# Project Report 2

June 4, 2019



# **B**<sup>2</sup>S<sup>2</sup>TR<sup>4</sup>F

Raphael.Silverio Antoine.Solé

Augustin.Brites Gaurav.Lokwani

# Contents

1	Inti	roduction	3	
	1.1	The group	3	
	1.2	The project	3	
2	Ove	er the book of specifications	4	
3	Progress by part 5			
	3.1	History	5	
	3.2	Design	8	
		3.2.1 Characters	8	
		3.2.2 Map	9	
	3.3	Gameplay	10	
	3.4	Network	10	
	3.5	Interface	11	
	3.6	Website	12	
4	Advanced and Delay 13			
	4.1	History	13	
	4.2	Design	13	
	4.3	Object interaction	14	
	4.4	Network	14	
	4.5	Interface	14	
	4.6	Website	14	
5	Planned progresses 1			
	5.1	Previsionnal Calendar	16	
6	Cor	nclusion	17	
7	Anı	nexes	18	

### 1 Introduction

### 1.1 The group

BAS<sup>2</sup>TRAF is a group project composed of friends, who came to know each other after coming to Epita, as they were in the same class. They did not have an idea of project before forming the group, but they did so because they thought that even if individually they were not the best, they would work better with people they like than with total strangers.

As they had already went through a semester together, they knew that they could count on the others and that once the idea was found, they would all work hard to transform it into something concrete. Unfortunately one of us (Thibault faucon) did not validate the S1 and he decided that he will go to S1# for the second semester, and now we have a new colleague in our group who came to us because his group has collapsed so we welcomed him, thus our group is now composed of Raphaël Silverio, Augustin Brites, Antoine Solé and Gauray Lokwani.

# 1.2 The project

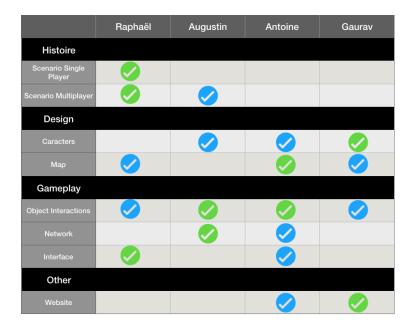
Episcape as its name indicate is an escape game happening inside the building of Epita in Villejuif. In this game the player will be a student who stayed late inside the building of Epita and when he finally decide to go home, he found out that he is locked inside. His goal will be to escaped the building and unfortunately for him and decide to studied the evening of the New Year Eve so he will have a time limit imposed otherwise he won't be in time to attend the party his friends organized.

There will be a mode Solo-Player and a mode multiplayer that will share similar gameplay, the difference being in the scenario and the mini-games and riddles that will be encountered. Each of the two scenario will separated in 4 parts that will be the 4 floor of the buildings. Once a player has clear all the events of a floor, he will be able to go to the next one and shouldn't need to go

back to a previous floor. The main map of the Solo-Player and Multiplayer mode will be the same, as they will both happened in the building of Epita in Villejuif.

# 2 Over the book of specifications

As we have a new member in our group, Gaurav Lokwani, we had to update our book of specifications, so we divided the work to make it possible to have everyone working on the project at nearly the same rate. Thanks to the first presentation, we also have been able to know a little bit better our desire and we knew what we wanted to work on so some tasks have moved and for example, Raphaël had to do the map but now it is Antoine's task. Here is the modified repartition of the work:



# 3 Progress by part

# 3.1 History

#### Raphael:

I approximately ended both scenario right after the first presentation because it was important and the group had to be focus on other important parts of the game so I wanted to end this because without the story, the group cannot continue to work and to translate the story into a true game. Then once it was done, I made pdf for my camarade to explain them the whole story.

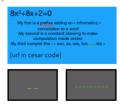
#### EPISCAPE Multiplayer scenario

A cinematic shows both players trying to get out of their rooms but they are locked inside and have to communicate if they want to get out, they both use phone call to communicate.

#### Player 1

A QR code glows, he have to scan it -> leads him on a website displaying this message « look at your light switches » -> Symbols appear one the wall and some screens are turned on:

#### Symbols:



Equation :  $8x^2+8x+2=0$   $\Delta = 0$ x = -8/4 = -2

Charade :  $e + \pi + ta = EPITA$ 

-> you give your answers to your camarade

Url: You find how the letters are shifted and you find the correct url



-> it leads you to a website saying :
« PIECES OF THE PUZZLE WILL BE
FOUND UNDER THE LIGHT SWITCH »
but there is nothing next to yours, so you
say it to your friend.

Once your friend has given you his answers, screens turn green with symbols :





#### Player 2

When the other one tells him he have to look at his light switch, he turns it on -> Symbols appear on the walls and some screens

-> Symbols appear on the walls and some screen are turned on:

#### Symbols:



 $^{\rm w}$  GO LOOK AT A COMPUTER ! » : It's a mystery number game, you have to find a number between 0 and 99.

CAPE: You listen to what your camarade told you, you go near the light switch, under it, there is a movable paving, you move it, there is pieces of puzzle and a key under it:



with the letters, you have a code, you give it to your friend -> the key does not work on your door

Once your friend has given you his answers, screens turn green with symbols :

0 0



A part of the multiplayer scenario

#### **FPISCAPE** Solo scenario

A cinematic shows the player, alone in a room, working on his computer, he look at his watch, it is 10 pm so he has to leave, but his school is locked so he goes back to his room...

A qr code glows on the board next to the player, he scans it and a website displays a text :

On the ground, under the qr code, a piece of paving seems to be movable, once it is moved, he finds a map + a safe with a padlock with inscriptions on it saying:

« A 4 Beats a 2 Cause 4 - 2 = 2 »

At the back of the map, there is a url changed in cesar code (each letters is shifted in the alphabet) once the player has found the correct url, he founds something like "https://www.stuff.com", he taps it on his cellphone and will arrive on a page displaying:

but someone threw me away where it stinks now I'm just like a dirty old socket

So the player has to understand with this " poem" that he has to find something near the trash, it's a key in fact and it opens the padlock.

In the safe now opened, he finds another key with the number 302 so he has to go to this room with the help or the map and once in the room, he see that the room is already unlocked so maybe the key has another purpose, he has to look in the room for other needs of the key and a light with his locked buy a padlock, he unlocks it and the light in the room turn into uv light, they reveal inscriptions on walls:

At the same time, screens of computers are turned on and display screens with blanks spaces that have to be filled with answers to different enigma:







You find another piece of paving that is movable, inside it there is pieces completing the puzzle EMECAPE: so thanks to the order of the pieces of the puzzle it gives 4 different possible:

13498756 63498751 15498736 65498731

one of those works and has to be written on the computer with 8 input

and there is also a paper where it is written "  $Bx^2$  - Ax+C=0 " this is solved thanks to the phrase wrote on the padlock,  $A=4,\,B=2\mbox{ and }C=2$  so the result of this polynome is X = 1, so you put 1 on the screen where there is only one input.

A part of the solo scenario

#### 3.2 Design

#### 3.2.1 Characters

#### Augustin:

I code the movement of the player and his camera during the game, I made some interaction between player and scripts like for example, the teleportation of the player to access at a mini games

#### Antoine:

I did the collider of the character once it was import on unity, it was quite tricky as there was separated part and for some reasons at the start even with the collider on it, a rigidbody, mesh filterer and renderer it was still going through the floor, but its collider was not! It took me some time to fix it.

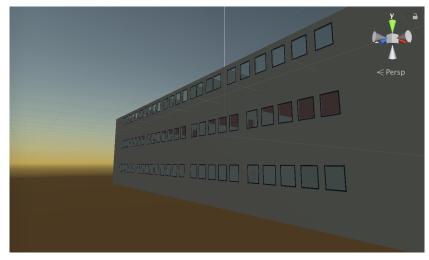
#### Gaurav:

I designed the characters which includes their clothes, skin, other physical features such as tongue, hair, muscles, skin colour. I added the rig in the player which basically provides it with movements at certain joints of the body. The aim of making a character is to have a humanoid(human like) character as the game is based on a person who is trying to escape the the building within a particular time frame. Creation of character in unity was a very hard task so i used Blender and MakeHuman but after designing the character I realised that the major problem was transferring the character from Makehuman to Unity. It took some time but i figured it out.

#### 3.2.2 Map

#### Antoine:

For the map, i did the 2nd and 1st floor in addition and the top of the building, i also added color to the three floor. In addition i did more objects like the computer and their screen, the board, the toilet, the sink and the two type of bin. Then i had to put them on the map and after filling the third floor i realised that i got a problem, it was far too long to load. It was due to the mesh collider that was to complex, so i did them again manually for each object. It was not very difficult but quite long and i needed to be creative as some colliders needed peculiar form.



The building



A room

# 3.3 Gameplay

#### Augustin:

I try to make a Mini-Game with a simple purpose: to calculate followings operations and we have the possibilities of 2 choices, if we have the good answer, we earn a key that will help to open doors etc...

#### Antoine:

I made the door to be able to be open on click, a chest has similarly been done.

#### 3.4 Network

#### Augustin:

I had some problems with the multiplayer mode, especially with the player and the script. They work very well in Solo mode because the player is already here and he is unique, in contrast of the multiplayer where the configuration of player isn't the same: The player 1 spawn to one place and it is a this time that we have to put in scripts.

#### 3.5 Interface

#### Raphael:

Right after the presentation, I knew what were the problem, some button weren't clickable and I made them clickable (not all for the moment) and I also added the option to have a pause menu, so when the player click on echap it pauses the game and you have access to the main menu and to the option menu.

Here is a look at the pause menu:



Pause menu look

#### Augustin:

I made the design of the inventory (Panels, Icon..) and I did scripts that we can take an object (as long as it is interactable, it doesn't work with every object), and put it in the inventory. I also did when we use the object that it is remove from it and use the good way. I can speak you about the locked door: with scripts, I made a door that can't be open without a key in the inventory, but if we have a key, the door is unlocked and we can open or close it freely. I had troubles with the inventory because of the correlation

between scripts and the real interface for exemple when we take an object, we need to see it on the inventory. So I have to do some design, create a class "Item" with some sprite image for the icon for eg and associate everything.

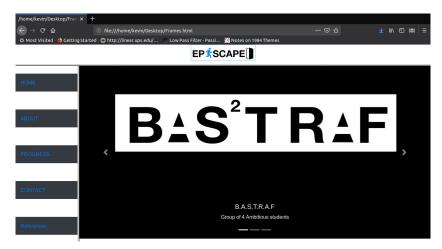


Inventaire look

### 3.6 Website

#### Gaurav:

I started the website from scratch and I am adding animations to it. i saw different layouts available online but this website is purely coded by me with the help of Bootstrap , HTML, CSS. I will keep updating the website till the last presentation.



The website

# 4 Advanced and Delay

## 4.1 History

The whole story is done, for both multiplayer and single player, now all that can be done is adapting those story to our abilities in coding because all of Raphaël's ideas aren't possible, for example the pone conversation between both players is complicated, we may think it another way.

# 4.2 Design

#### Characters:

Initially there were no characters for the game but now we have one and I don't think that there is any any delay regarding this part of the project as we are completely on time and we desire to get it done completely by Final Presentation.

#### Map:

The map has well progressed since last presentation, there is a slight delay because the ground floor is not done and it should have been, otherwise all the objects needed for the map have been done and it only missed some that will be created for the gameplay.

### 4.3 Object interaction

The majority of the Object Interaction is done, we know how this work, we only need to create some others scripts to achieve others things like minigames. We now have to implement the gameplay.

#### 4.4 Network

Network is done since the last time, there as been no addition to it.

#### 4.5 Interface

The Inventaire has been added by Augustin and the Pause Menu by Raphaël. Now the only things to add are maybe little adjustments in the option menu but that is all.

#### 4.6 Website

Website is started after First Presentation and it is on time but there would be some changes in the website as work goes on because it is constantly upgraded of any progress we have done and with the updation we also look for substantial graphic advancements in the website.

# 5 Planned progresses

#### History:

All that has to be done is adapting Raphael's ideas to what is really possible thanks to the time that is given and our abilities to code.

#### Network:

It is already completed and thus, there is no planned progress for it.

#### Characters:

One more character would be added before final presentation and it will be a perfect humanoid character with all the features of the human, we will try to have some more features with character(it is not sure but it is a prediction) depending on the availability of time.

#### Map:

For the final presentation the ground floor need to be done, otherwise all is already done and there will be only the addition of small object for the gameplay.

#### Object interaction:

We have to adapt the scenario into a real game so we already have the ideas, all we need now is to use some program that we already made and apply them to many object and create a real game.

#### Interface:

For next presentation, we have to be able to modify the language and the volume and to use objects from the inventory as well as being able to see the map.

#### Website:

The website has to be done for next presentation.

# 5.1 Previsionnal Calendar

	Presentation 3
Histoire	
Scenario Single Player	100 %
Scenario Multiplayer	100 %
Design	
Caracters	100 %
Мар	100 %
Gameplay	
Object Interactions	100 %
Network	100 %
Interface	100 %
Other	
Website	100 %

# 6 Conclusion

This time, we worked right after the presentation and did no loose time waiting for the game to be made on it's own, we worked on it as a group, everyone had precised tasks and we completed them nearly entirely according to the book of the specifications and the previsionnal calendar.

The motivation that we had after the first presentation has raised and now we are ready to finish this game within the next month.

Our team is brazed and we are motivated.

# 7 Annexes

### Illustrations Table

Figure 1: New Repartition of the work p.4

Figure 2: Multiplayer scenario p.6

Figure 3: Single player scenario p.7

Figure 4: The building p.9

Figure 5: A room p.10

Figure 6: Current look of the pause menu p.11

Figure 7: Inventary look p.12

Figure 8: The website p.13

Figure 9: Previsionnal Calendar p.16