



# PASTA MADRE

Preproduction July - December 2020

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# Overview

# Team



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**Tristan Veille**  
Lead GD, 3C & Combat  
Designer



**Lila Grimaldi**  
Producer, System & narrative  
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**Alexis Ledouble**  
Lead GP, 3C Programmer



**Vincent Letang**  
Environment Artist



**Julien Crépin**  
IA & Gameplay Programmer



**Clara Wimmer**  
Environment Artist



**Antonin Druelle**  
Level & IA Designer



**Noémie Meguerditchian**  
Animator



# PASTA MADRE

Embody Graziella, the fiercest and most resourceful recruit of the infamous Del Campo gang. Take on a thrilling mission to retrieve the Pasta Madre, a powerful artefact whose powers remain unknown. Use your trusty Pasta Gun to turn your starchy signature ammo into weapons and tools to wipe out your enemies with style!



**Midcore**  
Lovers of TPS with an  
immersive world-building



**Third Person**



**Shooter/  
Adventure**



**Solo**



**PC/Console**

# A Dynamic TPS all'Italiana !

Pasta Madre revolves around three pillars that our main character embodies.



## Freedom

Lightweight and agile character

Take part in dynamic fights against loads of enemies. Use your own agility to dodge bullets as well as your pasta grappling hook to glide across the level, shoot from the air and dominate your opponent.



## Fierceness

Developping different combat styles

Embody an ambitious gangster who likes to get herself into dangerous gun fights. Cook different types of ammos to keep your enemies at a distance. Don't stop moving until you're in the perfect spot to confront them up close or from afar in many different ways.



## Spaghetti Gangster

Offbeat tribute to Italy

Our goal is to craft an offbeat homage to the Italian pop culture and traditions. The tone is set by the mixture between the realistic venetian gothic architecture and our caricatural characters and UI.

## Once Upon a time in Italy...

Italy - 1960s : **Pasta rules over everything.** It is used as food, money and ammunitions. There's even a saying that some have properties that seem out of this world. Criminal organizations fight to gather the biggest collection of pasta. Graziella is the most talented recruit the Del Campo gang has ever trained. She wields the spaghetti like no other and already dreams of taking over her boss's seat, Donatella Del Campo, at the top of the organisation.

Donatella has been training Graziella personally since she joined the organisation as a teenager, hoping she might become her right-hand woman in the future. However, the all time revered Boss of the Del Campo family now fears that her recruit might have become too ambitious. In order to temper her spirit, she decides to send her pupil on an impossible mission to retrieve the mythical Pasta Madre, an ancient artefact known to possess mysterious powers. Graziella is about to discover what it feels like to be betrayed, which will only fuel more her hunger for power.



# How the Story Unfolds

Donatella and Graziella's relationship is based on admiration and jealousy. Donatella will not be present throughout most of the game.



Even outnumbered, Graziella will finish the mission. She will prove Donatella wrong.

**Storytelling tools :** Environnemental staging , Graziella talking to herself, short Dialogue between Graziella and enemies, combat and AI design (gang behavior while fighting)

# Market Positioning

With Pasta Madre, we want to create an **accessible TPS** and please a **mainstream audience**. The highlight system, for example, allows players to simply look towards the enemies or objects they want to interact with -instead of precisely aiming at them-.

The combat system is **permissive** and is deep enough to allow novice players to fight without too much frustration as well as allowing more skilled players to develop strategies to wipe out enemies with style.

Movement-centered TPS



Shooting-centered TPS



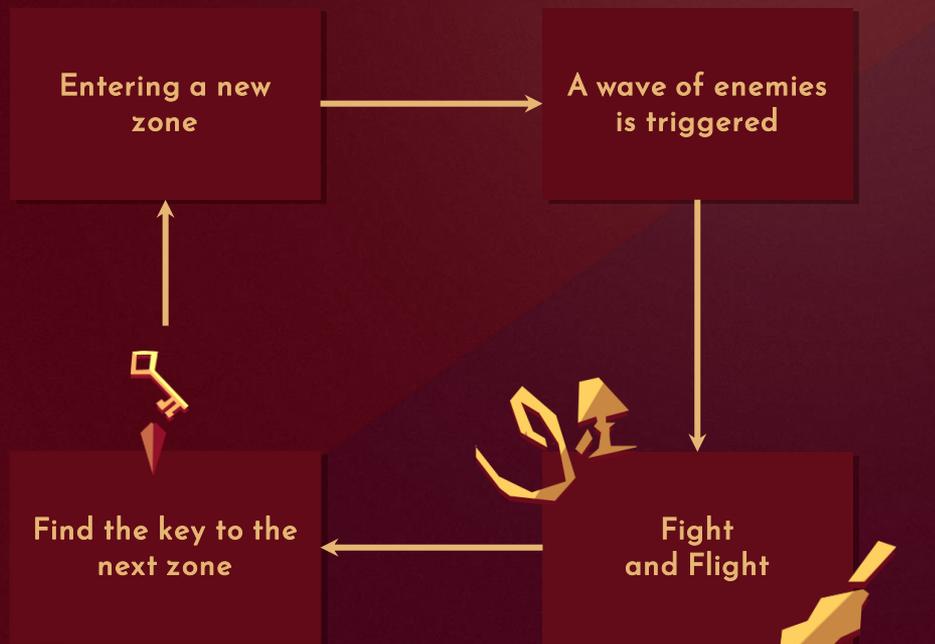
Use your **AGILITY** at your advantage

Use your **ABILITIES** at your advantage



# Gameplay

# Macro Loop



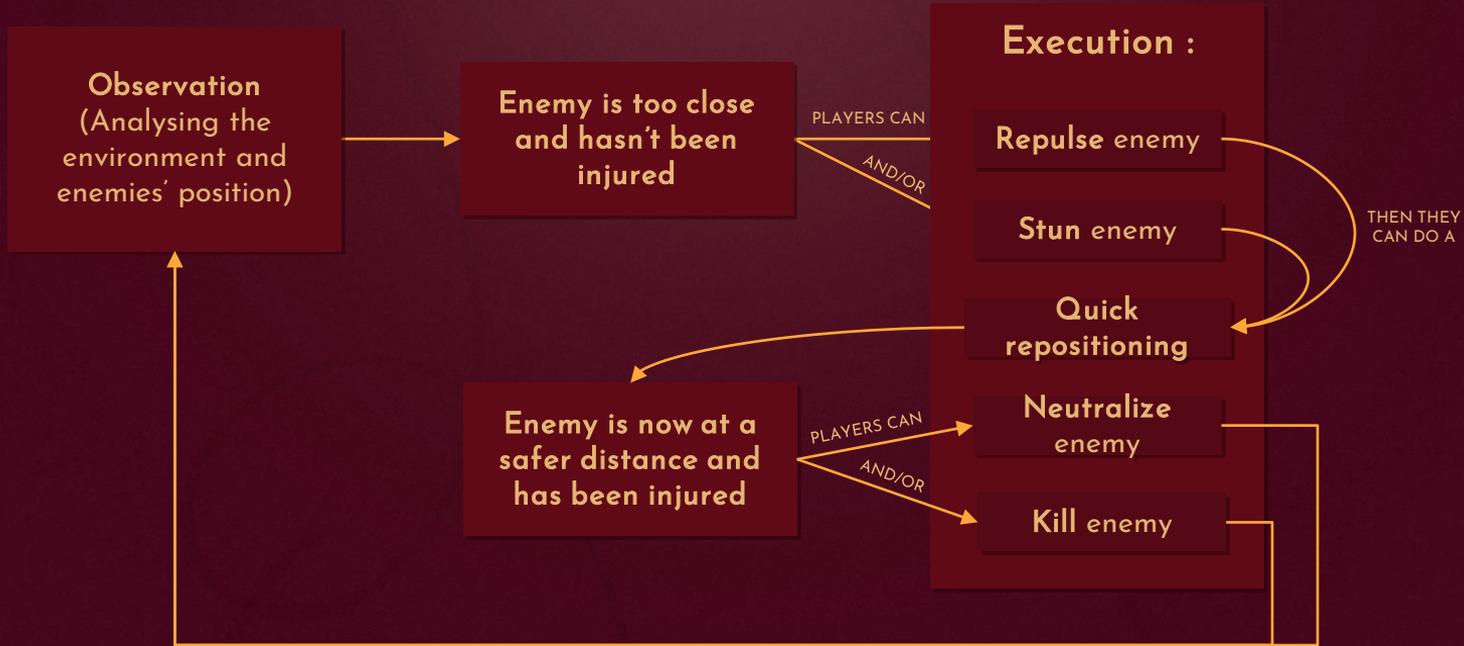
## WIN CONDITION

Graziella has to **flee the palazzo**. Each level is an arena that has been locked to trap her. The player must find the mobster that holds the **key** to the next room and **kill him**. Only then can Graziella **move on to the next level**, and keep on looking for the **exit**.

## LOSE CONDITION

**Death** is the first lose condition. Graziella should also **protect** the Pasta Madre to avoid having it **stolen** from her. She must be constantly on her guard and ready to move (fight and flight) to keep enemies at a distance. If an enemy manages to **steal** the Pasta Madre and **escapes the room** with it, the mission's over.

# Micro Loop : Fight and Flight



## The Pasta Madre

Making it out of the Rizzo's palazzo alive and with the Pasta Madre is Graziella's ultimate goal. The artefact enhances the power of Graziella's Pasta Gun and transforms her spaghetti into tools to move and fight. It also boosts Graziella overall speed. Enemies will try to steal it from her. Without the Pasta Madre, Graziella's left with only her default ammunition and has to retrieve the artefact at all costs.



**3 types of shooting modes unlocked**  
(Raw, Aldente and Fondente)

**Graziella's speed is slightly increased**  
(run speed and wallride speed increased by 0,1%)



**One shooting mode available**  
(raw mode only)

**Graziella's speed is back to normal**

# Fleeing and Repositioning

Graziella is weak when it comes to close combat. We want players to keep moving for most of the time. They will also be given tools to quickly reposition themselves if they chose to stay still for a second to take down some enemies.



Wall-running gives Graziella a **speed** boost to leave her enemies behind. She can shoot them while doing so and use the wall to **project herself in the air**.

Graziella can use her forward dash to **dodge bullets** or **avoid a close combat attack**. It is a **quick repositioning tool** that comes in handy when she's overrun by enemies.



One of the fondente Pasta is a **grappling hook**. Chandeliers are often in the middle of a room, allowing Graziella to quickly move from one corner to the other, while **shooting at enemies in the air**.

# Fight: Keeping ennemies at a Distance

Graziella trained hard to master one pasta in particular : the spaghetti.  
She's about to discover the real potential of her signature ammo.



Raw shoot

A sharp and raw spaghetti projected at a high speed that can **repulse and stun enemies** but also **pin them to a flat surface and kill them.**



Aldente Shoot

A **bendy spaghetti** that wraps itself around one or multiple enemies to **immobilize them temporarily.**



Fondente shoot

A **starchy spaghetti** that can temporarily **stick to surfaces and objects.**

- Can be used to **grab objects and throw them at enemies or into the environment.**
- Or shoot the sticky ammo towards **chandeliers** and **use them as grappling hooks.**

# Fight: Keeping ennemies at a Distance

The Pasta Madre turns the spaghetti into 3 different tools to counter different situations or approach the same situation in different ways.



## Raw shoot

Shooting at enemies will repulse them back slightly and stun them briefly.

The raw shoot is best used when enemies are close to flat surfaces (walls and floors).

You will need 4 shots to take down an enemy who's far from a flat surface, and 3 when near a flat surface.

Plus, you get to see them hanging on a wall and beg for their life...



## Aldente Shoot

You can't kill an enemy with an aldente pasta, but you can stun multiple enemies at once and for longer than a raw pasta would.

The Aldente pasta can be used on one or multiple enemies.

**Features we wish to implement:**  
We want Graziella to be able to kick down stunned enemies to pin them on the ground with the Raw Pasta.



## Fondente shoot

Allows you to Grab and throw it at the enemy you want to hit.

Hitting enemies this way will stun them for longer and kill them with less shots than with any other pasta.

**Features we wish to implement:**  
The Bruto enemy will be insensible to the raw shoot when standing up. You will have to knock him down with an object before being able to kill him.

# Your cannon fodder : The Rizzos

## Recluta

The Recluta is a basic enemy with whom players can improve/test their skills.

Recruits are an oppressing unit. They chase Graziella at a constant pace and can steal the Pasta Madre.

The Recluta pushes the player to move in order to keep them at a distance.

### Attacks

- Middle range shots (single bullet)
- Stealing the Pasta Madre
- Hitting the player with the back of their gun (melee)



In the Rizzo gang, enemies are classified in 3 categories :

## Soldato

The Soldato can hide behind obstacles. He can sneak his way to Graziella and create surprise confrontations.

The Soldier forces Graziella to approach and dislodge him from his cover.

The player must be cautious of every bullet path this unit shoots.

- High Range shots 3 bullets
- Hitting the player with the back of their gun (melee)



## Bruto

The Bruto is difficult to neutralize and kill because of his high resistance. He challenges the players on their reflexes and movements.

The player is encouraged to sneak behind the Bruto's back and take advantage of his weak spot.

It also encourages the player to take the time to use objects from the environment to stun and finish him.

### Attacks

- Charge
- Punch (melee)



# Highlight shooting System

As Graziella is constantly on the move, we preferred to create an assisted aiming system.

- Enemies are **highlighted in red** when in shooting range



- Objects and hooking points are **highlighted in blue** when in grabbing mode



The real challenge is safely positioning yourself in front of the enemy you want to stun or kill as well as objects you might want to grab.

This makes for an overall more accessible shooting system.

# Almost There

Once you've taken down enough enemies, the ones left alive will start to freak out. One will eventually beg for his life and tell you that he holds the key to move to the next segment. Once you have the key, you can head to the next chunk of the level through a special door.

When the last enemy wave is triggered, a key symbol appears above the head of one enemy. It is visible across all the level and behind walls as well. It signifies that killing this enemy will allow the player to move to the next chunk.



# Bloody Bullet Time

The Pasta Madre grants Graziella additional power when she proves herself worthy. After taking down enemies with style or gliding through the air with the grappling hook, Graziella becomes extremely aware of her surroundings. Time seems to slow down...

## Moving

Wall-riding, projecting, jumping from a high distance, dashing, using the grappling hook are all moves that fill Graziella's slow motion gauge a little.

We expect that a low skilled player can fill the gauge in around 1,30 mn by moving only.

## Fighting

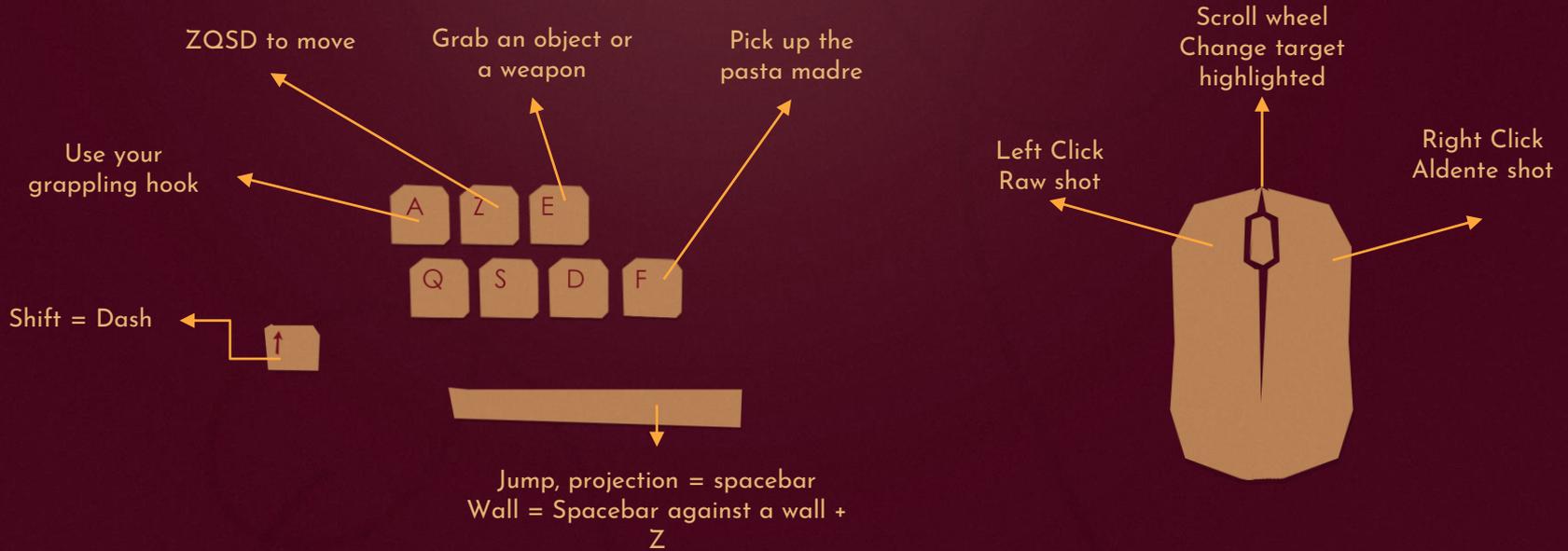
The starchier the better ! The Pasta Madre grants more awareness points to Graziella when she fights using al dente and fondente. Points are only granted when Graziella neutralizes or kills an enemy.

We expect that a low skilled player can fill the gauge in around 1mn by fighting only.

Once the awareness gauge is full, the player can trigger it at anytime to slow down time for 7 seconds. Players and enemies' movements are slowed down. This means players cannot dodge bullets faster, but they can use the camera freely to take down enemies in real time.

A good use of the bloody bullet time would be to attract as many enemy's attention as possible, run into a safe spot and slow down time to take down all the enemies who were chasing the player.

# How to play





# Level Design

## Location

The Level Design is inspired by the five-star Danieli Hotel in Venice, a large and historical building with a Veneto Gothic architectural style.

The Rizzo are a very rich and powerful family and took over the Mansion to fit the gang's needs. They own the Palazzo and live there on a daily basis, but also host many guests for business. The Palazzo is big enough to have uninhabited spaces.

To encourage the player to move around, the level does not have a lot of covers. It offers a fair amount of freedom to jump and wallrun, due to its spacious rooms and high ceilings.



Danieli Hostel



Ballroom



Dishonored 2, Level 8

# Level Overview



# Contrasts

## Empty areas...

that the player will quickly go through,

To make this level a memorable and interesting place to visit, it alternates between different states to bring contrast such as :

## Crowded areas...

that the player is going to linger on(during a fight for example).

## Cramped rooms...

to highlight the movement mechanics.

## Huge rooms...

to incite the player to use her tools to keep enemies at a distance (like the raw repulse).

## Illuminated areas...

where the player is going to fight and must have good visibility.

## Subdued areas...

where the player will be guided by lights and is on the lookout.

## Tidy rooms...

where the player and the Als need to move easily.

## Messy rooms...

to promote the mechanics of throwing objects and jumping.

# Level's Structure

Pasta Madre's Level Design gives the player a feeling of freedom and wonder with its open-zone structure. Players are given the keys to make the best use of their acrobatic skills through different mobility-centered workshops.

The palazzo's rooms are a succession of smaller intimate rooms and large reception rooms which create different combat settings to challenge players and keep them engaged. The level's cubic shape gives as much importance to verticality as to horizontality.

## Verticality

The level consists of 4 floors. In the middle of each floor is a balcony that directly connects to the first floor allowing the player to head downstairs with a single jump.

In order to encourage the player to climb up the level and continue the exploration, the Level Design uses the principle of the double spiral (DNA). Two intertwined paths allowing the player to climb the level using the stairs or jumps.

Global Level Design Shape

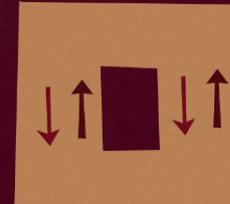


DNA structure with referrals zones inside each floors.



## Horizontality

Each floor is of the same size and has a shape close to a circle thanks to the central courtyard encouraging the player to move around it. Each floor allows circulating in both directions.



Plan of a floor (at the center is the rectangular balcony).

# Inside a Chuncck

Throughout the game Graziella will fight against many mobsters that work together and try to take her down. She takes pride in working alone and wiping out her enemies with ease. We want players to embrace Graziella's pride as they become more skilled. We don't want to rely on cinematics where players see the character doing an epic move. Instead, we want to tweak the progression curve so that when players are starting to master a skill, they can fight loads of medium skilled mobsters and feel powerful.

Difficulty level  
(number of mobsters spawning)



## Epic Slaughter

- More enemies spawn toward the end of the last waves so that players are given some time to enjoy their abilities and dominate the fight.

- Graziella's voicelines are more cheeky and arrogant.

# Storytelling and Pacing

## Tutorial

The Tutorial allows the player to discover a small part of the overall Level Design and to assimilate the mechanics of movement and combat in a linear way.

## The Rizzo's Palazzo (First chunk)

The first chunk offers the players to navigate more freely around the level and challenge the skills they were taught during the tutorial. The players can also explore the house, find collectibles and learn more about the rival gang through environmental details.

## The Rizzo's patio (Second chunk)

An open area where the game reaches its climax. In this arena, players will have to show that they have mastered all the mechanics of the game in order to defeat even more powerful enemies.

## The Climax

Graziella makes her way out of the palazzo after one more epic fight against lots of enemies. She's able to meet her Boss again and decides to disobey her by keeping the Pasta Madre for herself.



# Art Direction

## Art Choices

- Our Characters are **quirky**, caricatural and extreme. Graziella defies gravity, and is in perpetual motion. We mean to underline it by a stylised treatment. Characters must feel like **cartoons owning the real world**.

We therefore considered a 2D shading in order to make the shift between the two styles obvious.

- Italy is **magnificent**, ancient, and admirable. It's one of the sacred pillars of the game. Therefore we will portray the environment with **realism**, to **enhance admiration**. We need the exactness of the architectural details: molds, ornamentation, marble, velour.



# Setting

The action takes place in a Venetian gothic italian palazzo. We are in the middle of the sixties and the place hasn't lost its splendor. Its main purpose today is to serve as a luxurious gang hideout.

The Palazzo has seen numerous artistic influences. The rooms are served with ancient and modern furniture, from the eighteenth century to the sixties. Precious objects fill the rooms, as well as functional and everyday items.

Our story calls for a roman noir mood with deep contrasts and a felt atmosphere. But, as the game is shaky and very dynamic, we shall focus on levelling our contrasts so that they don't disrupt the player's eye from the action.



# Environment Storytelling

The Rizzo own the Palazzo Rizzo, an ancient and beautiful mansion. We want to be sure to portray the mood correctly we have in mind by combining those three types of settings :

The Rizzo are a very rich and powerful family, just as the Del Campo. They therefore choose to inhabit an ancient place that shows prestige of the family.



Old and beautiful

The Rizzo family lives in the palazzo on a daily basis. The palazzo should feel animated and populated, with contemporary assets.



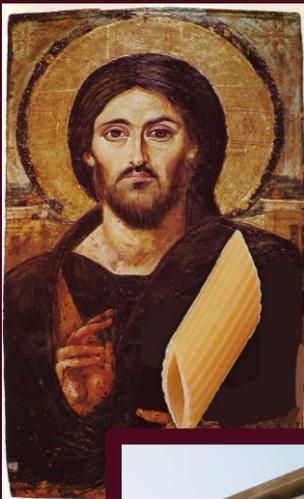
Living space

The Rizzo also have many guests for business affairs, social hangouts with gangster props are needed to understand what is the main family business about.



Gang business

# Storytelling



Pasta ornates the decorum.

The game has a striking universe. As pasta is the gold, the ammo and the food of a society, it is **included in the arts** and in the history of the country.

Pasta must be included with subtlety in the decorum.

UI assimilates pasta designs in a subtle manner.



Graziella has a mechanical hook on her belt to carry the artefact. She wears it as stylish accessory.

# Environment



The internal Patio is the level's circulation center. Its architecture is *grandiose* and develops vertically.

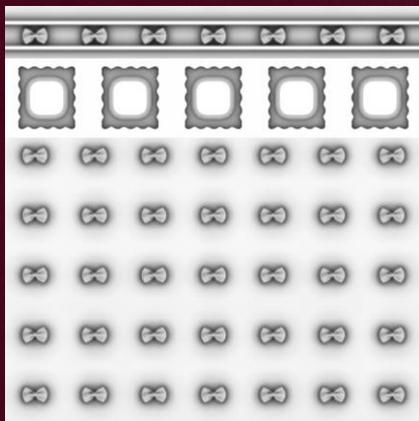
Most of the assets will be midpolys. Part of the ornamented objects will be sculpted and baked on their specific UV sets.



# Environment Textures

Most of the details are handled through texture. The use of Trimsheets facilitates any sort of frieze decoration. Repetitive textures such as floors, walls and ceilings, are made with substance designer in order to be procedural. Other assets can use megascan free textures.

Trimsheet



Floor pattern and carpet



Texture megascan



## Character - Graziella



Graziella is a brilliant gunswoman from the Del Campo Gang. She performs unprecedented acrobatic shooting moves, with grace and style. She became her boss's favourite recruit since she was very young, for her audacity and her skills.



- light hearted
- Sexy and cheeky
- Accentuated traits
- Specific exaggerated features
- Sharp designs and realistic body proportions



## Character Mobs



Characters are **caricatural**. As caricatures, they play along the typical italian mafia cliché. For every mob, we intend to use shape design to understand what sort of unit is in front of you.

## Characters - Shader



With the help of tutorials online we managed to have a simple Toon Shader quickly. Our first test for the shading works well, but it doesn't react to point lights well. Thankfully, this issue does not really show in the scene, and we will try to fix it promptly.

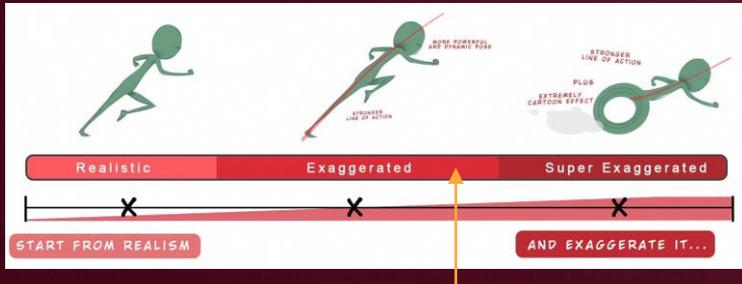


Most of the details put into the high poly didn't display on screen because of the cel shading. From now on, less details will be needed for the sculpting.

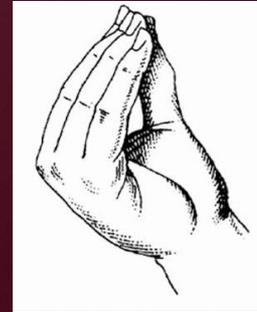


# Animation

Characters will have caricatural expressions from italian culture. Graziella will combine this aspect with her feline presence and explosive personality she has.



- Figures must remain **dynamic** at all times. We will focus on sharp designs and fluid animations.

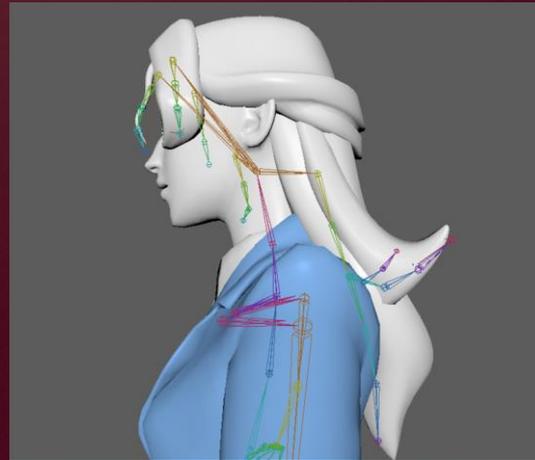
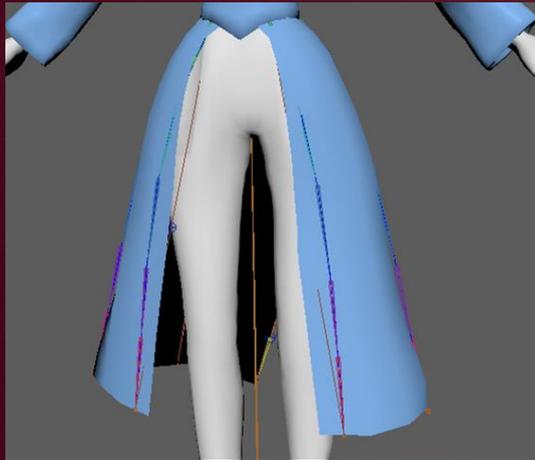


Theatrical expressions with the enemies

# Rigging

The character has many flexible parts. It could be animated manually or with physics.

Manually could be too long, and Unreal engine's system too random. We figured we could use Maya's physical bones.







# Technical Pipeline

# Engine



We're currently working on Unreal Engine 4 (version 4.25). This allowed us to experiment with the third person controller and test out our 3C more efficiently.

We started the project with blueprints but we might use C++ as well to create custom nodes in the future.



We're working around existing nodes to adapt them to our needs to be able to prototype and test features more quickly and let the designer tweak as many things as possible.



We used the shader system to create a Toon Shader. It is applied on the main character through the post-process system.

# Build Workflow

## Nomenclature des fichiers

Nom en anglais

Si un asset a des dépendances, mettre tout les fichiers dans le même dossier.

Camel Case et pas d'espace, faites des "\_" si vous voulez mettre un espace.

Pas de chiffres au début.

Pour différencier deux assets, on utilise deux digits. exemple : Wall\_00 et Wall\_01.

Si vous trouvez pas l'asset que vous cherchez à nommer :

<https://github.com/Alainrue4-style-guide>

### Préfixes / suffixes des assets :

Static Mesh : SM\_  
Skeletal Mesh : SK\_

Texture : T\_  
Font : Font\_  
Render Target : RT\_  
Sprite : SP\_  
Sprite Sheet : SS\_

Sound : S\_  
Sound Cue : S\*\_Cue

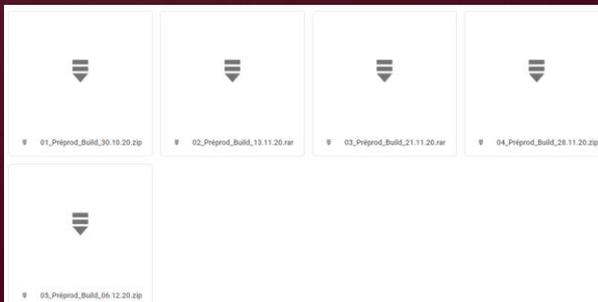
Material : M\_  
Material Function : MF\_  
Material Instance : MI\_  
Physics Material : \_PhysMat  
Particle System : P\_

User Widget : W\_

Blueprint : BP\_  
Blueprint interface : BPI\_  
Enumeration : E\_  
Structure : Struc\_  
Courbe d'animation : Curve\_  
Attenuation : \_att

We worked on a strict naming convention and documented it.

We decided to release a build of the game every week to check that the project compiles well and allow the whole team to make feedback.





What's Next ?

# Production Planning



Throughout this pre-production, we almost completely started from scratch 3 times.

We decided to cut down a lot of features to focus ourselves on what Pasta Madre really is about: being quick on your feet and having fun with your Pasta Gun to take down enemies with style.

Today we have a clear understanding of the strengths and weaknesses of our current demo, how to overcome them and bring depth to the game through a better AI and combat design to make every type of pasta stand out!

# Scope

## Must have

Polished 3C experience

An introduction level + 1 polished LD chunk

2 types of gangsters animated

Modular environmental kit to create compelling rooms with a basic narrative staging

## Should Have

Polished 3C experience with dynamic 2D-like signs and feedback/VFX

An introduction level + 1 polished LD chunk + a conclusion scene (2D storyboard followed by a wave of enemies)

3 types of gangsters animated

Specific props to create interesting stageplay in important rooms

## Nice to Have

Professional voice acting to make Graziella and the Rizzo come to life

An introduction level + 1 polished LD chunk + a conclusion scene (3D scene on a roof top followed by a boss-fight)

Carefully place props around the whole palazzo to gather visual informations about your enemies