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FIRST REPORT

# The Tales of Talris



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# 1 Preamble

## 1.1 Introduction

The purpose of this report is to present the overall progress we have made since the submission of the book of specifications, meaning what each member of the group did, how we did it, and the different positive or negative aspects we may have encountered while working on it. We will also include the definitive task distribution and progression for the next presentation.

For now, our project's outline has not changed as it is still a first-person horror survival game. As indicated by its type, the player will have to run from the villain and the main goal will be to collect a number of different items before finding the exit. There will also be some mini-games to complete to unlock parts of the level. However, we have not decided yet about the difficulty management.

Right now, the project's overall progress is not going as planned as there were many things we did not take in account while making our first progression array. There are some tasks for which we are in advance, such as the website, which is mostly complete except for the content, or the game menu, which is also mostly complete as it only needs to be linked to the rest. And there are others for which we are late, such as the physics, the interface, or the artificial intelligence. And as for the multiplayer, we are almost done with the first steps. But because each element is linked, we have learnt to now cross performing on each other's task to increase productivity and help things go smoother.

## 1.2 Gameplay and Scenario

The basic premise of our game is set in current era but the setting is an old house to create a creepier atmospheric pressure on the player. But the multiplayer level will be set in a big sewer system.

Our heroine, named Hayden, wakes up with no recollection of her past or how she got here. As she explores this creepy mansion she learns more and more about herself. Our antagonist, Talris, is a creepy clown-like figure who we later learn to be a magician, is chasing Hayden. Hayden is stuck and she learns about the horrific curse of Talris. As Hayden slowly approaches the end of the game and collects pieces of the puzzle/story, Hayden finally understands that she's exchanged her body with Talris, (now you) and that's actually Hayden chasing you to get her body back.

The player has to now navigate through the mansion and a creeping figure will be following them. It will feature the classic jumpscare and creepy underlying music all throughout.



### 1.3 Task Distribution (New and Improved!)

The first task distribution we submitted for the book of specifications was made depending on what each member wanted to or felt capable to do. As we started to work on the project however, the tasks have been naturally re-defined as some worked on tasks other than what they were supposed to work on, and others just lost interest in theirs. So here is the final task distribution that we'll keep until the end of the project:

Tasks	ShinysArc	Nightear	A\$H	Shoppy
Gameplay	-	-	X	X
Game Menu	X	-	-	-
Interface	-	-	-	X
3D Models	-	X	-	-
Animation	-	X	-	-
Physics	-	X	X	-
Multiplayer	X	-	-	X
AI	-	X	X	-
SFX/Music	X	-	-	-
Video/Cinematics	X	-	-	X
Website	-	-	X	-

Table 1: X : Main / - : Helper

## 1.4 Progression (New and not-so-improved!?)

This was the expected rate:

Tasks	1st Report	2nd Report	Last Report
Gameplay	30%	80%	100%
Game Menu	50%	70%	100%
Interface	40%	60%	100%
3D Models	30%	70%	100%
Animation	20%	70%	100%
Physics	30%	60%	100%
Multiplayer	50%	80%	100%
AI	10%	80%	100%
SFX/Music	0%	30%	100%
Video/Cinematics	10%	60%	100%
Website	50%	80%	100%

And this is the revised look.

Tasks	1st Report	2nd Report	Last Report
Gameplay	25%	80%	100%
Game Menu	70%	90%	100%
Interface	25%	60%	100%
3D Models	25%	60%	100%
Animation	20%	60%	100%
Physics	40%	60%	100%
Multiplayer	50%	80%	100%
AI	10%	80%	100%
SFX/Music	0%	30%	100%
Video/Cinematics	0%	50%	100%
Website	70%	90%	100%

Table 2: Progression of each task throughout every report

## 2 Project Progression

### 2.1 Website

The idea was to make a website with a horror ambience using only CSS and HTML, so that is exactly what we did. We added a spooky soundtrack to the website to help enhance the experience. There are easy-to-access links on the website that direct us through the few pages we have, meaning: the *Game* page that describes what our game is like; the *Team* page that is supposed to describe the team and each team member; the *FAQ* page that will contain some questions about the game and our answers; and the Downloads page that contains all the links useful for the game.

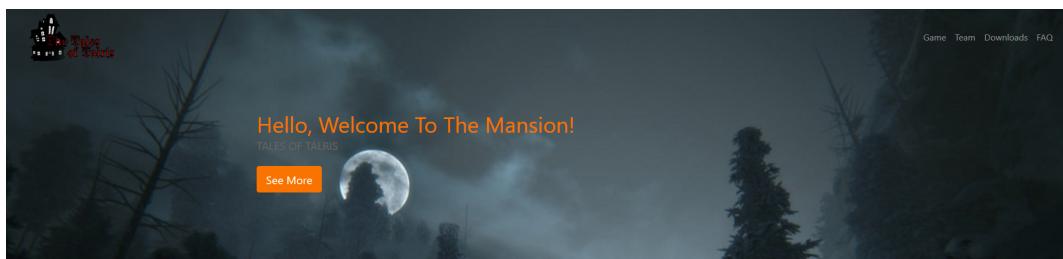


Figure 1: *Home page*

Each page follows the same structure:



Figure 2: *Games info page*

The buttons on the team page has a biography on each of us

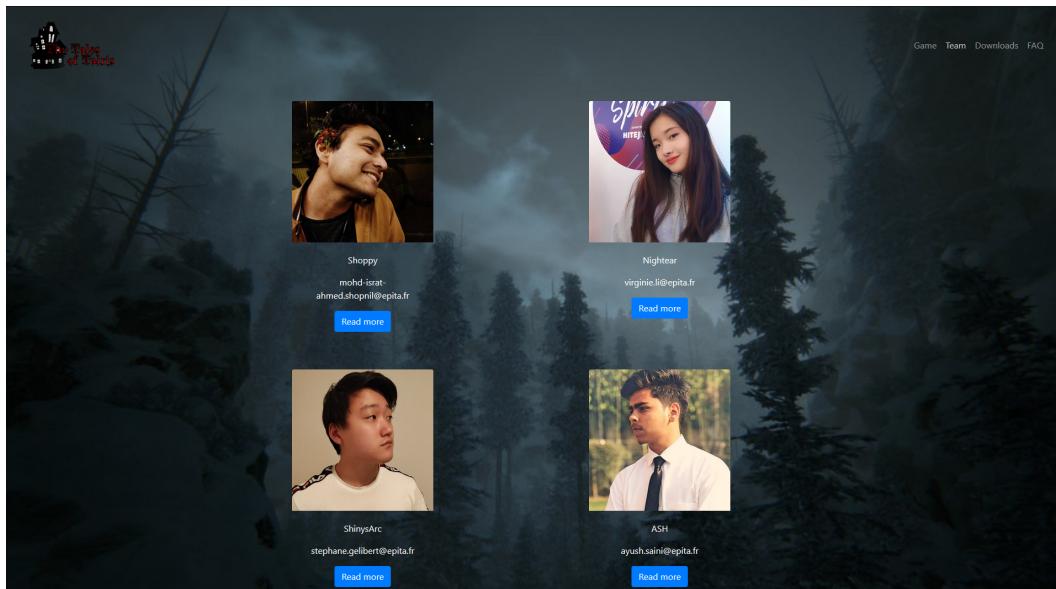


Figure 3: Team page

## 2.2 Game Menu

As of now, the game menu has been created, and can launch the multiplayer part, the settings menu and the player can quit the game. Doing in was not that hard, we had to create the background and the different buttons in it. Since we wanted a horror looking game, we mainly chose dark and red colors. After a quick draft, designing the buttons and logo on Photoshop was quite simple.

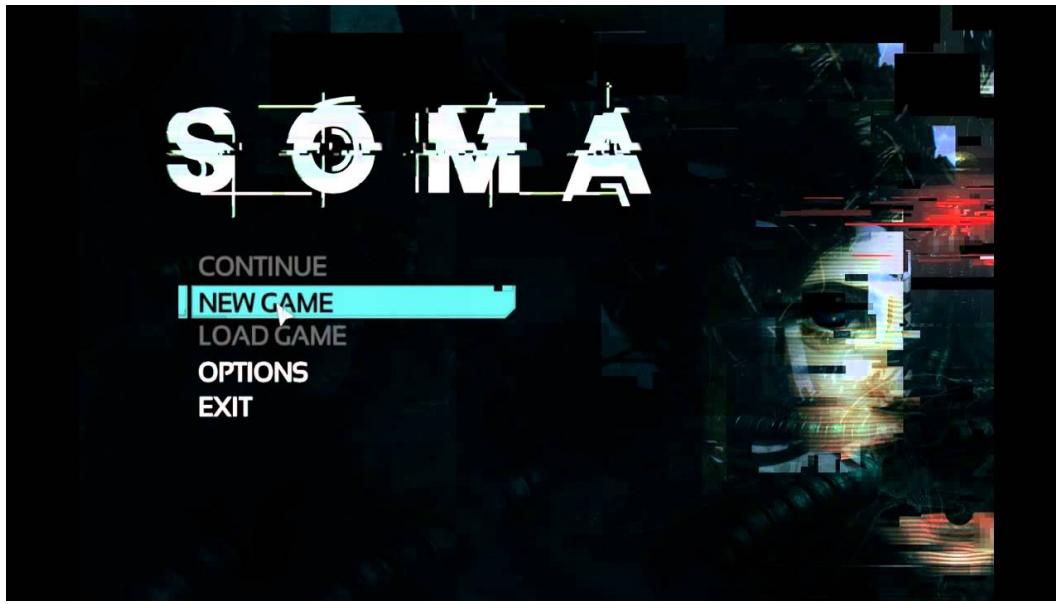


Figure 4: Soma (2015)

We played with the colors and the transparency of the images to make something smooth. We took inspiration from the horror game called Soma to make the game menu. And after designing the images, applying them to a canvas and attributing the different scenes we had was a few clicks away.

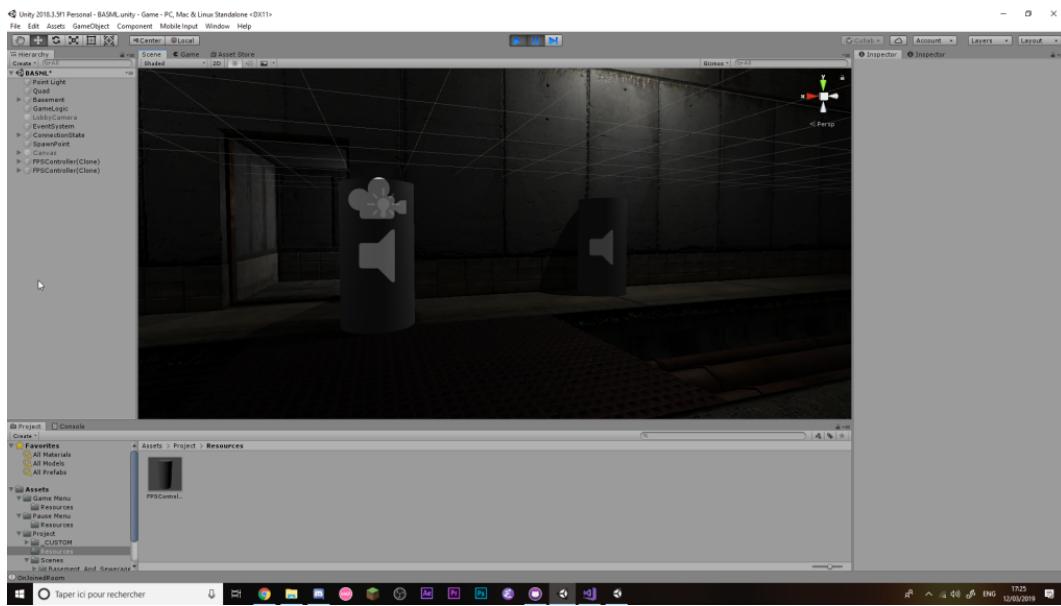




Figure 5: Our Game Menu

### 2.3 Multiplayer

In our Multiplayer, we somewhat have it working. We can connect to a Photon Network.

Figure 6: Multiplayer from *Scene* view

And can see each other running around in sync.



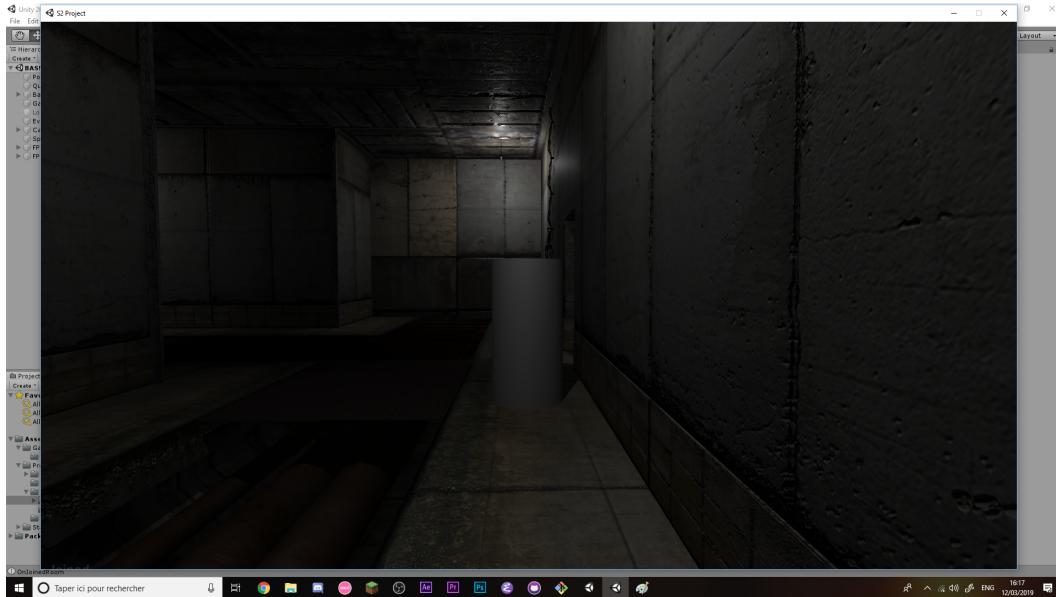


Figure 7: Multiplayer from *other player's* view

But to get to this point, we struggled a lot. ShinysArc and Shoppy spent countless hours running into errors, some that do not even concern networking. We once lost control of our player's camera. As frustrating as that was, we managed to work our way around them.

## 2.4 Gameplay

For this presentation, we have a working moving model (a cylinder), which can move around, sprint and jump with sound effects. With the camera following your mouse. A 3D model of our main character is of course to be added later on. Interactions have not been added yet, but is to be added very soon hopefully and then we can properly work on putting our story together.

## 2.5 Modeling

Since we are making a 3D game, we are obviously going to need a few 3D models for the characters of our game. At first, we figured using assets from the Unity store might be just fine. But we wanted our group project to be challenging, push our limits and discover new things along the way. Thus, we decided to make our own 3D models and Luxreel is in charge of this. That is where the software Blender comes in handy.

Blender is a free and open-source 3D computer graphics software used for creating films, visual effect, art, 3D models, 3D interactive apps but also, video games. It is widely used in the media industry. For example, it was used by the NASA for 3D publicly available models but also in different movies such *Spider-Man 2*, *Captain America: The Winter Soldier*, *Wonder Woman*, etc. Just like any other 3D software, Blender includes features like 3D modeling, UV unwrapping, texturing, raster graphics editing, rigging and skinning, fluid and smoke simulation, particle simulation, soft body simulation, sculpting,



animating, match moving, rendering, motion graphics, video editing and compositing. Some of those vocabulary words might sound like incantations or as if they came from another planet. But after a lot of readings and watching explanation videos about the whole process of making a 3D model, they started to make sense to us.

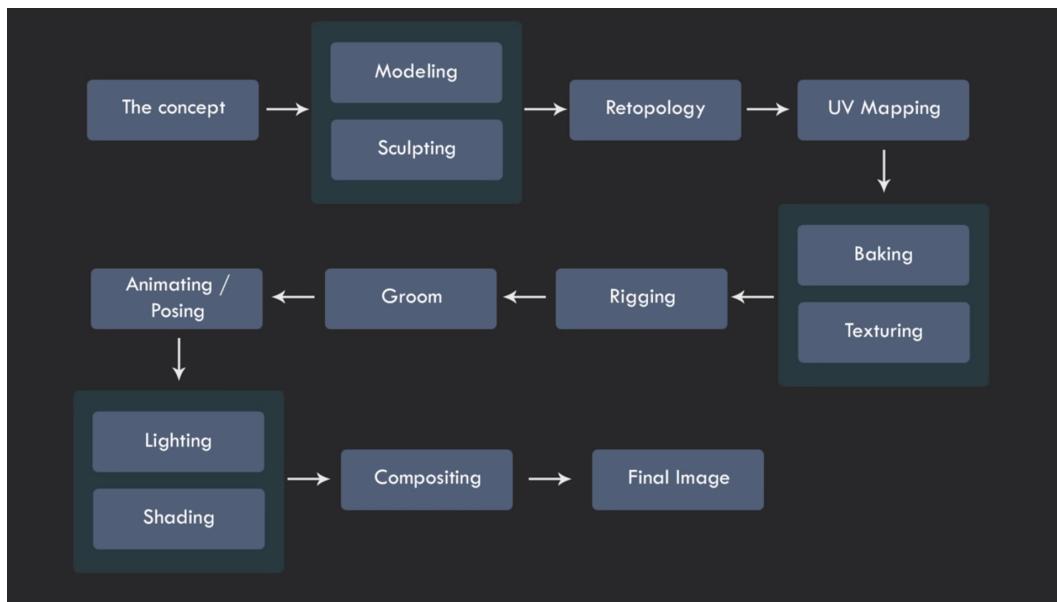


Figure 8: Diagram of every step of making 3D models

To simplify and without going in details through every step, this is what we have learned and done so far:

- **Concept:** In order to make a 3D model, you need to have an image of what you want to make in your mind, or better, have a picture of it if possible. Creating a 3D model without an image is not impossible, but our brain tends to forget/ignore all the small details even from an everyday life object we have often seen. That is why the use of an image is strongly recommended, and for that, Luxreel drew the two main characters of our game, Hayden and Talris, using different digital painting softwares, *PaintTool SAI* and *Krita*.



Figure 9: Hayden, the character that the player plays as

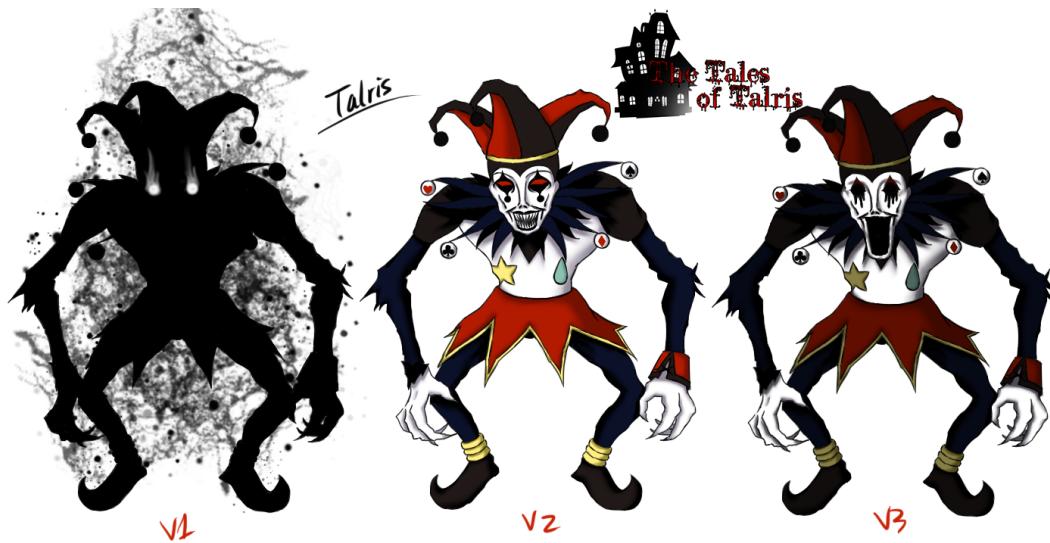


Figure 10: Talris, the monster/magician chasing us down

- **Modeling/Sculpting:** It is the process of developing a mathematical representation of any surface of an object in three dimensions. In the software, it is displayed as a two-dimensional image through another process called *3D rendering*. The model used a collection of points (called *vertices*) all connected by various geometric figures (called *faces*) such as triangles, lines (called *edges*), curved surfaces, etc. In order to shape and manipulate the digital object, the software generally offers us a few tools to push, pull, smooth, grab, pinch, scale and rotate it. It is probably the most important step of the process. As for now, this is the first 3D model we are experimenting with:



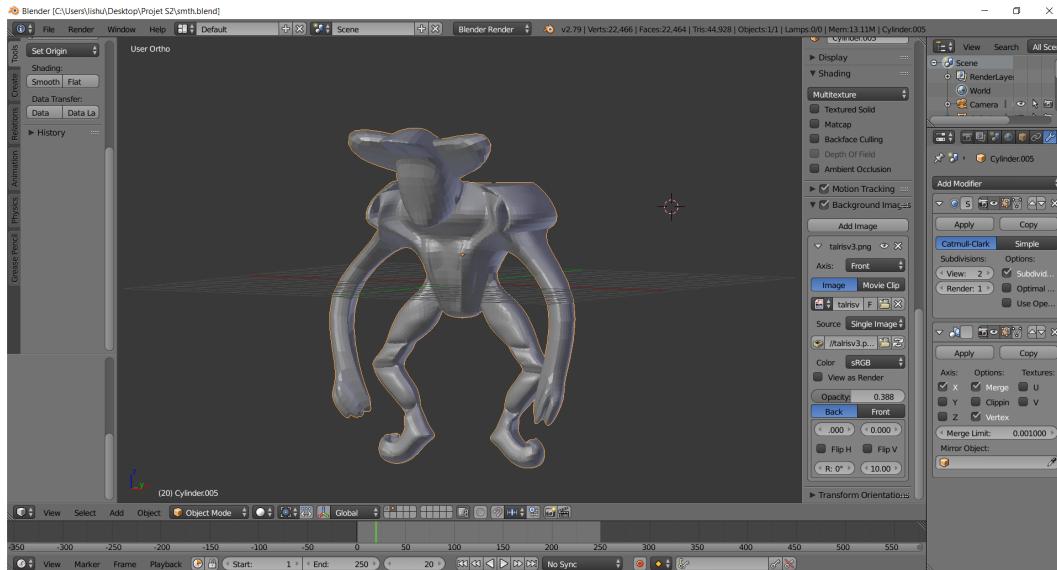


Figure 11: Experimenting with Blender

- **UV Mapping:** This is the process of turning a 3D surface mesh into a 2D surface. Exactly like when you were younger when you create the blueprint of a box and fold it together, you are creating the 2D blueprint/plan of your 3D model, so you can exploit it later on for texturing.
- **Texturing:** This is the method of defining all the details, surface textures and colors information on the 3D by wrapping and mapping pixels from a texture to a 3D surface by putting it on the 2D blueprint.



Figure 12: Example use of texturing

- **Rigging/Animating:** Rigging is basically turning your static character into a moving puppet you can control and animate around. It usually involves creating a *skeleton* (also called *rig*) that will sit inside your character to which the character's mesh is bounded to. Then, it will need to be weighted which is the process of making sure the mesh behaves as it should when we move the character around, basically gaining proper control over the deformation of the 3D mesh.

## 2.6 Overall Review

Remember in the book of specifications we wrote that we would strive in the future endeavors? Well I don't know about striving, but surviving is what we are attempting to do. Our first endeavor started with Shoppy's Laptop's motherboard having a mental breakdown, and by mental, I mean physical. And to this day is rendered useless. And a couple days later, ShinysArc got robbed of his bag which had his laptop. But still we managed to pull through. Other than the mental traumas caused. We've almost delivered what we promised.

There was a lot to learn and we learned mostly by trials and errors to complete what we have managed to do. We all agree that we should split the workload and do a bit every x time, so we are thinking about creating a schedule of some sorts. We also need to learn how to work separately in a more efficient way to manage our time more efficiently.

The Game Menu was very simple to do, as ShinysArc already knew how to use Photoshop and the other members of the group gave him some ideas on the design. And a few tutorials later (by a few we mean one) the Game Menu with working buttons was done! The Options Menu was also quickly set up since Unity already included many UI features such as sliders, toggles, dropdowns, etc, so we did not have to make it from scratch.

Modelling was by far the most time consuming. By watching a whole lot of videos we've learnt a whole lot about how much of a complicated mess modelling is. We now know the necessary steps and the time consumption of modelling. So we will pay close attention to it for the next time.

The website was fairly easy to make as the main coder already knew the languages used, meaning CSS and HTML. It took quite a long time, but it is mostly complete and functional as a simple, informative website. Although it lacks the content, which we intend to add little by little, it is ready to be used as it is. We may try to tweak it a bit, make it prettier or add more functionality to it later on.

Last but not least, we have a working and joinable network where multiple players can join and be in sync together.



## 3 Upcoming Updates

### 3.1 Website

As we have decided to make everything creepy and scary, same goes with the website. It is still incomplete and we are planning to add some animations as well and make it look a little more scary. so by the next presentation, we will have a more complete version of our website.

As we have put the background music in the website but it is set on auto-play, so we are planning to add a stop button or a pop up notification that will allow the users to stop the music if they want.

We may try to add jumpscare in it too but we still have to discuss about it as it can be annoying to some users if it is too repetitive.

### 3.2 Gameplay

We all clearly have a vision of the game in our heads, but to present it, we need more time. The Multiplayer's gameplay is described in the following sections. As for the Story Mode, for the next presentation, we hope to have a few interactive items such as cards that Hayden can pick up to progress the game. Once a certain numbers of objects are collected, the final door of the mansion will open up so that Hayden can escape, resulting in the game ending.

Some of these interactive items will prompt a text (or something else), that will explain the story and help Hayden jog his/her memories back to normal. We also plan on add few text dialogs to make Hayden talk.

We may try to add some Easter eggs inside the game that would be triggered by interacting with the environment, but that is just an extra idea for the moment.

### 3.3 Artificial Intelligence

We are yet to implement any artificial Intelligence. But we have a lot planned. I am sure programming our main antagonist, will be quite hell-ish. But we already have some ideas on how his movement could be implemented in Unity3D.

For the multiplayer section of the game, we will have multiple protagonists run away from Talris which will also be a player. The latter option implies that there will be no implementation of artificial intelligence. However, it implies that we will have to implement a team assigning script that will have the player spawned at different places of the map. Talris will then have to intercept the players before they go out of the basement.

Overall, Talris is supposed to keep chasing until some distance and then go



back to roaming around and then he might get triggered to start following when a new door is opened.



### 3.4 Interface

Well, we have started working on the pause menu, but it is not something we want in our final build. By then we will have a better and cleaner pause menu with proper buttons

As for the UI, we want it to look empty with just the cursor on the screen. We were inspired from horror chase games like Amnesia and especially Outlast.

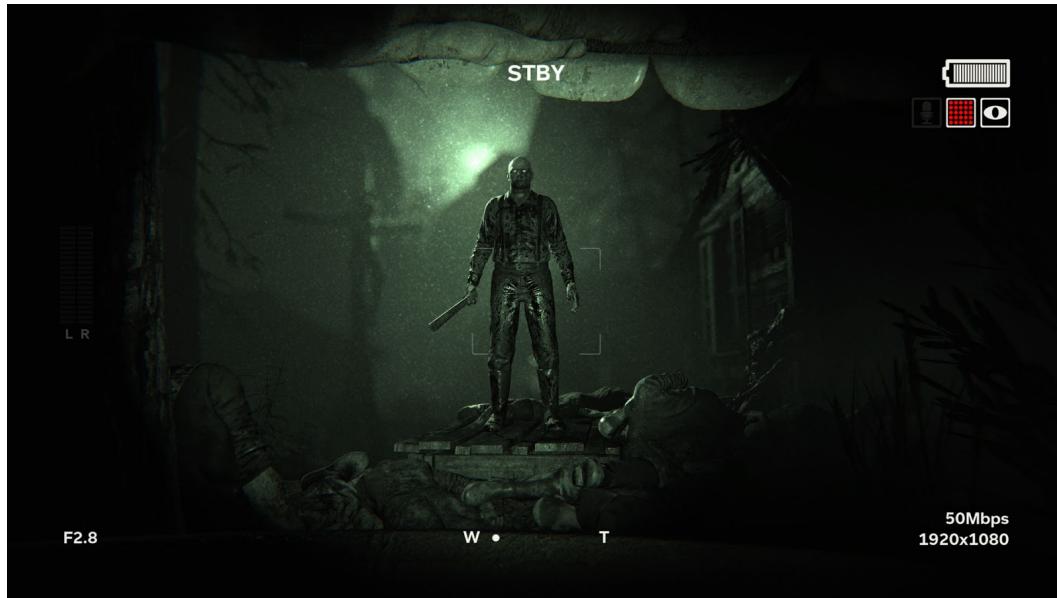


Figure 13: Outlast 2 (2017)

We also thought adding a sanity bar that could lower would be a good idea for the game, the player would see his 'sanity' get lower and lower and he or she could lose some capacities such as visibility and running speed for example. We also added an item bar at the lower right corner so that the player can see how many items he still has to pick up. And so, the final UI could look like this:





Figure 14: A possible look of the future UI

### 3.5 Multiplayer

Our goal with this game is for it to be replayable, and for that reason, the Multiplayer section is very important. We've set the groundwork and it's going unexpectedly smoothly. Well it did take us a whole 2 days of work to make it work.

By the next presentation, we want to accomplish a few things:

- First, a lobby system, where we can get multiple games going on at the same time.
- Second, game room rules, like for example, the max capacity of players, and many more.
- Of course it is planned to add interactability between players: we want the chosen villain to be able to kill the others.
- Lastly, we want to add the randomly generated number factor to choose who plays what by assigning different 'teams' of players.

### 3.6 3D Models

As you can see, for the current 3D model we are experimenting on, we only have the basic shape of it. There are still a lot of steps we need to go through such as mapping it onto a 2D surface, giving it textures, adding a skeleton to it and last but not least, animate it so it can do simple actions such as walking and running around and to make the player/monster's movements more realistic than using cylinders.

Right now, we have the basic shape of how we want our monster to look like.



But we will also need a 3D for the main character, even though the player cannot see it most of the time. However, if we manage to pull it through, we will be able to exploit the 3D models to make videos/cinematics we can implement in the game later on explaining the scenario of the game. We will also try to create variation of the main character's 3D model so multiple players can see and differentiate each other in the Multiplayer part.



### 3.7 Overall Review

Overall, we may have made progress on the game, we still have a lot to do: our multiplayer is to be improved, the singleplayer part is to be built from scratch and so we have to create the artificial intelligence of the monster and implement it in the game. For the next presentation, we will have a working interface and we hopefully will have useable 3D models for our characters.

We still have work to do before the next presentation, the first few levels will hopefully be playable by then.



## 4 Conclusion

In conclusion, we will have to start working as soon as the first presentation finishes. Our progress right now is behind schedule, but we will do our best to compensate every part we are lacking right now, so to present a playable game for the next presentation.

