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Sniper Elite 4 Level Design Document

Preparation Stages

The initial stages of this level design were in the form of playing Sniper Elite 4 and learning what worked and what didn't in each level. The best game without DLC has about 10 levels. Tim Jones, Rebellion's Head of Creative Aimed for Sniper Elite 4 maps to be larger so that long shots could be possible. This was the first thing I took in mind but as I played through each level of the base game, I made notes for the pen and paper on recurring themes. I played single player as well as multiplayer to get a feel for both types of gameplay. I'll be designing a level in Unreal Engine 4. This is because I have previous experience with them and feel comfortable with the tool software.

This is the game play mood board for my level. This shows the types of gameplay I want to have in my level.



The second is the same mood board but with some guides so I can better explain the different images of the mood board.

1. This first section of the mood board is to show that I want landmines to be usable in this level; this is why there is also a road and a truck. I hope to have convoys regularly moving around the map so the player can plan ambushes. When I played through the levels, I found this aspect of the game very enjoyable!
2. Cover is a large part of Sniper Elite 4 so this second image will remind bushes and crates will need to be scattered around the map so that players can use them as cover. Additionally, a repetitive theme I saw in the levels when playing Sniper Elite was that there was a chain of bushes that would have guide the player. These bush paths would allow the player to move around unseen. I want to use this same tactic in my level. But I must make sure to regularly break up this chain, so the player must take risks and additionally I'm keen to give the player multiple options, so multiple bush paths are ideal.
3. This is additionally a recurring theme I saw. The player would be guided to a vantage point in which they would be able to see a large open section and plan their attack. This allows the player to make their own decisions and

get a good idea of the map. Additionally, it is a good opportunity to visually show the player their goal. E.g reach a tower.

4. At some points in my playthrough of the game I found my movement interrupted by verticality. On my map I hope to always have accessible routes up and down hills, so the players never feel like they have hit a dead end. This image shows a section of a mountain that the player is over to climb up.
5. Image 5 shows the player doing a stealth kill. The main gameplay in Sniper Elite is obviously the sniper but I found little use for the stealth kill mechanic when playing through the game. I hope to make more sections in my level where the player can use the stealth kill and not always resort to the sniper.

The next stage was to choose the theme of the map. For inspiration on my theme, I went to real history. I wanted the level to be based in Italy as that is where a large chunk of Sniper Elite 4 takes place. Near the end of World War II Mussolini Was trying to escape Italy. North of Milan is a small village called Dongo. As Mussolini was attempting to leave the country he was stopped at this Village. Mussolini had with him some of his own Italian soldiers protecting him and a group of SS soldiers. To attract less attention, he ordered all his Italian soldiers to surrender and disguised himself with a Nazi uniform. He was eventually discovered in Dongo and killed shortly after. For the level I thought it would be a good idea to have the player assassinate Mussolini at Dongo although this isn't historically accurate it is close to reality. Additionally, having Mussolini disguised as a German soldier would make an interesting gameplay mechanic and something to think about when designing the map and objectives.

Having objectives for this level is something that I would need to think about as all Sniper Elite levels have targets and various options for extra tasks that can be done throughout the map. Because of time constraints I've decided to keep my level I'm designing here, as small as possible having limited objectives. But enough to demonstrate my design process.

At the beginning of the level the players first objective is to search two areas in the town where Mussolini could be hiding out. Mussolini will be in one of the two areas hiding in the back of a military truck. This is where he actually was discovered in Dongo historically.

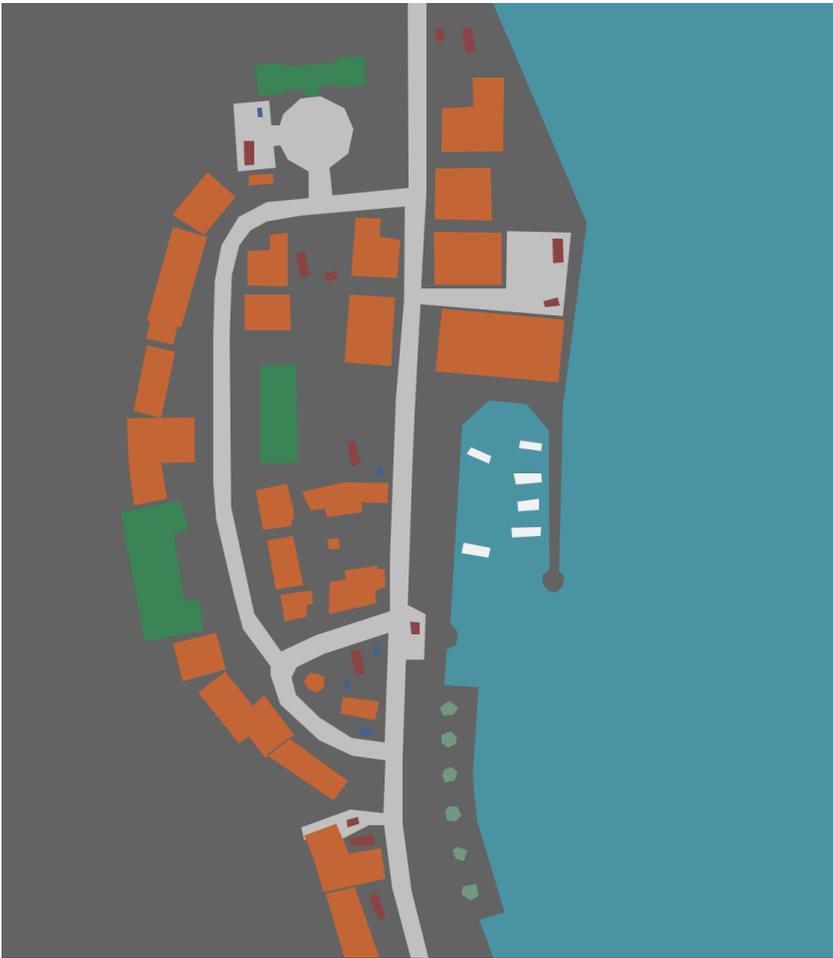
Below is my theme mood board. Like before I'll explain each section of the mood board and my plans going forward. Most of these pictures were from Google images of Dongo. This is the village I'm basing my map around so having actual pictures of the village are very useful. The images with the person icon in are to represent the height of the buildings. The icon was made to cover actual people in the image.



1. First image on my theme mood board is to represent that this is a village so therefore there will be buildings such as cafes, restaurants, churches and shops. Additional plan for the player to be able to enter these buildings. And they could be German soldiers guarding a local shop because their ammunition supplies are being stored there.
2. This second images are to represent the height of the buildings compared to the average size person this will help me when white boxing to know the sizes of buildings.
3. This third image is an aerial shot of the local park in Dongo. It Additionally has what looks like a manor house inside it. I like the idea of adding a manor house to give the player at the beginning of the level multiple locations where Mussolini could be hiding out. One could be the Manor house, and another could be a local building that the SS troops are using as a barracks.
4. These two images are to represent that's some of the architecture at Dongo have balconies. This will be perfect to snipe from and additionally perfect to put enemies that could be lookouts and can be shot from the ground.
5. The fifth image is a piece of architecture from the village I am keen to take as much inspiration from the actual village of Dongo as possible. But obviously recreated for the purposes of this Sniper Elite level.

Top-down map

My final task before beginning white boxing is to create a top-down map of the village. Starting with a 2D plan will make it far easier when it comes to white boxing. Below is what I created.



Orange shapes represent buildings green buildings I planned to make interiors for. There are red rectangles around the map these represent the enemy trucks smaller versions of these are cars and the blue versions of these are neutral vehicles.

White Boxing

Stage 1

After completing the initial planning stages I started getting a project set up ready for a white box. The software I'm using for this project is Unreal Engine version 4.26. At the time of writing this is the latest version of Unreal Engine. The first thing I did was get a new project going with a third person controller in it. Then I repositioned the camera too more accurately represent the camera positioning in Sniper Elite 4. Additionally, I added a sneak animation so that I could set up a height for the player to sneak and design accordingly. Having the ability to make my character sneak allowed me to test this. After I've done this I started on the terrain.

I knew the map was going to be in Dongo. Dongo is located next to a river with a mountain back drop. So instead of manually using the terrain tool I got the height map info from the actual location of Dongo and used this as a heightmap in unreal with the terrain tool it created the mountain range that the village is based in.

Next, I started planning out the size and density of the village. I heavily used reference images from Dongo itself. And throughout the project always had a Google Maps open of Dongo. Additionally, alongside this I planned out the main

buildings that the player would be able to enter and where objective points would be located. I also planned out the positioning of all the vehicles as Mussolini would be ultimately positioned in one of these vehicles, so I took time to make sure this stage was thought through. Below is an image of the initial white box.



The player would start on the left side of the village. At this stage there are three buildings colored green. This means I plan to give them interiors. The one to the furthest left is what I plan to be the local town Hall. Which the SS platoon are using as a barracks. The church is in the middle with a bell tower allowing the player to get a nice vantage point. And the furthest building away that's colored green I plan to make a Manor house. The barracks and the Manor house will be the two locations that the player will be asked to search for information about Mussolini. Having the church Bell tower lined up perfectly to the Manor house will help convince the player that Mussolini might be in the Manor house. But he will be located in the back of a truck.

The long red rectangular prisms are to represent trucks. And these smaller versions of these are to represent cars. Red cars and trucks are enemies. But throughout the map there are Additionally blue cars which belonged to the residents of the village. An enemy truck will regularly move round the road system transporting troops. This is so that the player will be able to set up an ambush using the mines.

I changed verticality for the starting location of the player I wanted the play to start on the high ground being able to get a good view of the whole village. Additionally, the Bell tower of the church is set to a height in which it is viewable from the majority of the village. This means it can be used as a visual point of reference to help players not get lost.

It is very important I get the truck with Mussolini in located correctly. If it is too close to the starting area of the level play my accidentally kill Mussolini before completing any of the objectives. So, Mussolini will need to be positioned on the other side of the village. One concern I do have is replay ability, having Mussolini in the back of a truck on the first playthrough might be a surprise but on return playthroughs if they know where the truck's location is the player won't need to complete any of the other objectives. To solve this, I will place three trucks in set locations. Mussolini will be randomly positioned in one of the three on every playthrough.

I could have it so that once the player has searched both locations a cutscene happens where multiple more trucks are transported into the village one of those will have Mussolini in it this would make it so the player would only be able to

kill Mussolini after completing the first two objectives. But my main concern with this solution is that it takes away the open-source style that Sniper Elite 4 has. I think the player will appreciate having the ability to just go after Mussolini if that's all they want to do. For example, in the Target Furer map where the player is tasked with assassinating Hitler. There are several side objectives, but the player is not forced to complete them if all they want to do is kill Hitler.

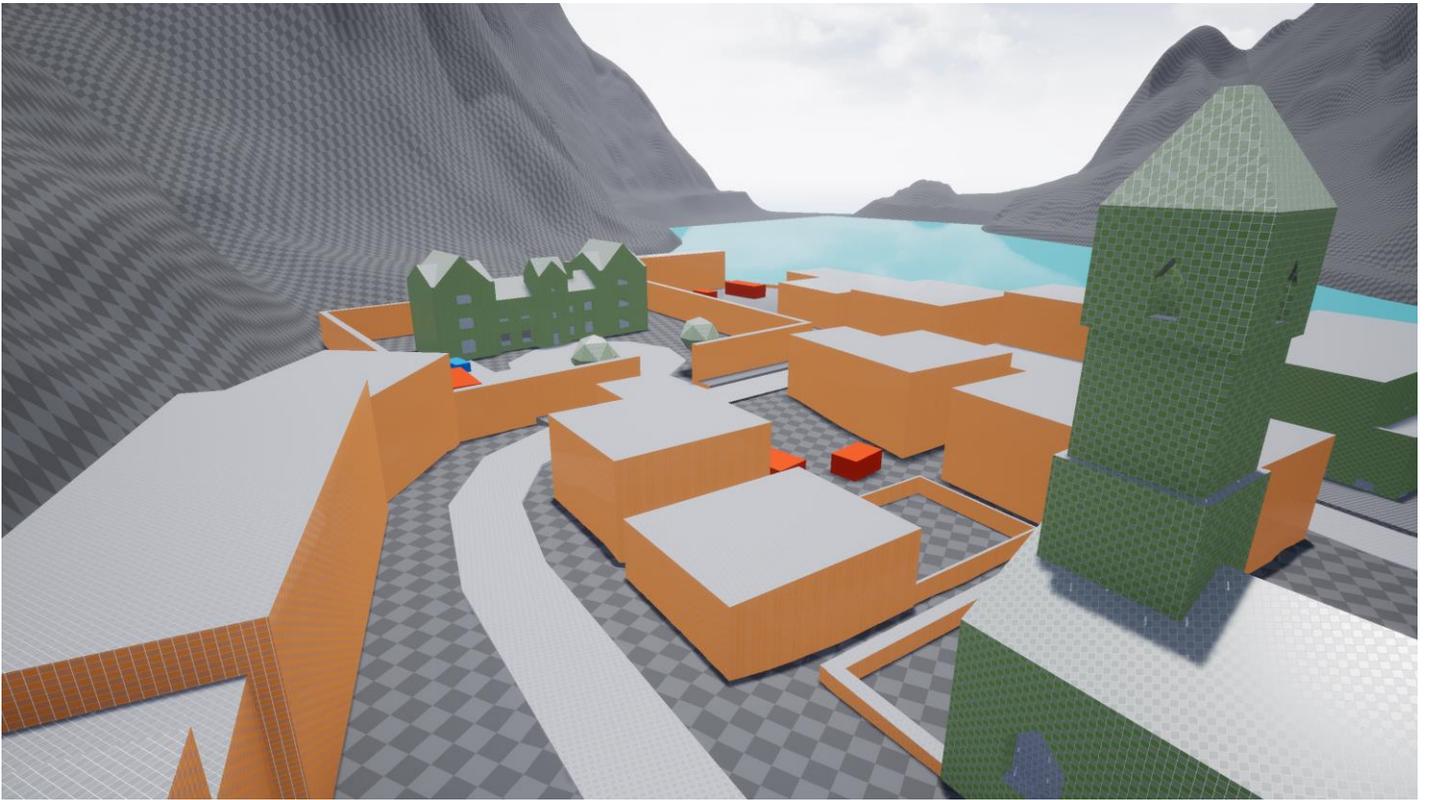
Stage 2

Stage 2 of white boxing consists of going back over the level and adding more detail into buildings for example adding interiors. The image below is from the same angle of the previous image but at later stage of the project.



The first thing to point out is that interiors have been added to the three initial buildings. But two additional buildings have had interiors added to them. Identified by their color being green. Ideally, I would like the majority of the village to have buildings with interiors but due to time constraints five is enough to demonstrate my ideas.

The harbor has now been filled with boats entries have been added alongside the dock with benches to demonstrate types of items that could be placed in that section of the map.



The Bell tower can be reached by the player going through the church. from the bell tower position the player can get a good line of sight on the Manor house and the soldiers that will be positioned there. Mussolini will not be positioned inside the Manor house, but some sort of officer will be so that the player feels it is not a waste of time to get to that position.

My plan was to add small keeps around the map to represent where soldiers would be positioned but due to a technical issue this project has had to be cut short. But Fortunately, majority of the main design features I intended to be part of the map have been added.