

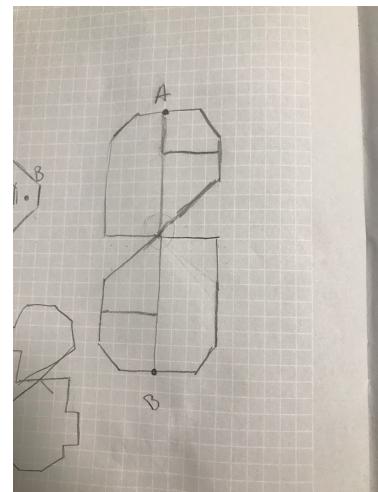
DESIGN PROCESS REPORT

This is the report for “CFT - CASTLE” made by Guillem Arman with UnrealTournamentEditor.

The purpose of the coursework was to create, from a design point of view, a CFT map using the different concepts and techniques we have learned at class.

To begin with, I did some sketches on paper:

My main idea was trying to create a simple 'S' map, 4vs4, with the basic CFT layout: 3 main paths, 1 connector and a battle arena.



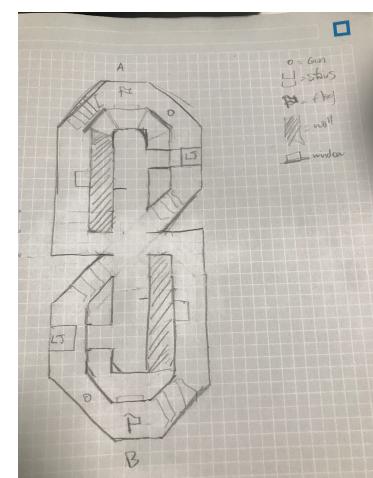
Since Unreal Tournament maps normally have 2 levels of verticality, I decided that both flags, A & B, should be in a higher position so they are easy to spot.

Knowing this, my point is to stick to a very simple symmetrical map but modifying it through iteration until achieving an acceptable level of fun.

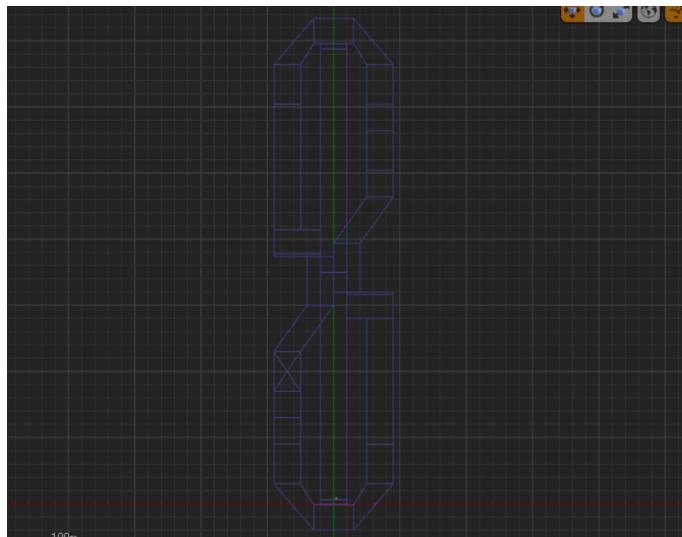
The first step was to iterate on the initial sketch ,this is the result:

The covering areas would play an important role since the map is pretty straight forward.

The diagonal lines in the sketch represent the slopes between levels. To add cover on this aspect, I decided to add a roof on one of the paths. We will see later as it is.



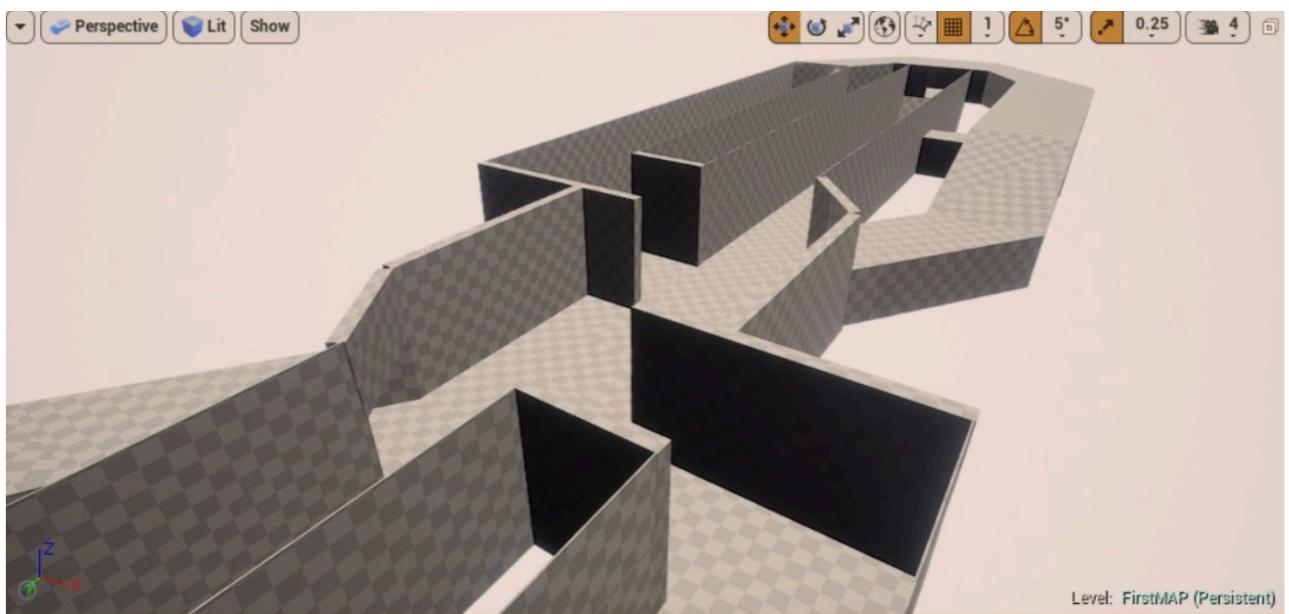
Once the sketch had all the requirements I jumped on creating it on the editor.



As we can see I added more space between the paths, creating a battle zone, to avoid the problem of long corridors with no escapes. In this image there is still missing the connector.

So the main idea was that the long path would be for long guns, the middle one for snipers, and the shorter for mid range weapons but after adding the roof, and with the slope just near to the battle area, it was more logic to swap the close range with the long one (side paths).

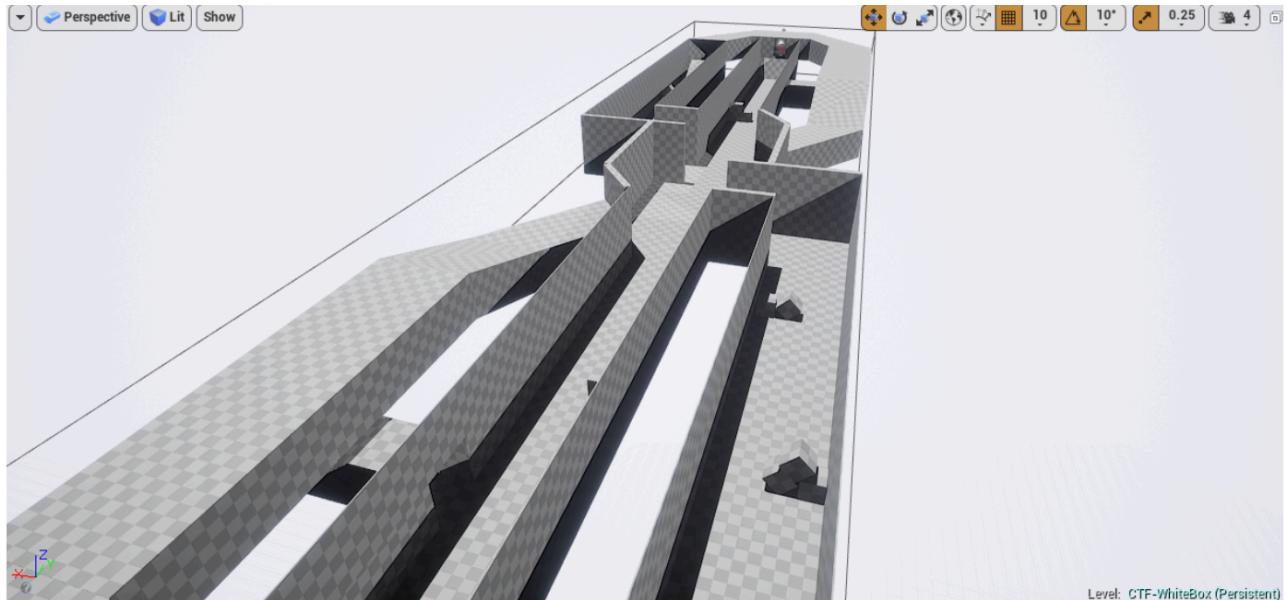
On the next page we will look at the first building of the map.



Following the techniques, I made sure that at the entrance of the battle arena you are not able to see all the entrances. This is where the tactical design enters in.

Since the map is not complex in pathing terms, I focused more on how teams would play the CFT match strategically rather than with skill.

The most important part is to control where the enemy position in order to get to the other side of the map. Each path has a good view of the opposite one, so the best way to play it is to divide the players at least into 2 different paths.

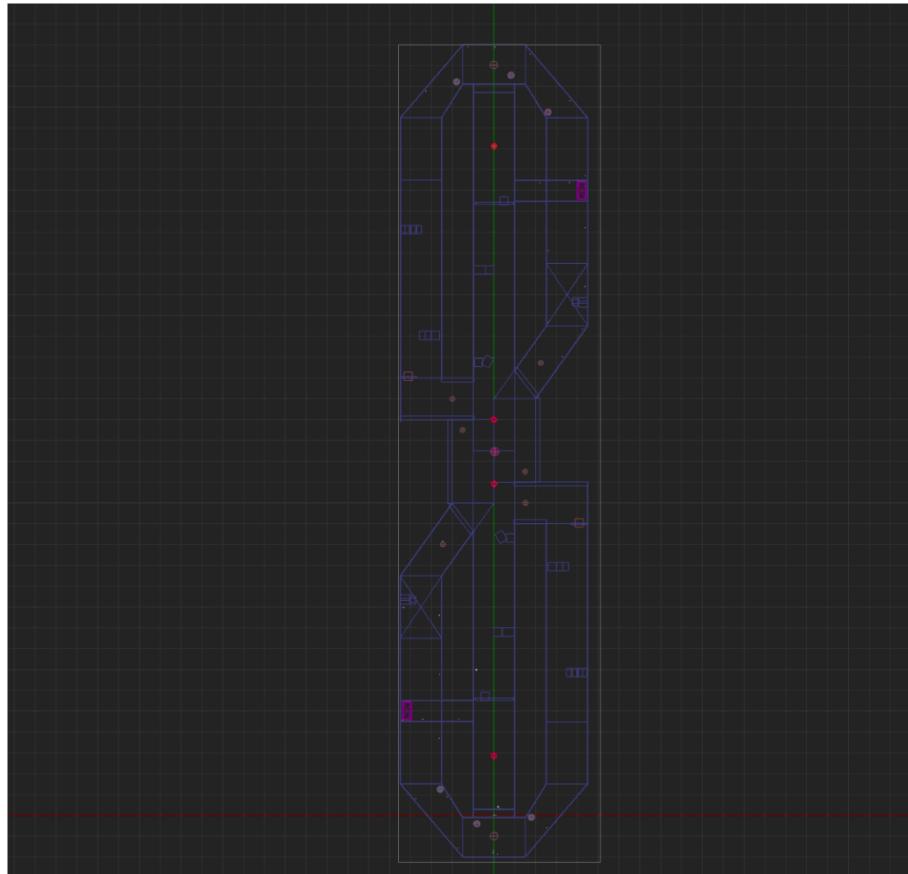


After adding some more cover on the side paths I realize that there was only one way to get into the battlefield, but since the map is so small, and after some playtesting with the bots on Unreal Tournament I figure it out that it is not a big problem.



On the connector path though, I added some cover to give the player the possibility to choose which way access into the main corridor.

This is the main top view of the map, we can see all the power ups and cover spots



Since the connector path is on the floor level, an elevator would manage the situation to get to the side path.

The elevator creates an opportunity to fall down on the short path, so skilled players can get a reward there by not falling and getting a good position to kill the others.

Note: All the positions of the power ups are made after several sessions of play-testing.

PLAYTESTING

The only way I had to play test the map was exporting it to Unreal Tournament and play with bots. The first thing I was trying to was to see the navigation mesh. I noticed that every bot was using the translocator weapon and that they use the main window/door to get away once the flag was captured:



So I adjusted some heights so the players can only use the window as an escape and not an entrance, and add power-ups to the side paths in order to add them more reward.

The main problem to play with bots is that there is no strategy. They just follow the paths in order to get the flag so it was harder to trying to imagine how a real team would behave.

Since the main path has poor cover, I added an armor power-up near the flag to incentivize that choice. Also the battle arena has a big health in the middle like “Facing World” map has.

WEAPONS

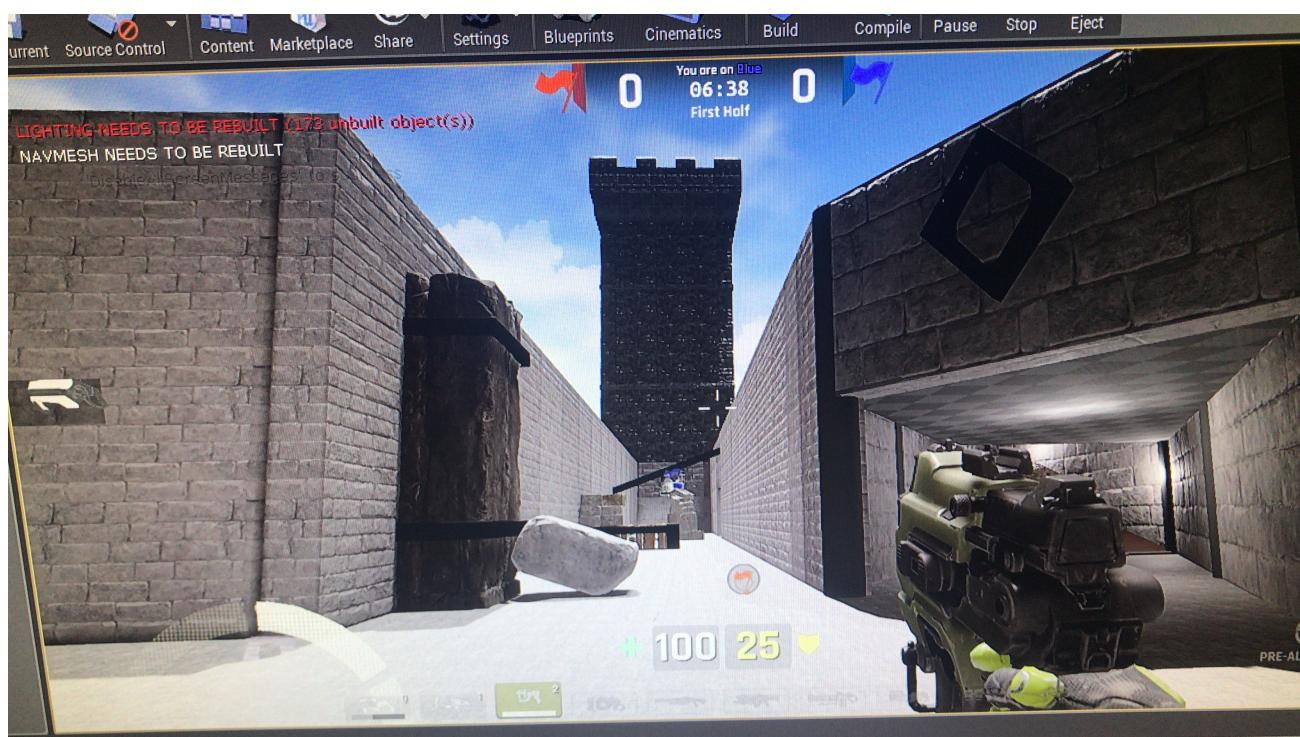
The weapons available on this map are the Enforcer, Translocator & Impact Hammer by default.

Near the respawn we can pick up the sniper since we have a clear view of the main path. If we are on the blue team, on the left path we can pick up Flack Cannon which is useful for short distances. And on the long path we can pick the link gun.

At the end of each path the player is able to pick some ammunition.

AMBIENTATION

The process of converting the BSP to static mesh was not really a big deal since I took a look into the assets folder before creating a map. I saw that there were a lot of assets of Castle ambience and that fitted quite good into the design. The large side path has big Castle walls and the short one gets you inside the Castle.





In order to give more credibility I added some fire particles on the torches.

And for design purposes I put some flags on the walls. In this way the player can know its position since it could cause confusion to new players because of the symmetrical design.



CONCLUSIONS

After doing my first CFT map in Unreal I can extract the following conclusion:

Play-test is key. Despite having the tools and lectures that covers how to do a map, each decision has a big impact on the gameplay. Every change on the map needs to be tested. I encountered many problems with different meshes, creating z-fighting, and a few with the navigation mesh. Some objects did not have accurate colliders so I spend more time than i expected on fixing those.

To end with, I am proud of this first result on level design. Now let's play and see if it is fun!