
    - Close up fights with Maul.
    - Fights against Mauls troops.
    - One small puzzle and or jumping puzzle.

Open World Design

So now that I have established my design goals, I can move onto creating some of the initial ideas. First, I'll start with the open world design. This will be the small section of the open world that we based in Mandalore where they'll be missions for the player and secret challenges to collect Kyber bricks.
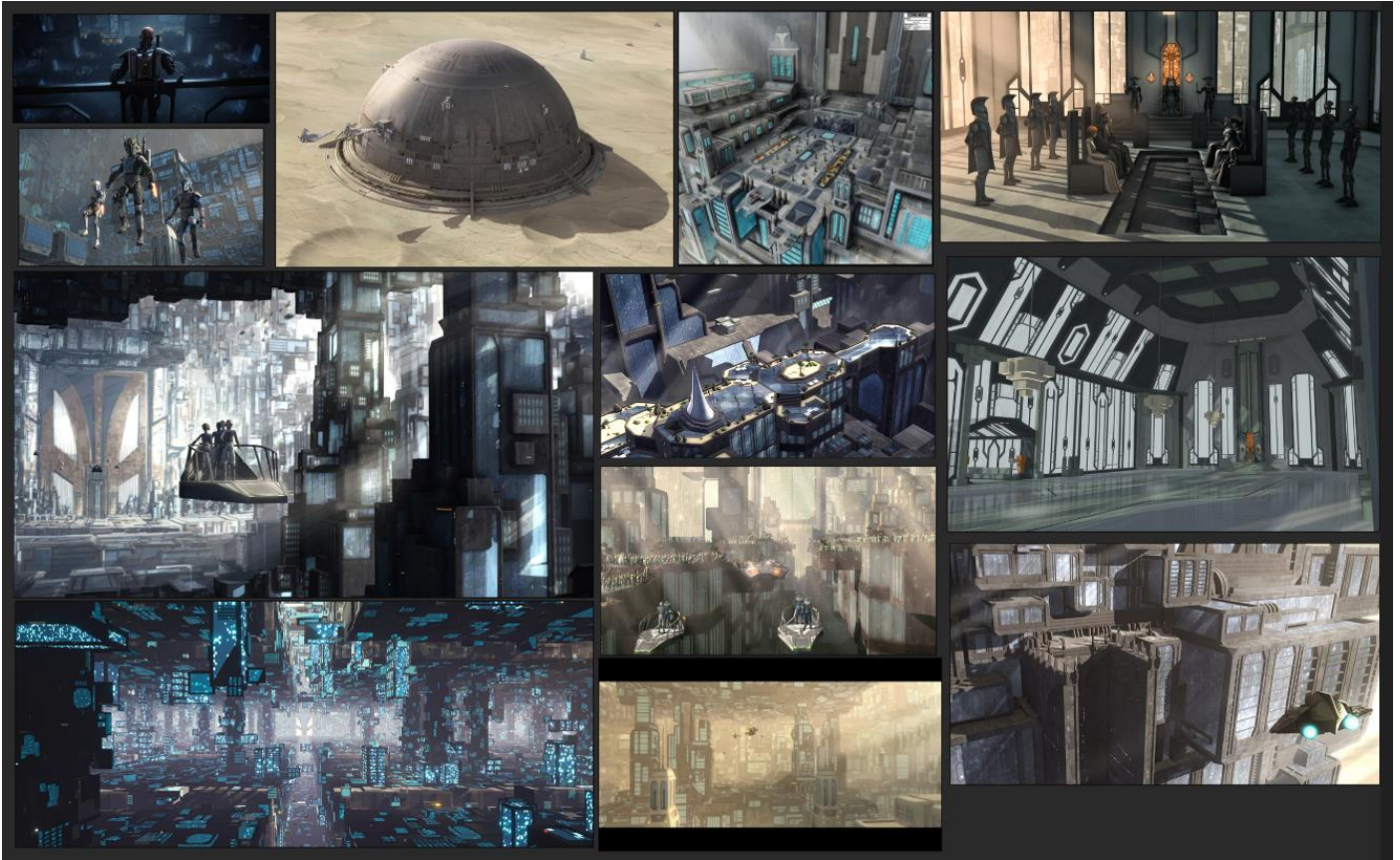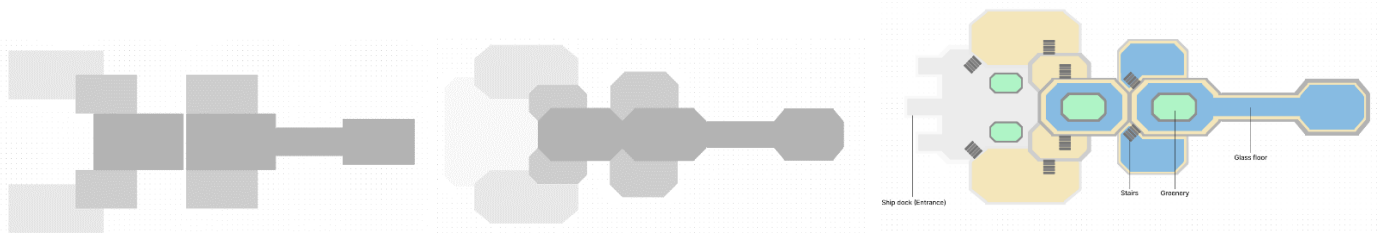

This is my mood board, for the capital city of Mandalore called Sundari. This is the location where I will base my open world section.

2D Design

For the 2D design I will use my mood board along with the open world content I took note of when playing the game.

*Here are my initial designs of what I have now named The Park Quarter. The average section of the open world in the game has up to 20 or 30 mini games in. Due to the time constraints for my area, I will just design 5.*

5 Kyber brick mini games

- *Climb building.*
- *Destroy 5 Mandalorian cleaning robots.*
- *Garden imperfection, put rocks back in the correct pattern.*
- *Destroy gold container.*
- *Destroy silver container.*

Here are the five mini games. The easiest are at the bottom and the hardest at the top, they'll be a gold and a silver container which requires certain characters to destroy. There will be a puzzle where rocks are laid out in a certain pattern except in one patch of the garden, the player will need to rearrange the rocks in the correct pattern. The player we'll need to destroy all 5 cleaning robots. And the final mini game will require the player to climb up a tower, this will require several different character types.
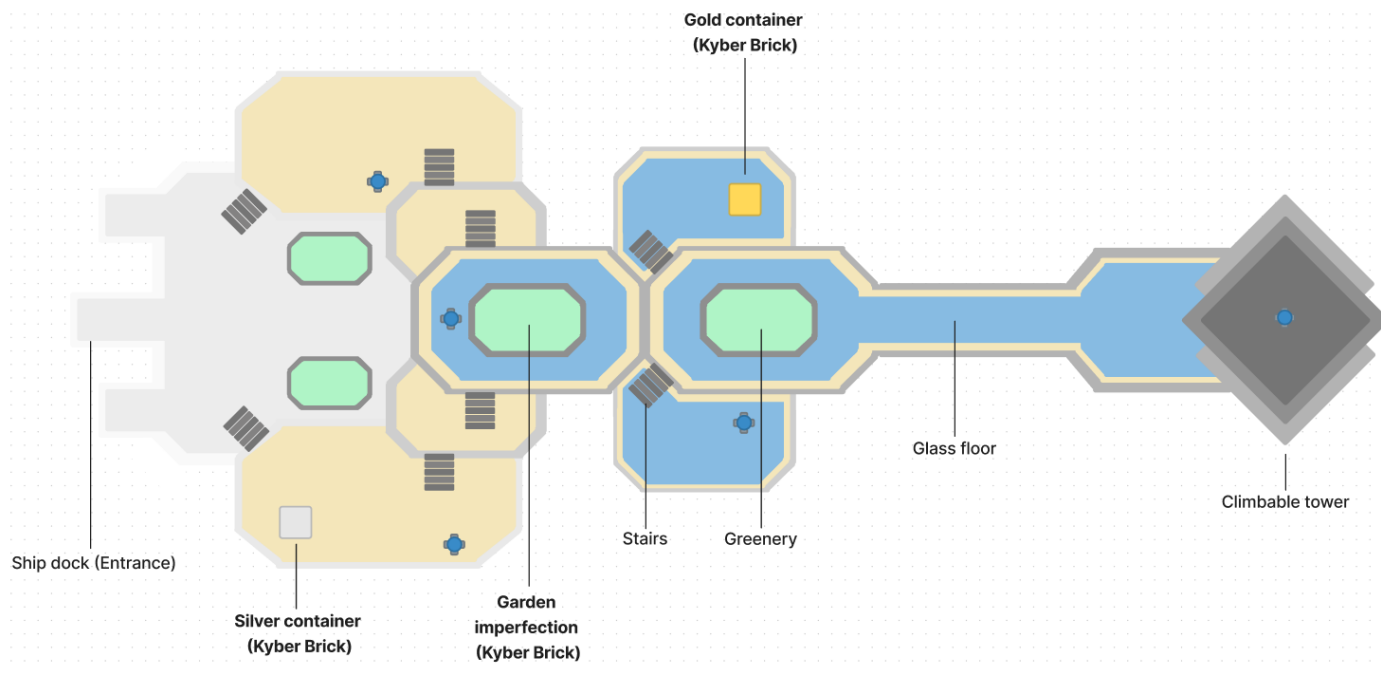

Boss Fight Design

Now onto designing the boss fight with Darth maul. The best practise to do here in my opinion would be to study and analyse all the boss fights in the game. Due to time constraints I'm not going to be able to do this, but I will be able to study a few of the boss fights. Shout out to Luke Chapman, who was a designer on the game and actually goes into detail about how he designed the boss fights on his portfolio. This was a really useful resource when designing my boss fight.

When designing any kind of sequence for a game I typically use a flow chart as it's a nice way of visually laying out what's going to happen. For this boss fight I can largely base the sequence of events on the story of the battle from the clone wars show.
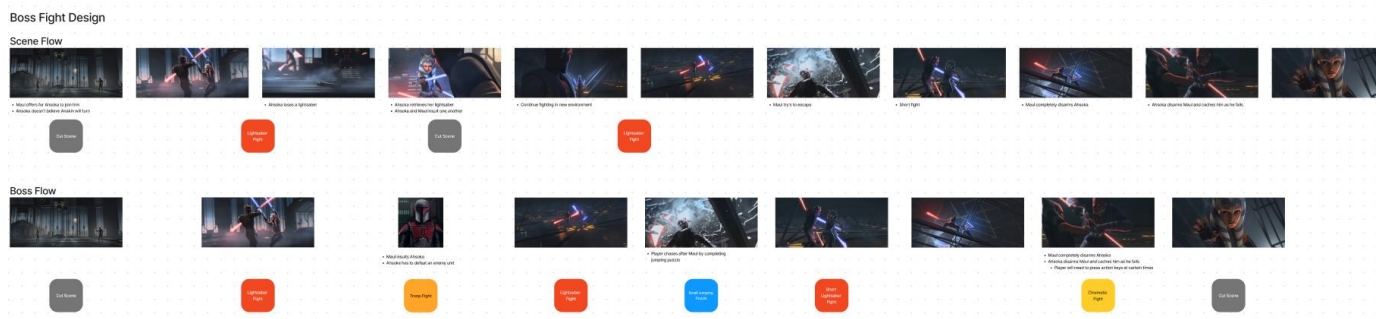
I started by analysing the original fight sequence from the clone wars show. I created a rough storyboard of the events, as I did this, I then created an initial flow chart of events for my boss fight underneath. My chart simplified the events and just focused on the location and what type of story beat was happening. For example, were the characters fighting or is it a dialogue scene. Then I added some additional elements to my flow chart for example in many of the other boss fights I played there would be a unit of enemy troops attack me midway through the battle to break up the pacing I thought I would do the same here.
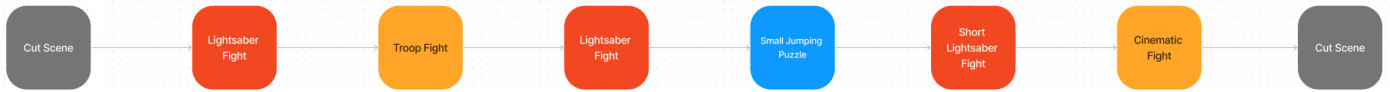
Whitbox

*Now I'm onto the white boxing stage this is when I will create the basic 3D environments for these designs. I found a Lego Clone trooper on sketchfab rigged it through mixamo and set it up as the third person controller in Unreal Engine. I'll start with my open world design.*
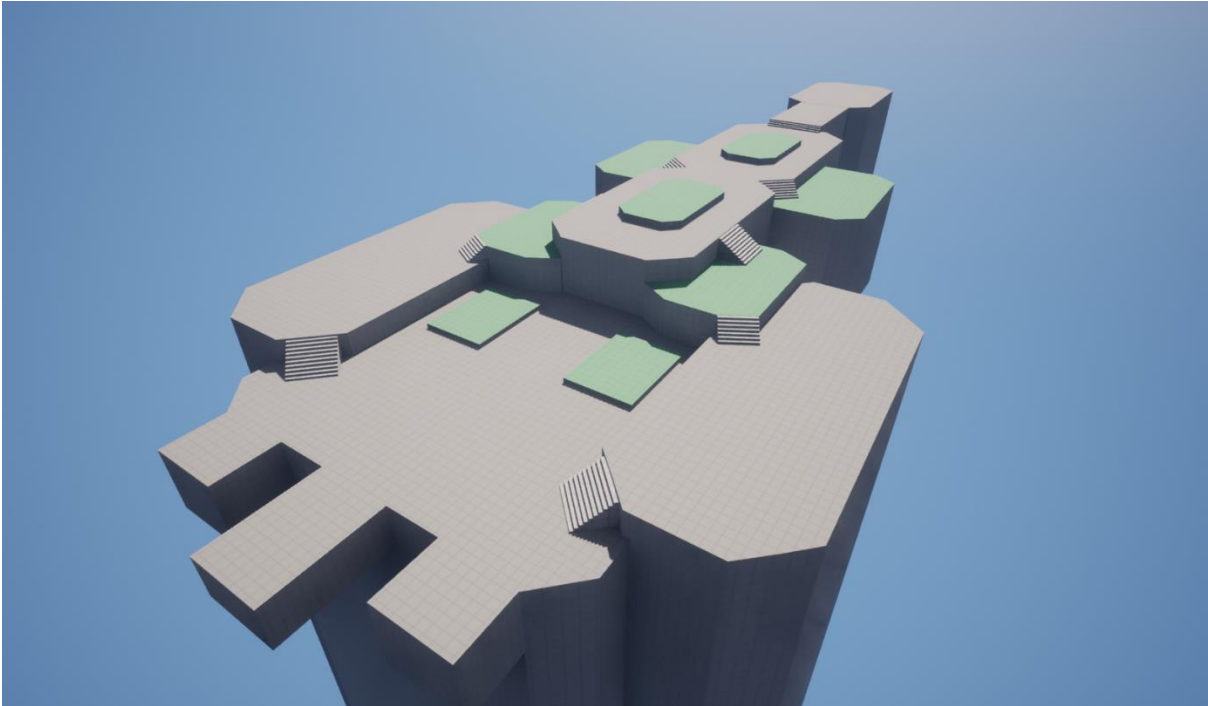
I started by creating the basic shapes based on my 2D design. I then started thinking about colours and materials of how the environment would look but not going too much into detail here as I'm primarily focusing on the design of the environment not the environment art. This is how it finally turned out after adding all the mini games within my area and also a tower. Additionally adding architectural structures based on the Mandalorian city around the playable space to really make it feel like you're inside a city and not just a floating island.
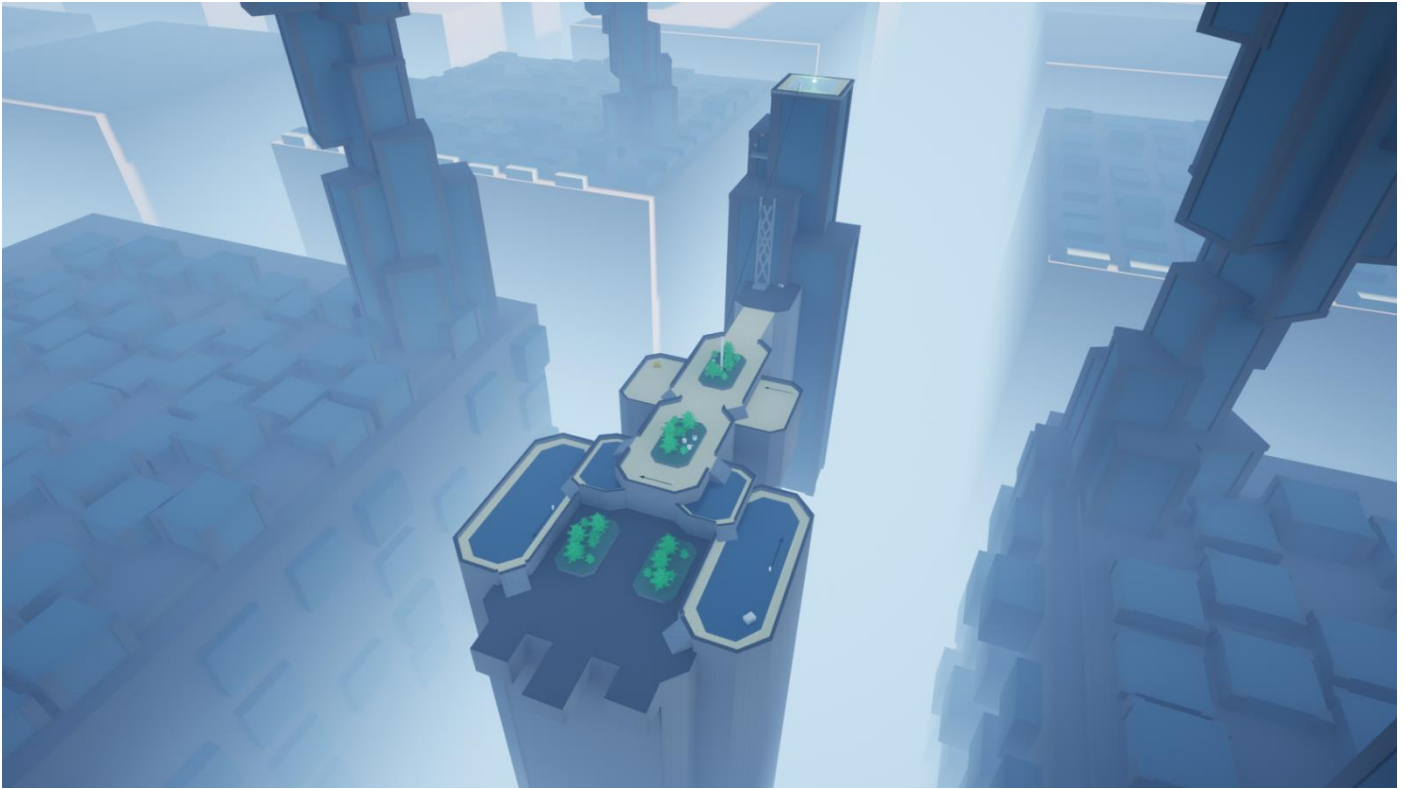
The player can explore this area in the whatever way they want. Here you can see a silver container that can be destroyed with a certain character type. If all five of these robots are destroyed the player will get a Kyber brick. This is a stone puzzle the player needs to reposition these stones in the correct order. The player will need to find the stones that are hidden around the area and put them on the correct podiums corresponding with the colours. The player can additionally find a gold container over here that can be destroyed with a certain type of character. And finally, the tower. Using a Droid the player can activate the elevator. The player will then be able to climb the rest of the tower using these grapple points. At the top the player will be rewarded with a Kyber brick and also will be able to destroy the final Droid. This is obviously a collection of quite simple puzzles and like I said earlier these areas in the game would be even more jam packed with challenges for the player but I'm quite proud of what I've managed to pull together for this small project.

Now I will show you my boss fight level design whitebox. This is the throne room where the flight takes place. There will initially be a cutscene, and then the fight will begin it will start with a basic lightsaber fight. After the player has reduced Darth maul's health blue halfway a small contingency of enemy troops will come in to attack you. After you defeat these troops Darth maul will break the window and escape outside. The player will follow Darth maul out and fight on the struts above the city. There will then be another lightsaber fight where the player will have to jump between struts. Maul then attempts to escape; the player will have to do a small jumping puzzle to chase him. The player will then have one final lightsaber fight with the enemy, at the end of this the player will go through a cinematic action sequence where they will have to press buttons at certain times to defeat Darth maul. That was my whitebox designs for my open world area and the boss fight.
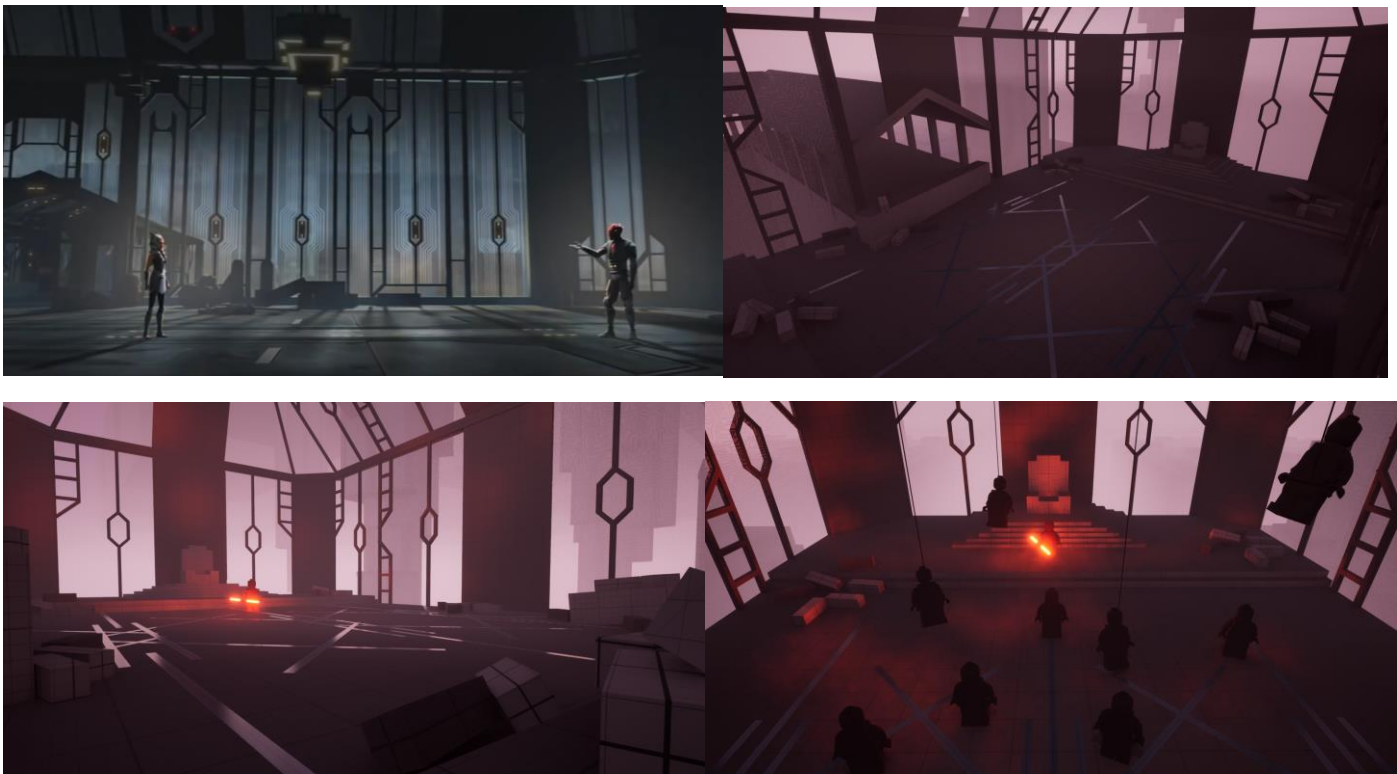
Disclaimer
A disclaimer. Game design is an iterative process ideally, I would love to make these levels functional and test them, get feedback and iterate. And then repeat that process multiple times for the time scale of this project that's not possible so it's best to think of these puzzles not as the final product but as an initial idea of what they could be.

References

Behind the scenes. LEGO® Star Wars™: The Skywalker Saga - Building the Galaxy. [online] Available at: https://www.youtube.com/watch?v=bna4W6x4h8w&ab_channel=WarnerBros.Games [Accessed 22 Aug. 2023].

Jack Chapman Portfolio. jackchapmanportfolio. LEGO: The Skywalker Saga. [online] Available at: https://www.jackchapmandesign.com/lego-tss [Accessed 22 Aug. 2023].

Lego Tree. This work is based on "Lego Tree" (https://sketchfab.com/3d-models/lego-tree-842efd6c8eb04449aca12cd599a27af3) by Michael Ironstone (https://sketchfab.com/Michael-Ironstone) licensed under CC-BY-4.0 (http://creativecommons.org/licenses/by/4.0/)

sketchfab.com. (2022). LegoClone - Download Free 3D model by Thureb. [online] Available at: https://sketchfab.com/3d-models/legoclone-debe6cb5d02d4e108088bb05dcfc8cd0 [Accessed 30 Aug. 2023].