

# Book of Specifications - Episcape

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## BAS<sup>2</sup>TRAF

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# 1 Introduction

## 1.1 Group Presentation

Bastraf 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.

## 1.2 Members

Raphaël has chosen during his last high-school year, to make ISN (Informatical and Numerical Sciences) so he already made a project (creating an IA able to drive on a circuit on Unity) with Python so he already has some experiences in programming. He participated to already 5 real-life escape game so he has some experience and can help the group on the conception of the project.

Augustin chose, as Raphaël, the ISN course. He had a project in Arduino of a robot which is following a black line on the ground. It was a great project with 3 others friend within 4 months. I hope I will bring a little bit of my experience to the group.

Thibaut is the only one of the group who had chosen maths. Despite of his lack of experience in those kind of project he can bring a new point of view and can explore new way to solve problems.

However he has created on his own for classes project a game in python.

Antoine Solé : I have started to take interest in the programmation when i was in class of '3ième'. But at that time i did not have the motivation to seriously start learning it and since then i only made small scale personal project until last year where i had to realise a game with my specialization ISN and my class of SI. At that time i realised that it could be very difficult to

### **1.3 Logo**

Raphael was the one who did the logos. When he first start thinking about the two logos, (one for the group, one for the game), he wanted something simple and not flashy, just enough to make everyone understand the goal of the game. So he wrote down the name EPISCAPE and asked himself what would give the best comprehension of the idea of the project. He then thought about a running man and put it at the place of the 'I' and since this man wanted to go out, he put an open door at the end of the world, and thus, EPISCAPE's logo was born.

Secondly, for the group's logo, he took each first letter of our names and second names, the vowels are like "negatives" and both S for "Sole" and "Silverio" are regrouped and the S is squared to mean that there are two 'S', it gives BAS<sup>2</sup>TRAF and you can see the logo at the top of the booklet of charges.

## **2 Project's presentation**

### **2.1 Presentation**

#### **2.1.1 Origins**

EpiScape is not the first idea that came out from our brainstorming, we first had ideas about a game similar to Street Fighter or Smash Bros, then we debated around it for around 2 weeks, and at some point the idea of an es-

caped game emerged and seduced everyone. But we thought that a game in the style of 'The Room' was not good as we wanted something more similar to the one existing in real life. Then we thought that we should first decide where the game will happen, and since it was a game that will be made while we are at Epita and that would stay inside it forever, then the game could happen inside too.

### **2.1.2 Nature**

EpiScape is a game in which the player-s will have to escape the school by resolving riddles and deducing his way out. It takes place inside Epita Villejuif's campus in a 3D environment.

### **2.1.3 Goals and Interests**

The goal is to make a different kind of escape game, one in which we can have interaction with the setting and modify it, contrary to the majority of known escape game. It will also be different from general escape game as there will be mini-games inside the game that will have to be played, so that there will be more action to do inside the game.

### **2.1.4 EpiScape among video game's history**

EPISCAPE is meant to be part of this type of video games called "Escape the room" created in 2001 with Mystery Of Time And Space and has been popularized by Crimson Room in 2004. Nowadays, plenty of game of this type exists as The Room or, in the way that you have to solve riddles and puzzles to, we could talk about the license Uncharted but Episcape does not contain any fights.

## **2.2 Functionality**

### **2.2.1 Contextual Reminder**

The player will incarnate a student who studied late inside Epita and when trying to go home, he found out that he is locked up inside. He will then have to use his brain to resolve the riddles and minigames spread out inside the building to find a way out. Because it is the New Year Eve, he will have to get out within a time limit otherwise his friends will start the party without him and he will be quickly forgotten.

### **2.2.2 Game's functionality**

There will be two modes, solo player and multiplayer. Each one with its own map based on the campus of Villejuif. For the multiplayer mode some of the minigames will be changed to be playable only with two or more people and the time limit will be decreased as the players should be able to gather the objects and find the solutions faster.

Inside the game the player(s) will be able to do 6 types of actions :

- Movement : The player will have a 8-directional movement and will be able to jump and crouch. It will be in first person point of view and the forward direction will be set to where the player is looking.
- Inventory : The player will be able to pick up some object and will have to stock them inside an Inventory. There will be a maximum number of object that the inventory can contain and when the limit is reached the player will have to deposit an object of his inventory to pick up another. The object of the inventory will be displayed in a bar at the bottom of the screen (In the style of Minecraft) so that he can know what he has everytime.
- Craft : There will be a craft system so that the objects can be assembled together. Not every combination will be possible and it should be possible to de-craft an object to obtain its components.
- Interaction with the settings : Most components of the settings will

be movable. Some of the components will be breakable while other will not permit interactions other than the physics (wall, floor). There will be minigames implemented in the settings and there will be interactions with them (at least to start them).

- Time : A key bind will be assigned to look at a watch(starter item) and the time limit will be said at the start of the game (for example time limit 23h30, start of the game 22h30)

- Map : A map of the building should be retrieved at some point of the game, a key bind will be assigned to it and it will not be counted as an object in the inventory.

To make sure the player does not stay blocked too long on one minigames in particular, he will be able to ask for three hint free, and for more hint but with a time malus. There will also be a unique NPC in the game, Lola, she will posses an IA and will sometimes help the player to find clue and at others time forced him into minigames or block his way depending on his advancement in the game.

As for the graphical interface, there will be 3 :

- The starting screen : Here the player can select solo or multiplayer mode, access to the config or quit the game.

- The in-game screen : Here the player will have the first person point of view with nothing more than the inventory bar at the bottom of his screen.

- The in-game screen(escaped bouton) : Here the player can select to return to the main menu or quit the game, resume his game or modify the config. There will be no save button and the game will not paused when the player open this interface.

Inside the config, the player will be able to modify the volume of the sound effect and the background music, change the language( french, english, and some others), modify the size of the inventory bar and finally change the shortcut.

### **2.2.3 Running the game**

The purpose of this game will be to give a totally new and different experience of this kind of game by merging the world of ‘escape game’ and the ‘world of video games’ into one.

The game will be divided in several small challenges. Help our student resolve small them to find his way out. On your journey to freedom hints for your escape will be founded and will to leave the school and be present for new year eve. You will be able to experience some side quest and random events that could change the game and make it go towards a totally different path.

Unfolding of the game : you will evolve in a school environment where you have to exit the building as fast as possible. First of all a timer will be set at the beginning of the game and if you do not exit in game you will miss your new year eve party.

Each room that you explore will have a challenge for you to solve. Solving it will allow you to go to the next step. Failing could make you lose some times and time is key in this type of game. And if you find one challenge too hard you can ask for help freely yp to three times then further help will come with penalty. If by any chances you solve every mystery and riddle and find an exit door you will be raised as one of the brave and most promising students of EPISCAPE.

### **2.2.4 To Go Further**

There are a lot of ideas that can be implemented but since this is the first time for our group to work on a project of this scale and thus our working speed and capacity are unknown, it is not sure if all of them can be implemented before the deadline. One of them is to randomize the minigames so that the map are not known by heart after one try. Another one would be to expand the map so it not only take the building VA but also the court and the building VB. Lastly, it would be to enable the customization of the character, with four pre-made model based on the member of the group.



## **2.3 Technical and methodological aspects**

### **2.3.1 Material Means**

Epita gives access to many computer 24/7 and each of us have a laptop and a computer, coding logiciel such as Rider,Blender and SublimeText are free so the coding of the game and of the web page will be handled without problems. Unity will be our main software to code and design the game.

### **2.3.2 Intellectual Means**

For this project, intellectual means are basically every books that we could use as well as some web site or youtube channels that may help us, but also our Algorithm Teacher and our ACDCs. We can also always ask for help to our friends or family if we lack inspiration to create the riddles and minigames.

## **2.4 Economical Aspects**

We do not have many economical aspects to think about for our game but we know for marketing and communication. We want to make a video game box with a cd, and maybe four t-shirts for our presentations and finally, knowing that our game will be about escape games, we will do one in real life, it will have two goals : first, it will show us how an escape game works and, secondly, it can be seen as team building. Because during an escape game, we have to communicate and work in group, as well as during the conception of our project.

### 3 Division of the work

#### 3.1 Representation of the division of tasks

	Raphaël	Augustin	Antoine	Thibaut
Histoire				
Scenario Single Player				
Scenario Multiplayer				
Design				
Caracters				
Map				
Gameplay				
Object Interactions				
Network				
Interface				
Other				
Website				

Delegate   Substitute

## 3.2 Previsionnal Calendar

	Presentation 1	Presentation 2	Presentation 3
<b>Histoire</b>			
Scenario Single Player	70 %	90 %	100 %
Scenario Multiplayer	70 %	90 %	100 %
<b>Design</b>			
Caracters	30 %	60 %	100 %
Map	50 %	75 %	100 %
<b>Gameplay</b>			
Object Interactions	35 %	70 %	100 %
Network	30 %	60 %	100 %
Interface	50 %	80 %	100 %
<b>Other</b>			
Website	20 %	50 %	100 %

## 4 Conclusion

To conclude, we can say that the goal of BAS<sup>2</sup>TRAF with this project is to really learn how to work as a group, and on a project of a larger scale than what we already did. It will give us some very valuable experience for our future project, which should always be done as a group. And to allow us to grow to most, the game must also grow the must, as we will progress alongside it. That is why we will do our best so EPISCAPE can reach the highest point possible.