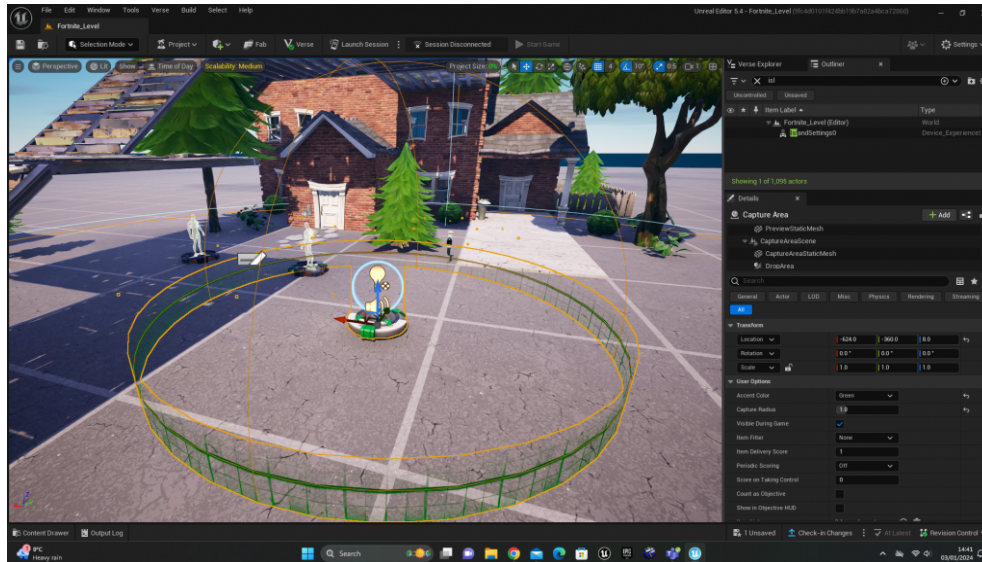


Designing a Fortnite Experience

Having not played Fortnite since the battle royale mode became a hit phenomenon in 2017, I had a lot to catch up on. The game now has options to create many different genres and layer experiences, I was quite taken back by the amount of creativity going on in the game. With this in mind my first job was to research the changes and play Fortnite to understand my options on how to create my own Fortnite experience.

I began by opening up the Fortnite editor engine and playing around with building assets, creating game modes and seeing how the game plays and how the world reacts around the player:





After some experimentation testing how vehicles react, physics, building etc I played a few hours of fortnite online, trying all of the different modes available. The game has become its own game creation hub where gamers can use the fortnite tools to create their own genres like first person horror games, racing games and survival games. With so many different genres to make I had to think hard about the direction I wanted for my own level to go in.



Research

I went through the devices in the Fortnite editor and a vehicle caught my attention. This was "The Baller", a circular pod where the player can fire a rope with a grappling hook attached and attach it to surfaces. The player can use physics to gain momentum using this grappling hook and move the ball around terrain. This gave me ideas to create a medium sized level with areas only reachable by using this mechanic. I was thinking of moving platforms that the player has to attach to and move along with them either to collect items or reach destinations or even both. The idea of the player using the ball along flume type water tunnels in the Jungle seemed very appealing to me. The level would be set in this kind of location, I want players to move at their own pace and decide where to head to on their own. This meant a hub like world with different areas that can be played in any order, the objective being to collect as many items/coins as possible and take them back to the hub area.

I looked into what other players had done with this mechanic, I searched through the Fortnite filter using the Baller as a filter and came across only a few levels. I went through each of them and the "Spider - Baller" level stood out the most for what I'm trying to do. In this level the player has to use the baller to navigate the environment without touching certain walls, this means using the momentum to thrust yourself through small pockets within the walls to the otherside. I broke down what I liked and didn't like about this level:



Spider Baller

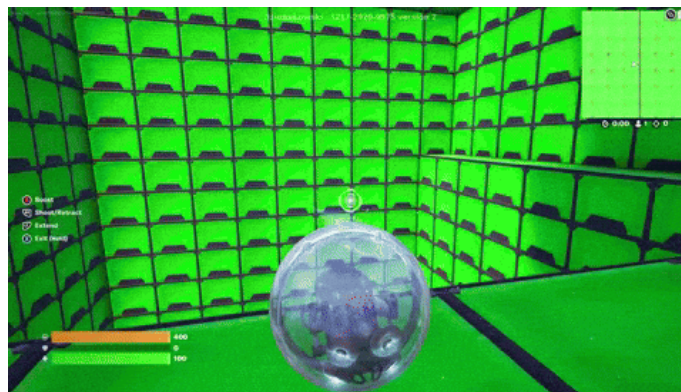


Pros	Cons	My solution
Good use of the mechanics	Too difficult to progress	Tone down the difficulty
Easy to understand and play	The death boxes are too large (stick out from the wall)	No death boxes on walls
Some interesting ideas such as avoiding obstacles and changing verticality	The mechanics are not tailored enough for the precision needed	Avoid the amount of precision needed to navigate
	No checkpoints	Add checkpoints in difficult areas

Large death boxes around walls:



Using the physics to gain momentum:



Avoiding obstacles whilst swinging:



Changing verticality:



My thoughts on this level were that whilst the physics can be fun to use (swinging around) if the navigation is too difficult it turns to frustration fairly quickly. The mechanic seemed to be tailored for a more casual type of player instead of someone that wants a challenge (makes sense considering the game it comes from). My level would reflect this by keeping challenges short and simple to avoid frustration. The change in verticality was interesting to me, and there were some interesting things I could do with this. The swinging section was quite fun to play but the hazards could be annoying to avoid, the colours for the hazards were a little confusing. The hazardous walls were red which is understandable but the floating obstacles were purple, this confused me into thinking they were collectables at first. I began playing around with the mechanic and making tests in the engine for my next task.

More Research

Inspiration

My first thought was a game which had similar ideas to my own is a game called "Super Monkey Ball Adventure". This game was released in 2006 and received average to poor reviews. The main complaints were the changes to the genre of the IP (the original games were more linear and focused on game modes), this game was much more open and focused on the platforming. Complaints were also about the technical issues such as loading times and bugs.

My idea was to avoid these issues, the Fortnite game is generally bug free and my level design would accommodate for the lack of precision, plus there would be no loading screens between areas and difficulty would be balanced.



Ideation

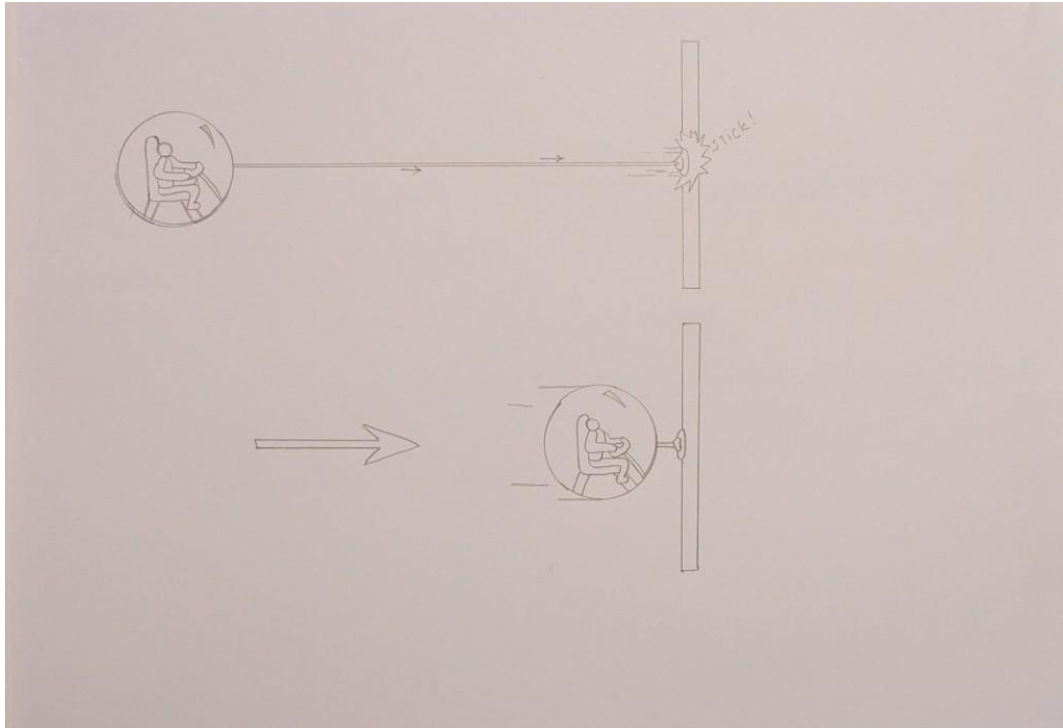
Theme

I'll be using the Fortnite Jungle assets. A cartoonish look but includes detail and an easy going pace with moments of challenge in each area.

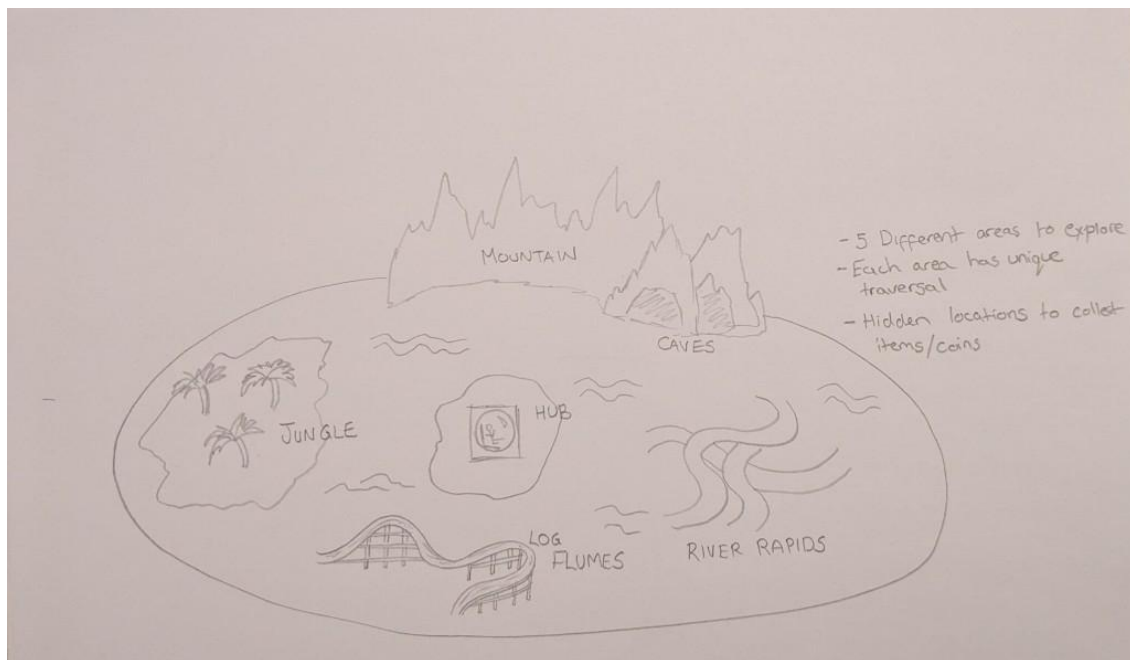


Sketches

Mechanics:

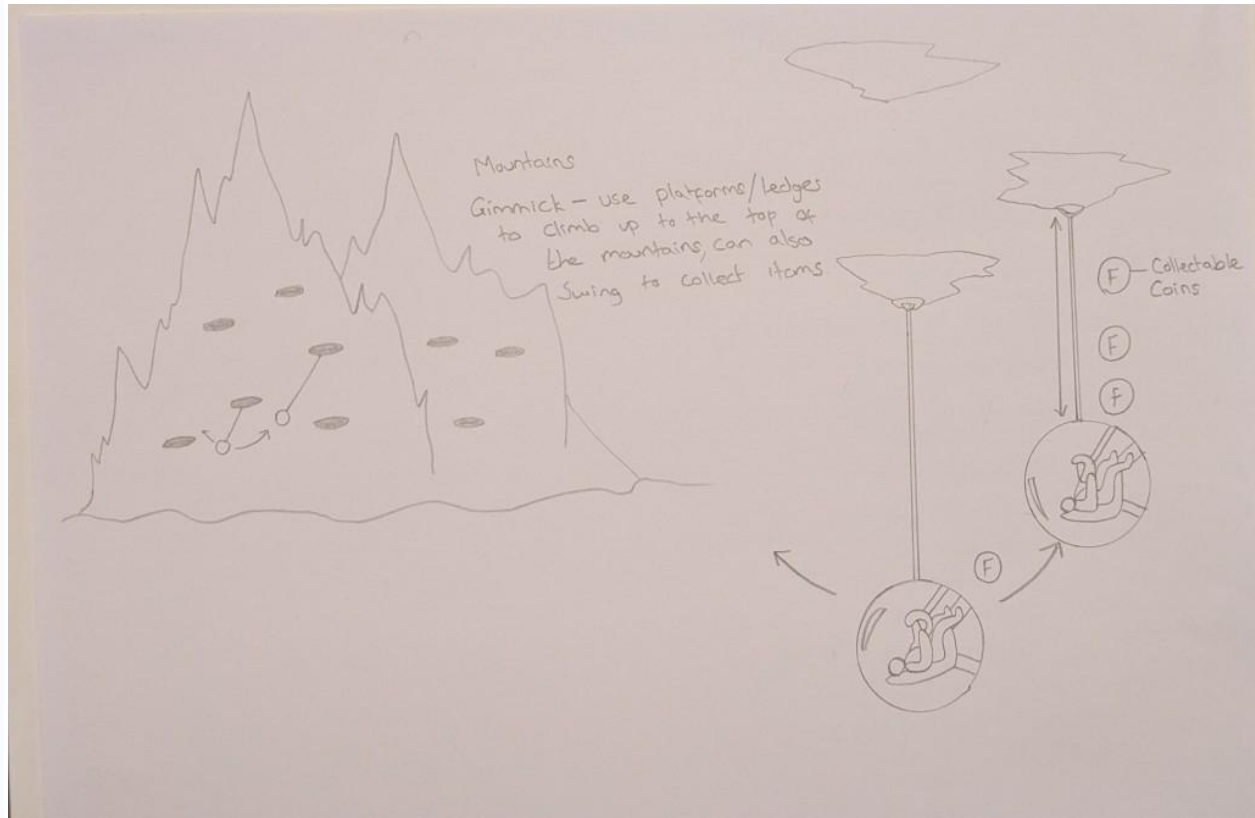


Level map:



The player starts in the centre of the level (Hub) on a small island. The player can choose any direction to go in. There are five surrounding landmarks all distinct from each other. These areas contain unique gameplay traversal and contain items to collect.

Mountain area unique traversal:



Prototyping

I created a rough blockout of the Hub island, Mountain, Cave and River Rapids just to see if this idea was feasible in the engine. I came into some issues with the size of the map, the draw distance was quite low meaning the distance from the Hub to the Cave made the cave disappear until moving closer. This was a big issue as it affected the affordance for the player and drawing them to the landmarks. There was also a hit on performance due to the sheer size of the map and another problem was that the river's current did not affect the baller vehicle, meaning I had to re-think the river rapids either by adding speed boost traps under the water or by scrapping the idea completely. I did find some positives for the layout, it gave the player plenty of room to swing the baller around, the scope was really cool to look at, with the size of the large landmarks, It gave a Zelda Wind Waker feel exploring the vast ocean. The mountain area worked quite well, swinging the baller around to collect the coins by attaching to platforms and using momentum. Here's a short video of the layout:

<https://youtu.be/E57L4L8RDtU>

Redesign

I scaled the landmarks back in terms of size and re-designed the rapids area and instead turned it into the cave area. This was to cut back on processing power and to also solve the river rapids problem. In its place is a cave with a tunneled maze inside. I thought it would be fun to go through these tunnels to find collectables:

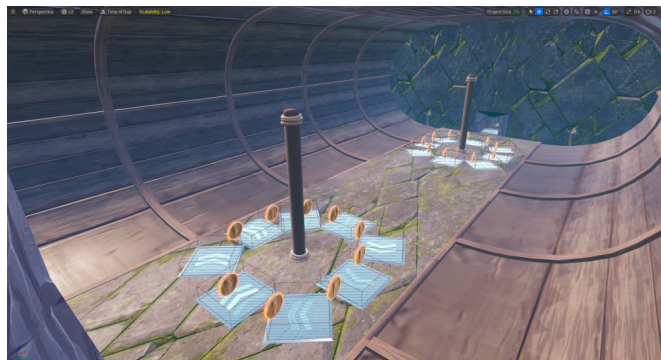
https://youtu.be/j_rtwB-ZDqA

Prototyping

Using the assets provided in the fortnite engine I started to try and create a few structures for players to use the baller mechanics with. One of these was the log flume/roller coaster area. Unfortunately I couldn't get the assets to work properly with the baller physics this includes creating a river for the player to go along, this resulted in another rethink. I decided to swap out the log flume area for a temple in the jungle, this fits the theme and has possibilities for experimentation. In this area I decided to put together a ring of speed boosts and in the centre a pole. The idea was that the player could collect coins in a circular motion by using the grapple hook in the centre and boosting around in a circular motion. I had to put the speeds super high so that the player could not just roll over to the coins easily and would have to tie themselves to the pole as not to go flying into a random direction (due to the high speed boost) here is an example of said contraption:

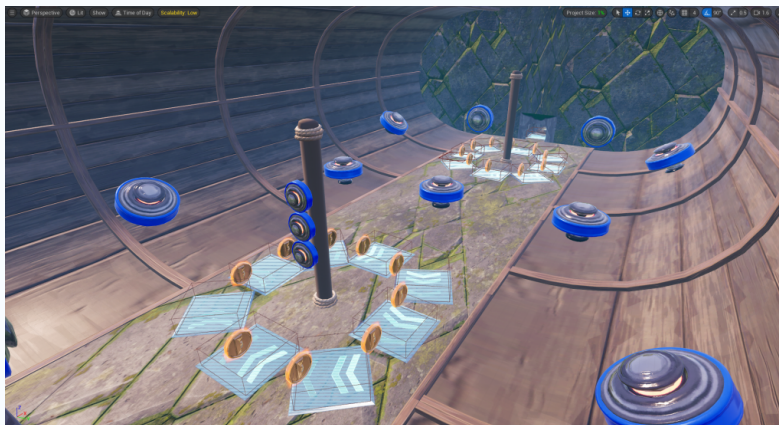
<https://youtu.be/qU2HCpHa2po>

Once I was happy with this I created a room to house two of these contraptions. This area resides inside of the temple and is accessible via a small tunnel. I found an asset as close to a half pipe as I could find to help with the gameplay (the player can roll around freely after being boosted):





After experimenting and playing for a while I decided to add some of the pinball assets, this was to make the area a bit more chaotic and interesting to play around in:



I also added an exit only accessible from this area (you could not come into this room the same way), here is a quick video using the mechanics:

<https://youtu.be/ytWBZn3wbvw>

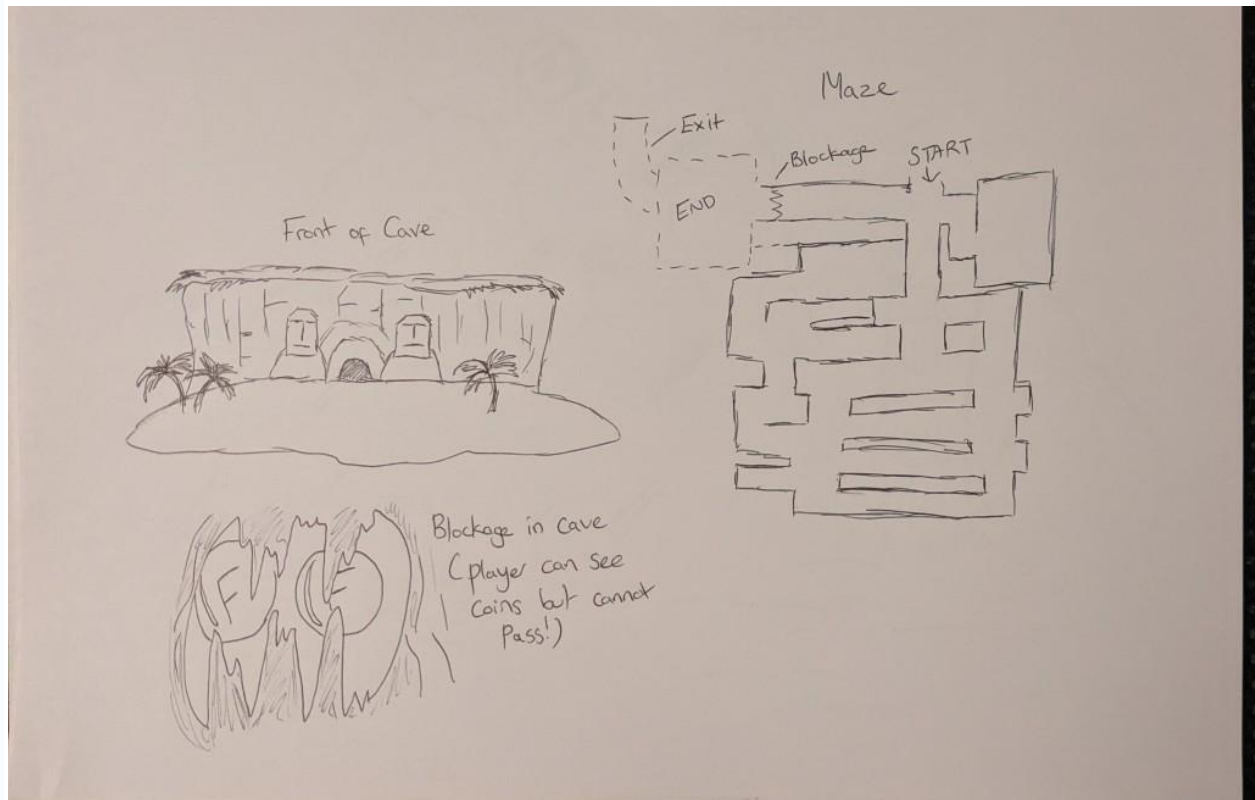
I've also added poles in the main lake area, this was so that players could use the grappling mechanic to move around faster. The poles are the same asset as not to confuse players and to keep affordance for the player:



Designs

Having experimented with the assets available and the Baller mechanics I re-designed the landmarks to suit what was available to me. I chose the following:

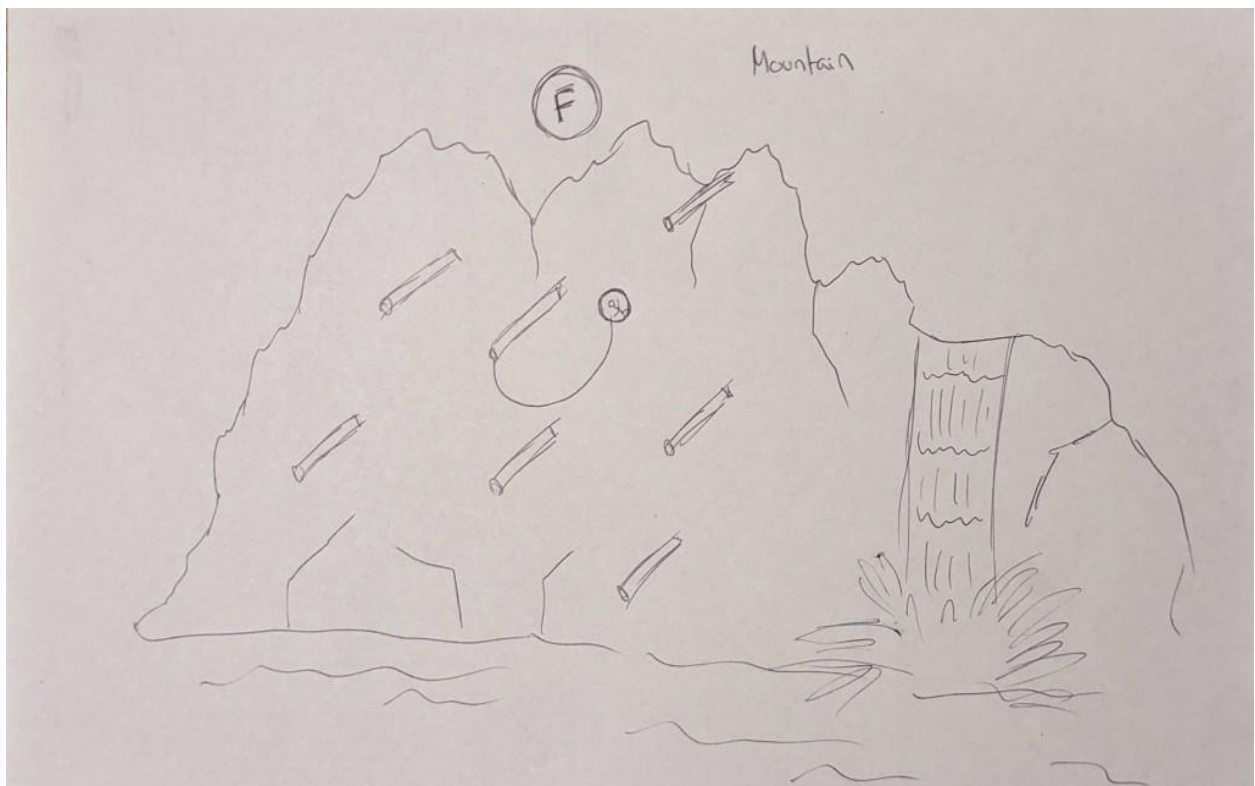
The Cave area (maze)







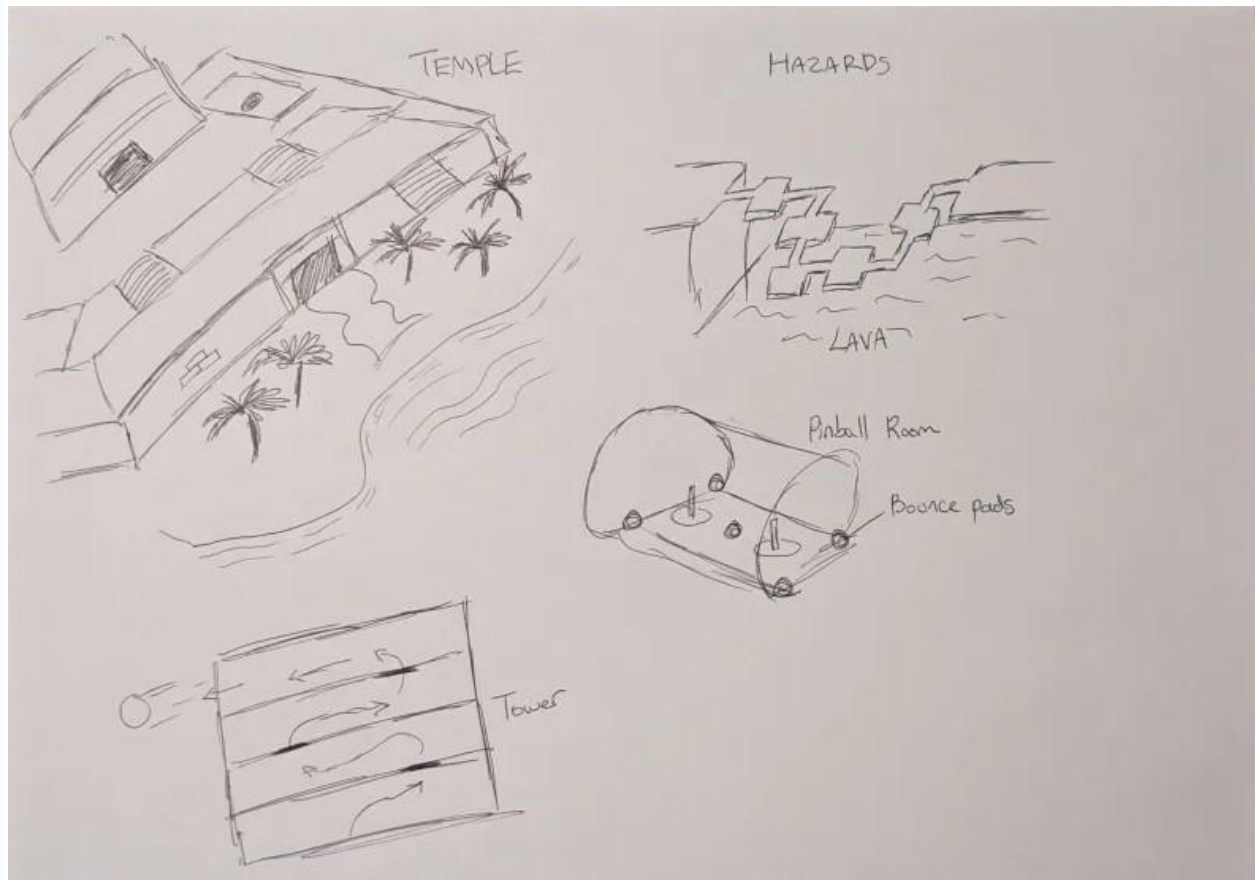
The mountain (Vertical traversal)

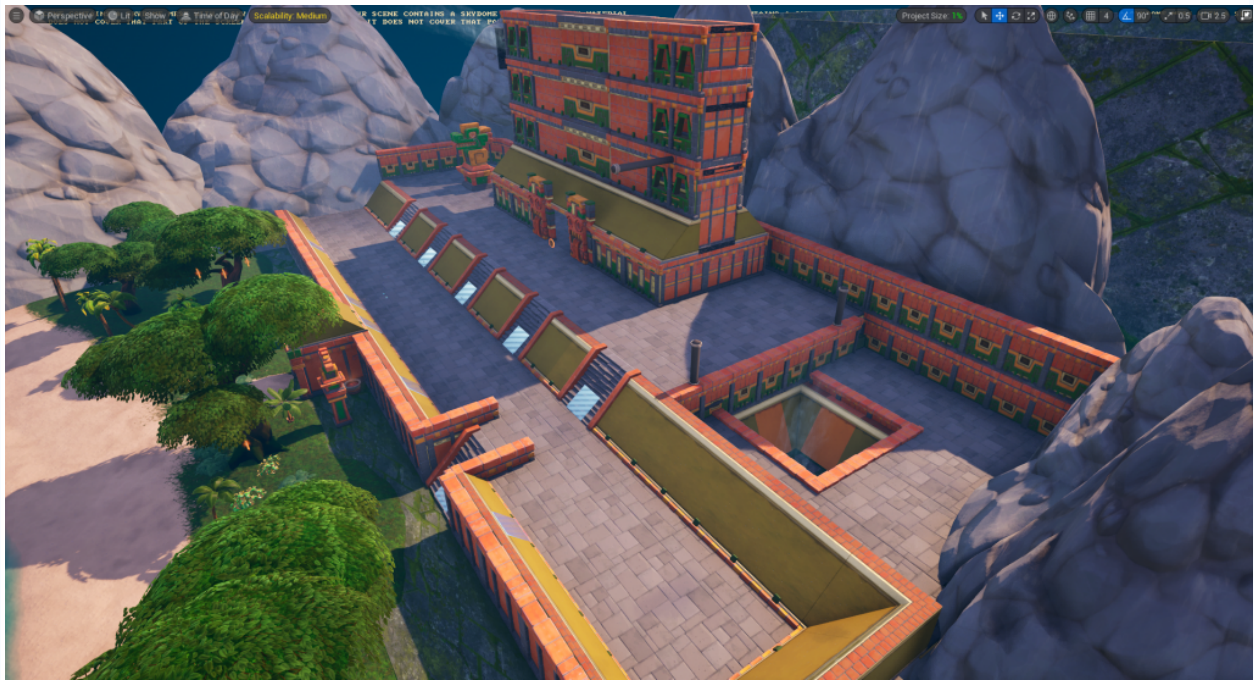


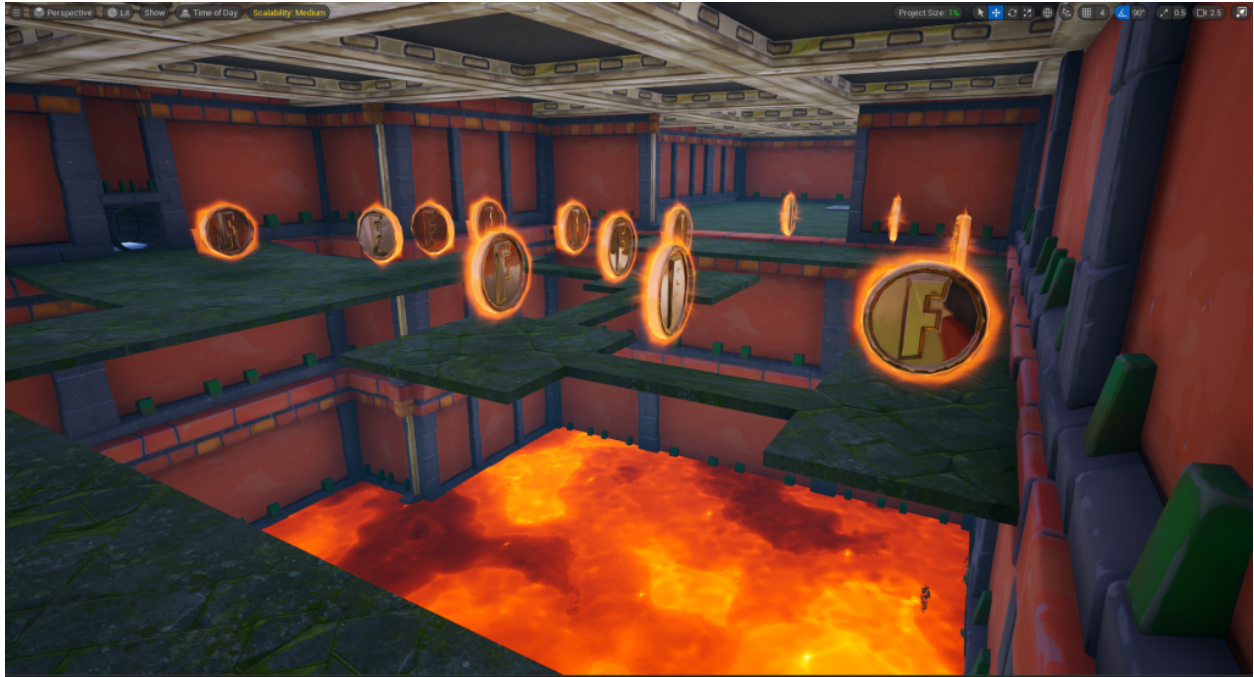
The Temple (Hazards to avoid)

Lower Temple (Hazards to avoid)

Higher Temple (Vertical traversal)







Conclusion video

<https://youtu.be/9ibsLP6l9Jw>