

ULTIMATE FIGHTING CHICKENSHIP

Book of specifications



TEMPÊTE GROUP
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1 Introduction

1.1 The roots of TEMPÊTE

The beginning of TEMPÊTE

TEMPÊTE is a video-game development studio born in late 2018. It is the union of three EPITA students from the same class INT2: Philippe, David and Charlie. We are first and foremost a group of friends which loves to imagine and create. Creating things pleasures and amuses us. As TEMPÊTE members, we are forever curious to see to what extent we can fulfill our atypical goals and carry out our peculiar ideas. To make it simple, we are our first and most devoted audience, therefore we believe the creation process is part of the enjoyment. Thus, the goal of the project is to share our games with a broader audience. The project in our opinion represents an opportunity to highly improve our skills and leave our comfort zone.

Through this presentation we introduce our first project: *Ultimate Fighting Chickenship*.

The members of TEMPÊTE

TEMPÊTE has four members. Everyone is versatile, creative and hard-working: those qualities ensure the good listening of everyone's ideas and thoughts about the project. Furthermore, everyone brings a singular asset to the studio. The members are young yet willing to improve their programming skills and their teamwork and to enhance their creativity.

1.2 The idea of the game

Ultimate Fighting Chickenship is a PC fighting game where two characters - chickens - fight each other until one's health is reduced to zero. The gameplay we aim for is similar to *Street Fighter*'s and relatively close to classic fighting games where the two foes are facing each other. However, we want to enable the players to move, attack and jump faster than what *Street Fighter* allows the players to: the goal is to enhance movements and agility. This would be our contribution to the evolution of fighting games.

A major aspect of the game is that it aims to be fun and is, thus, purposely "fatuous". The idea of taking chickens to fight each other illustrates this aspect very well: as we want this game to be multiplayer oriented, we are making sure it is a game a group of friends could play to have fun and relax. One should not be surprised by the unexpected features or artistic choices of the game.

2 Ultimate Fighting Chickenship (UFC)

2.1 A short history of fighting games

The first game of the genre is *Heavyweight Champ* (1976), a two-player game that was released for the arcades. The game has a simple black and white color palette and consists of two characters shown on a two dimensional plane. The players have a very limited set of attacks at their disposal: each character can shoot high and low punches, the goal being to knock out the opponent before they knock you out.

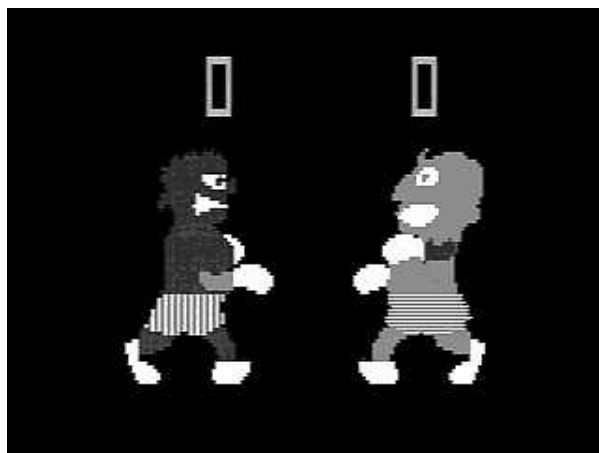


Figure 1: *Heavyweight Champ*, the first fighting game

The genre as we know it today is the result of an evolution of fighting games. The first game to introduce less crippled movements was *Karate Champ* (1984) which marked the beginning of the popularization of fighting arcade games. Then, *Yie Ar Kung-Fu* (1985) introduced a system where every character has their own fighting style.

The first major milestone in the evolution of the fighting genre is the *Street Fighter* series, specifically *Street Fighter II* (1991) which quickly became popular thanks to its great variety of characters and attacks, as each character has as many as 30 unique moves / combos and several special attacks. The game also gained popularity thanks to its wide availability on arcade as well as home gaming consoles.



Figure 2: *Street Fighter II*, the most popular fighting game

As time went on and technology got more advanced, newer games similar to Street Fighter appeared, the most important in the scope of our project being:

- *Mortal Kombat* (1995), for its usage of violence and special attacks (*fatalities*),
- *Super Smash Bros.* (1999), for its fast-paced gameplay and percentage-based damage mechanic.

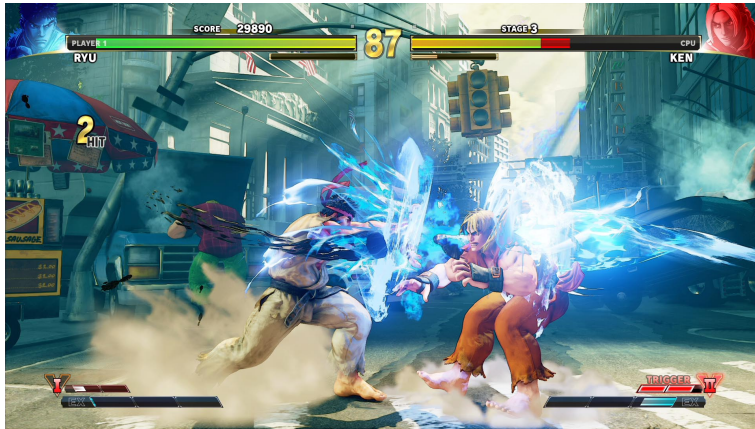


Figure 3: *Street Fighter V*, the most recent Street Fighter game

2.2 Artistic direction

2.2.1 Philosophy

The main guideline we wish to follow is to keep the visuals simple and uncluttered. The assets will consist of simple colors, with photo-realistic touches. The final goal is to get a consistently "wacky" style, with inspirations from the *Raving Rabbids (Les Lapins Crétins)* games and the *Deadpool* movies. UFC is meant to be funny and unexpected. Moreover, we wish that not only the gameplay, but also for the visuals, sounds and music to play a fair part in the player's enjoyment.

2.2.2 Characters

The game will feature a various selection of characters, mainly parodies from pop culture. Here are some of the characters that will be featured in the roster, or may I say the *roaster*:

- **Poule Pogba**, with soccer related abilities,
- **Git Poule**, with IT related abilities,
- **Krispoul**, with godlike computer science related abilities.

2.2.3 Maps and sounds

Maps

We intend for some characters to have their own thematic map:

- **Poule Pogba**: a soccer field,
- **Git Poule**: a shell environment,
- **Krispoul**: the famous green screen background from the algo MiMos.

Will also be featured regular invented maps with their own atmosphere and specific characteristics.

Sounds

Sound effects, musics and songs will entirely be homemade. Characters' noises, screams and voices will be dubbed, musics composed and sang: we are really involved in the artistic part of the project and under no circumstances would we want to delegate this task.

Each character will have an original voice including numerous lines: a handful of catchphrases during fights, an introduction line, a taunt line in the case of a victory, a sore loser one in case of defeat and many others. Furthermore, the lobby will contain a dynamic voice-over guiding the player through the interface.

Music represents a sizeable part of the artistic creation of the game. It accompanies the gameplay and supports the experience with an intense acoustic background. We aim to compose various songs from different genres of music: an epic style main theme and an alternative theme. Few characters will also have their own theme of different genres:

- **Poule Pogba**: an afro-trap beat,
- **Git Poule**: a 16-Bit melody,
- **Krispoul**: a Metal track.

2.3 Gameplay

2.3.1 Combat style

As in every game, characters will have statistics. Those statistics are :

- **Speed (SPD)** directly transposes the character's ability to move on the map, it also defines the speed of jumps,
- **Jump (JMP)** expresses the height a character can jump,
- **Attack (ATK)** shows the ability of the character to deal damage, it will be weighted by the defense statistic to compute the damages dealt by an attack on a specific character, damage can be dealt by basic attacks or special abilities.
- **Defense (DEF)** complementary to the Attack statistic as explained above,
- **Health (HP)** transposes the ability of a character to sustain damages. It is designed by a bar containing a certain amount of Health Points (HP). These HP can be reduced by the exact same amount dealt to a character by a specific ability. Health cannot be recovered during a fight.
- **Stamina (STM)** expresses the amount of energy a character has. Each ability uses a certain amount of Stamina Point and the player can only use an ability if its character has enough stamina. It prevents the player from abusing some abilities. Unlike Health Points, Stamina Points can be recovered quickly during a fight.

Naturally, abilities will also have their own particularities: in addition to a unique animation, it will have an Attack statistic, a number of Stamina Points required to use it and a **Range (RAN)** that shows the scope of the ability. Abilities can only be used one after another.

To summarize the possible actions in the game, the player can:

- Move Right and Left and run in those directions,
- Jump and realize a double jump,

- Get down,
- Attack with a standard attack. There will be different animations along with the position of the character (in the air, on the ground, moving and standing),
- Attack with special abilities, two different for each character, one when standing and another one when moving,
- Shield, a move that increases the defense of a character by a certain coefficient (specific to every character).

Another objective is for the characters to have their own specific gameplay and playing style. There are 3 types of characters:

- **Balanced:** Normal running speed and strength (attack power and health),
- **Lightweight:** Above average running speed and less strength,
- **Heavyweight:** Below average running speed and more strength.

We can think of them as "classes", that players will be able to learn and master, adopting their "main" character. Those classes define the statistics of Speed, Attack and Health of the characters yet each one will have unique.

An important feature of the game is to feature faster and more fluid movements, as it already was mentioned. Unlike the Street Fighter franchise, we want to make moving a major part of the gameplay. Movements will be wider, more vivid: enhanced! It breaks with the traditional pattern where characters can only move slowly and do superficial jumps. As maps will be wider, players will be enabled to achieve double jumps and run on a bigger surface. This functionality creates new strategies in both defense and attack and enables the possibility of turnarounds: players are free to flee!

2.3.2 Combos and Ultimates

Combos are a sequence of attacks and abilities. Several combos will be defined for every characters but each fighter will have unique combos. A combo deals additional damage and/or status alteration like damage over

time (*i.e* the player continues to lose a certain amount of health points per second over a certain period of time).

Each of the characters will feature a unique Ultimate Attack. Each Ultimate Attack will be composed of different animations and sound effects in order to show the uniqueness of the characters. The Ultimate Attack is designed by a bar filling naturally overtime. Players can also chain combo attacks to fill up their Ultimate progress bar. Once full, the player will be able to use their Ultimate Attack. As every Ultimate is unique, they will be of different types: it can be an enhanced attack way stronger than the regular abilities, a boost of every statistic of the player for a certain amount of time, a heal or other status alteration abilities, etc.

2.3.3 Main menu and lobby

The game will launch into a main menu where players can choose their preferred game mode (single player or multiplayer). Once the mode is selected, players will be brought to a lobby where they can select their characters and modify gameplay parameters. Modifiable gameplay parameters will include:

- **Round maximum:** Best Of 3 (first to two rounds) or Best Of 5 (first to three rounds),
- **Round timer:** Time before the round ends in a tie (neither player gets a round),
- **Damage modifier:** A parameter to set the damage multiplier (defaults to 1x).

3 Means and task distribution

3.1 Technical aspect

The project will be brought to life with the following software:

- **Blender**: 3D modelling software,
- **Unity**: game engine and all-in-one development utility,
- **Git and GitHub**: for collaborative work.
- **Ableton**: music making software to create our soundtracks.

The reports as well as the book of specifications will be done on Overleaf. Communication is key in a group project, thus we will use a Discord server that we created.

The project will also include 3D animations. In order to implement them, we will use **Mixamo**, a website where thousands of animations are available for free use.

As documentation, we will use the Unity forums as well as YouTube channel Brackeys. Other sources such as Stackoverflow might be of help.

3.2 Economic aspect

In terms of economy, we do not intend to spend any sizeable amount of money into the project, as we already have all the software we require. The game will be free of cost. All members of the group have friends that want to test our game. If they like it, they may share it with their own friends, who might do the same thing and so on. This is how TEMPÊTE will extend its community, and how the distribution campaign will start.

3.3 Task distribution

	Philippe	David	Charlie
Game mechanics			
Movement		✓	⊕
Basic attacks		⊕	✓
Combos	⊕		✓
Sound design			
Music	✓	⊕	
Sound effects	✓	⊕	
Voices		⊕	✓
Graphics			
Map design	⊕	✓	
Character design	⊕		✓
3D Animations	⊕	✓	
User Interface	✓		⊕
Other			
Multiplayer	✓		⊕
Website	⊕	✓	
Artificial Intelligence		⊕	✓

✓ stands for "In Charge", ⊕ stands for "Substitute".

3.4 Timeline

Presentation	1st	2nd	3rd
Game mechanics	40%	70%	100%
Movement	70%	90%	100%
Basic attacks	25%	60%	100%
Combos	0%	30%	100%
Sound design	20%	50%	100%
Music	30%	60%	100%
Sound effects	0%	50%	100%
Voices	0%	50%	100%
Graphics	20%	60%	100%
Map design	50%	75%	100%
Character design	15%	60%	100%
3D Animations	15%	60%	100%
User Interface	0%	60%	100%
Other	40%	70%	100%
Multiplayer	50%	90%	100%
Website	30%	60%	100%
Artificial Intelligence	0%	25%	100%

4 Goals and interests

With a lot of work comes a lot of rewards. This project will obviously allow us to learn many new notions. Building a website from the ground up, learning L^AT_EX and using new platforms such as Unity will be key parts of the project. These skills will be used in future projects at EPITA and in our professional careers.

The project will forge a strong ability to work in a group environment for each of us. Communication is essential for group projects, as every member of the group needs to be understood by the others, and the project will be an excellent occasion for us to develop this skill. All of this will make us a united team that will enable us to do more efficient work and provide better results.

Being almost exclusively autonomous will cause us to make mistakes. We believe making faux pas is an important part of the learning process. Acquiring experience would lead us to develop a strong instinct enabling us to recognize which paths are worth following and which ideas are worth keeping and implementing. Not only that, but having deadlines will teach us to be efficient and to plan ahead.

5 Conclusion

As members of TEMPÊTE , we are united and invested in the project. With high ambitions and a strong belief in what we can achieve, we imagined a game which means a lot to us. We all played *Street Fighter* during our younger years, along with *Super Smash Bros.* Drawing inspiration from classic games that made the genre what it is today, *Ultimate Fighting Chickenship* aims to be the craft of our very own fighting game.