



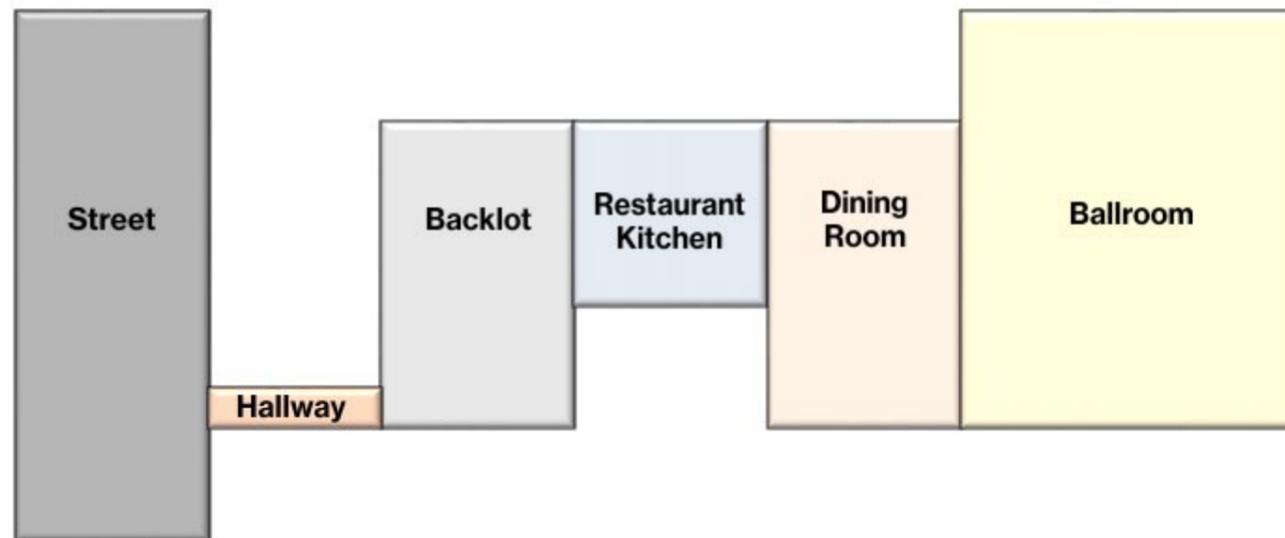
LEVEL DESIGN SKILL ASSESSMENT

Jasper Oprel, July 2020

THE CHALLENGE

THE LEVEL

- Below is a linear level layout for a first person shooter.
- The maximum number of enemies allowed at any time is 6.
- Player health is returned to 100% between each room, but does not regenerate outside of this.



ARCHETYPES

- 1) **Grunt** – cannon fodder (normal movement, normal health, normal damage, normal range). A group of 4 grunts is considered to be of normal difficulty. The player will handle it, but lose 25-50% health in the process.
- 2) **Flamer** – area denial (slow movement, normal health, high damage, short range). A Flamer is a slow moving unit with a short range but high damage. It uses its flamethrower to completely deny the area in front of it. Due to the slow movement and short range, it proves little to no challenge on its own.
- 3) **Machine Gunner** – elite enemy (slow movement, high health, high damage, long range). A Machine Gunner is much harder than a normal enemy. The player has a small chance of handling 2 machine gunners, but will lose 75-100% health in the process.

TIMEFRAME:

3 days to create, playtest and document (this booklet) level.

DEBRIEF

Infiltration. Player has a high value target in the ballroom. The path goes
Street > Backlot > Restaurant Kitchen > Dining Room > Ballroom

- *Objective: Give the player the experience of infiltration.*
- *Keep the endgoal clear and in sight, but out of reach until the end of the level.*
- *Make them feel like they are walking a meandering path to their destination.*
- *Within each section keep it clear what their target exit is.*
- *Slowly increase difficulty over time.*

Location: City center. Old european style/organically grown city.

DESIGN TIME ESTIMATIONS:

References/initial sketches: 2 hours.

Rough Greybox variants: 3 hours.

Initial encounter design: 2 hours.

Blockout this version + first walkthrough: 3 hours.

Quick playtests + iteration pass: 2 hours.

Final polishing: 2 hours.

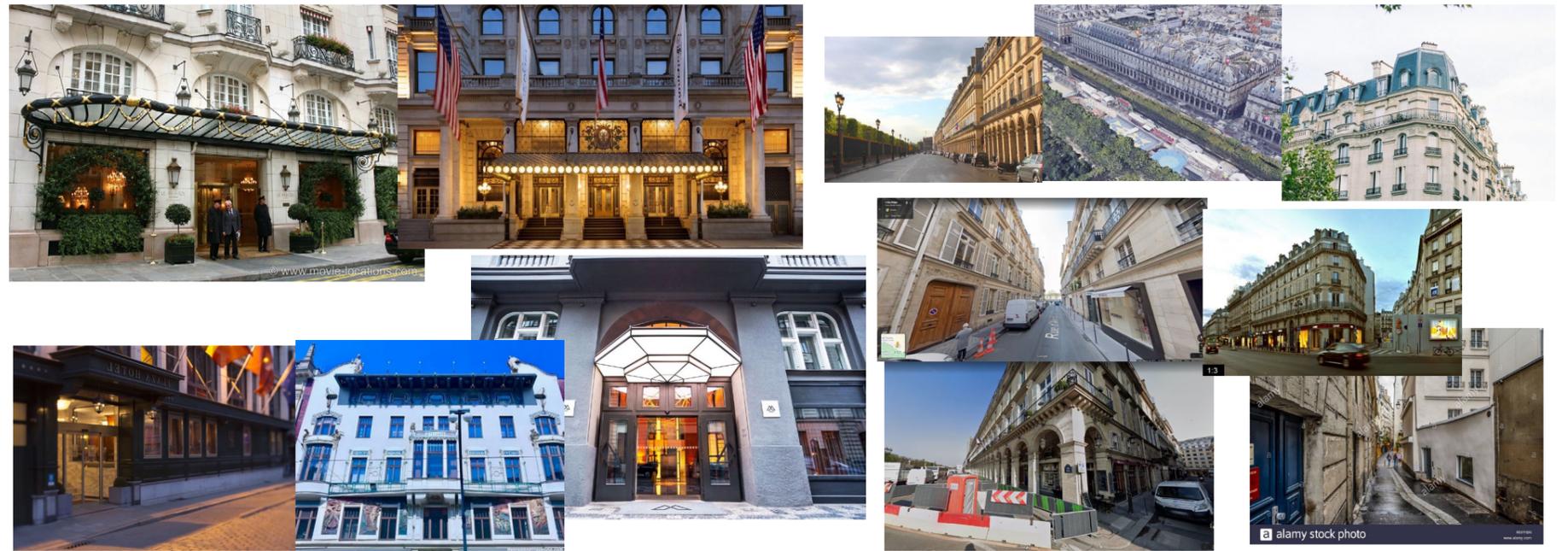
TOTAL: 21 hours.



MOODBOARDS

Architecture references, 2 A3's per location

STREET



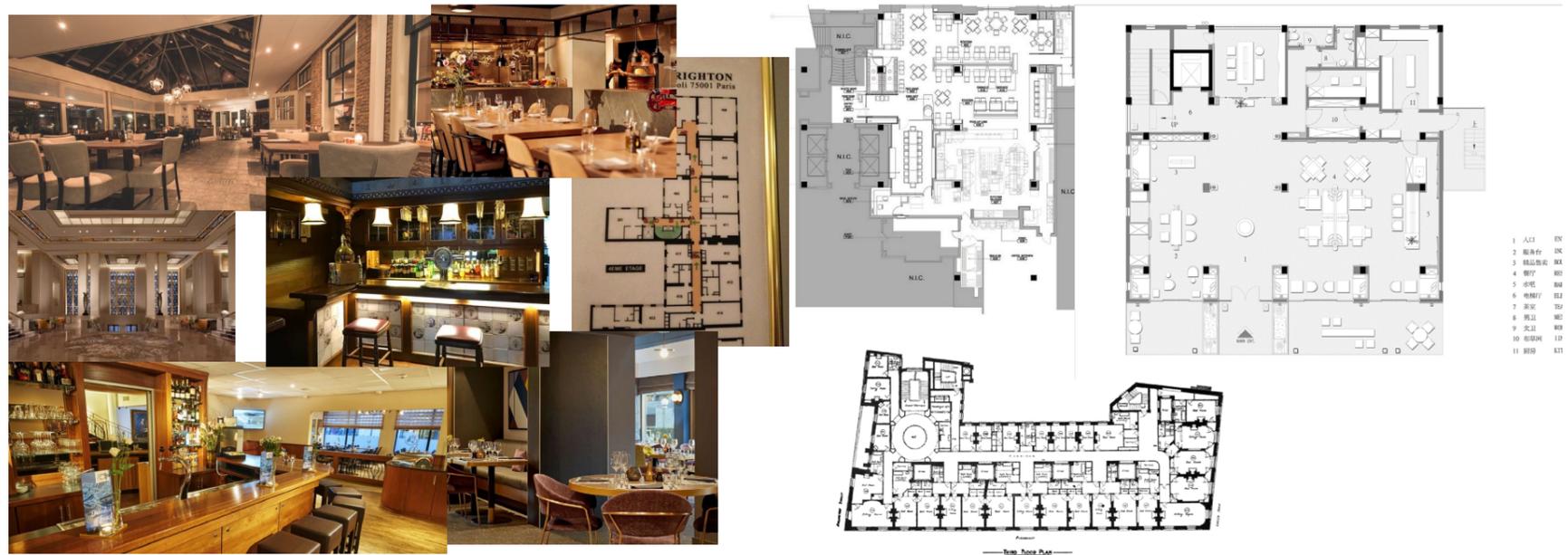
BACKLOT



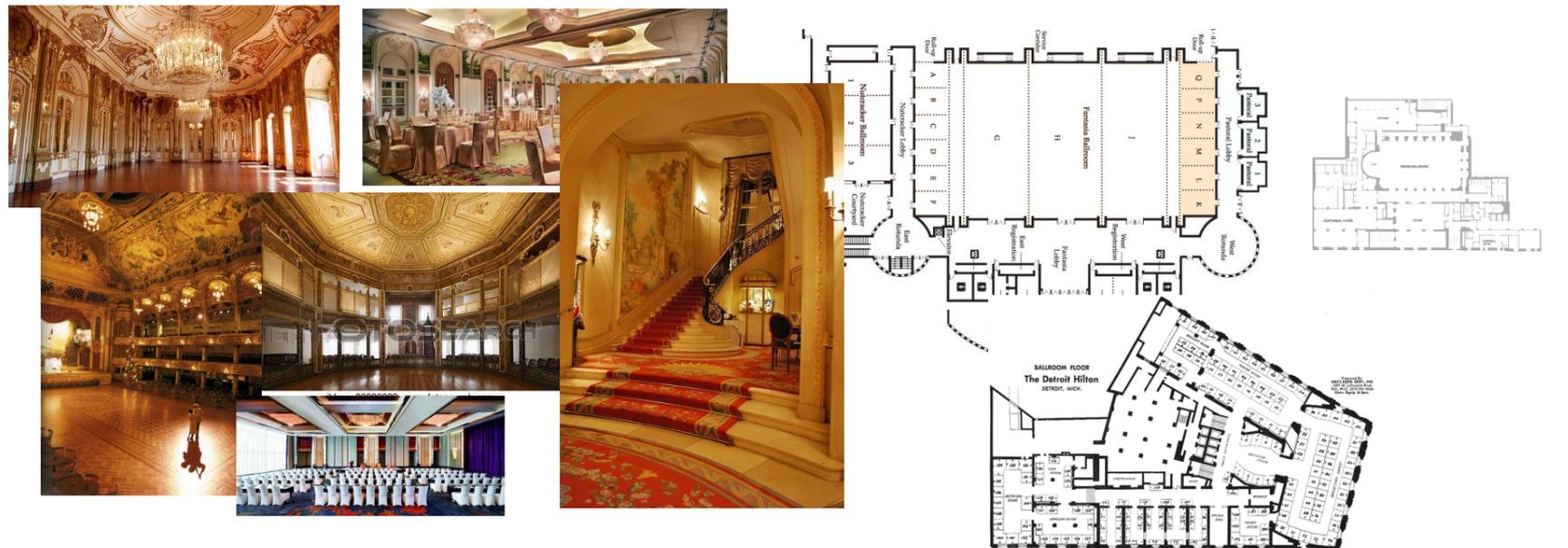
KITCHEN



RESTAURANT

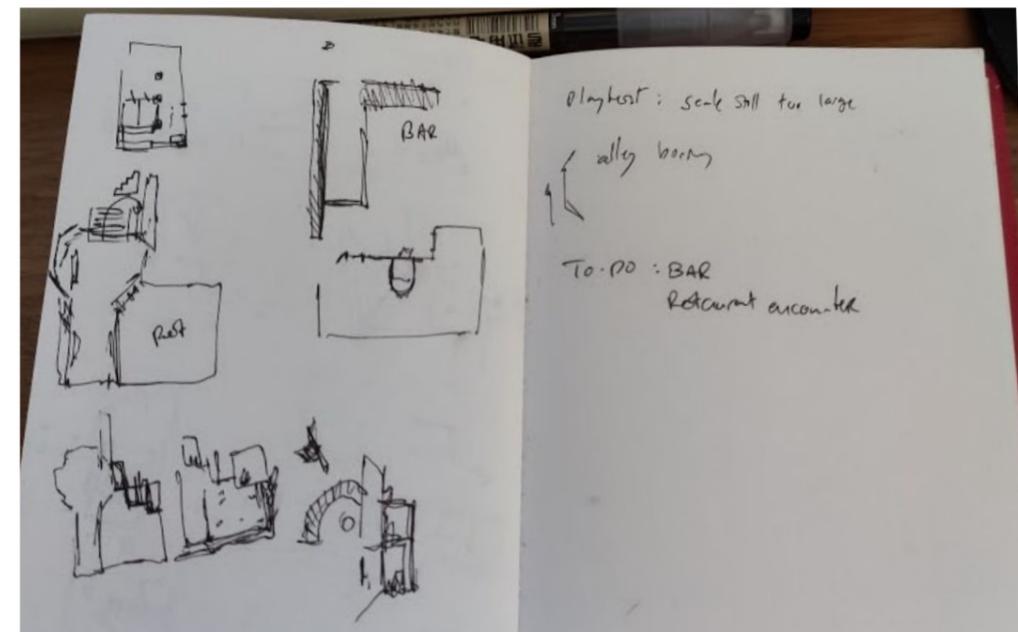
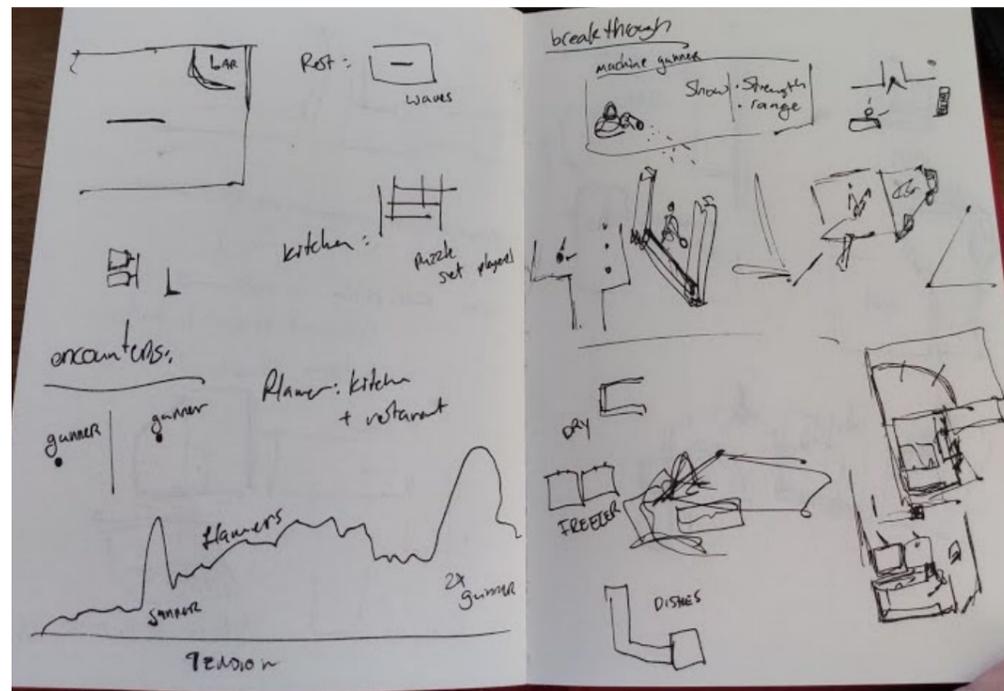
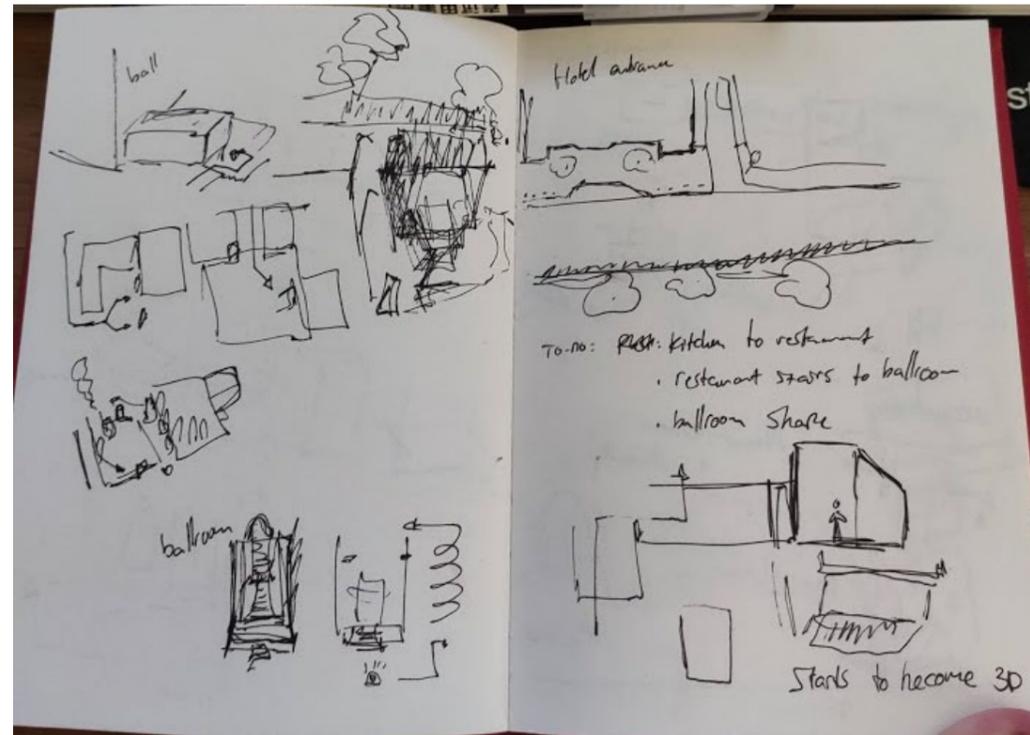
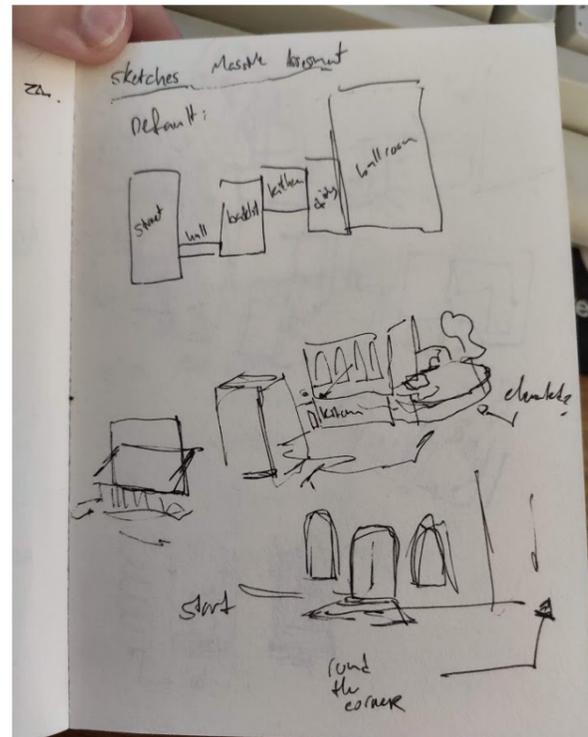


BALLROOM

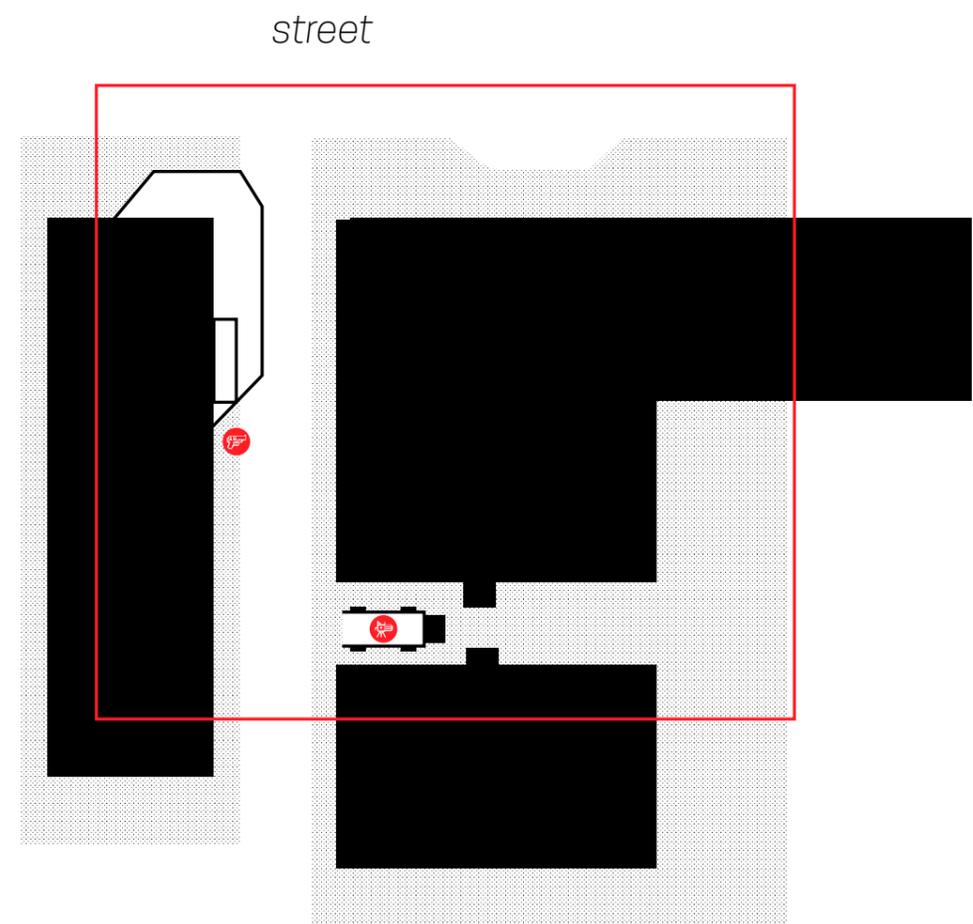
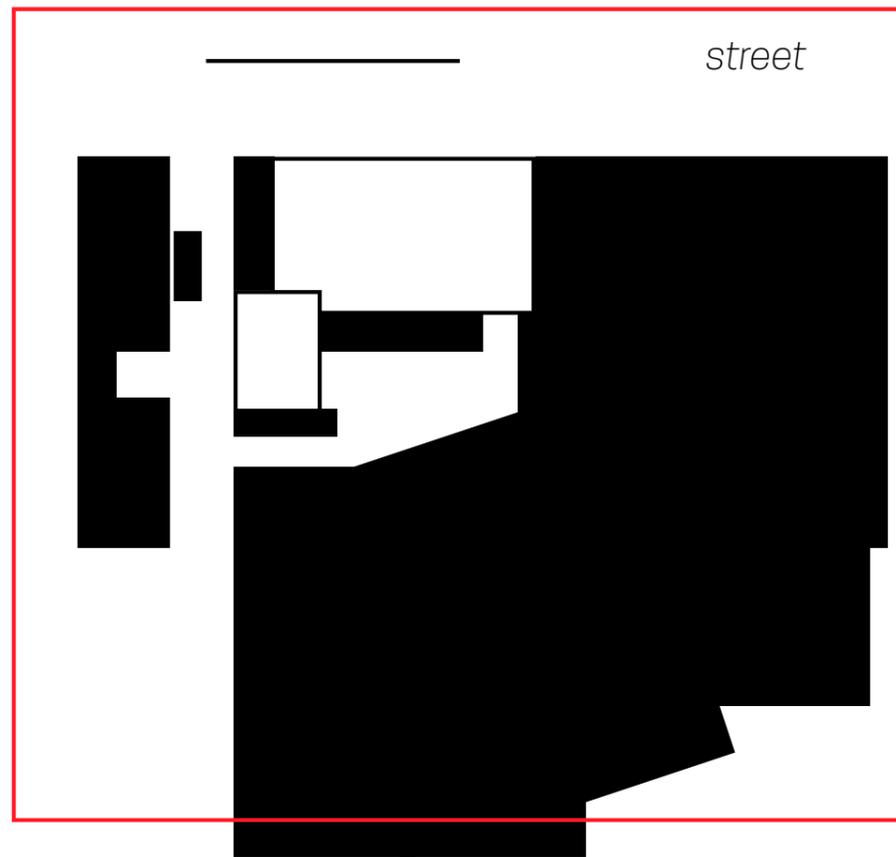
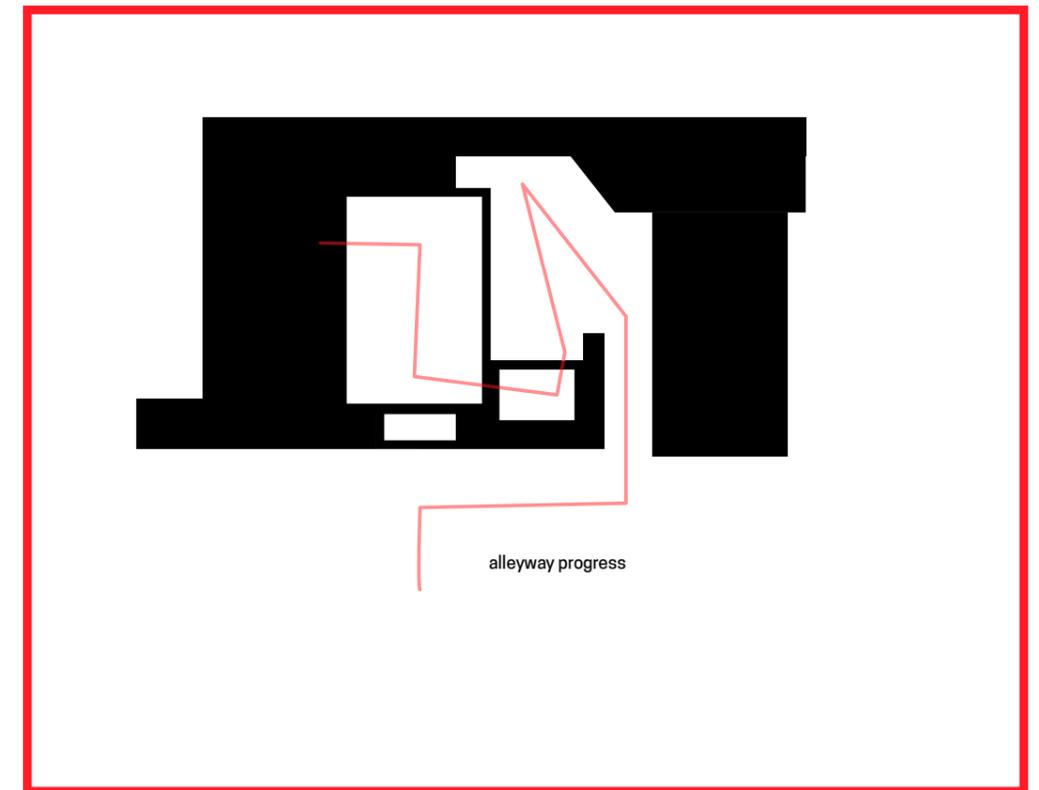
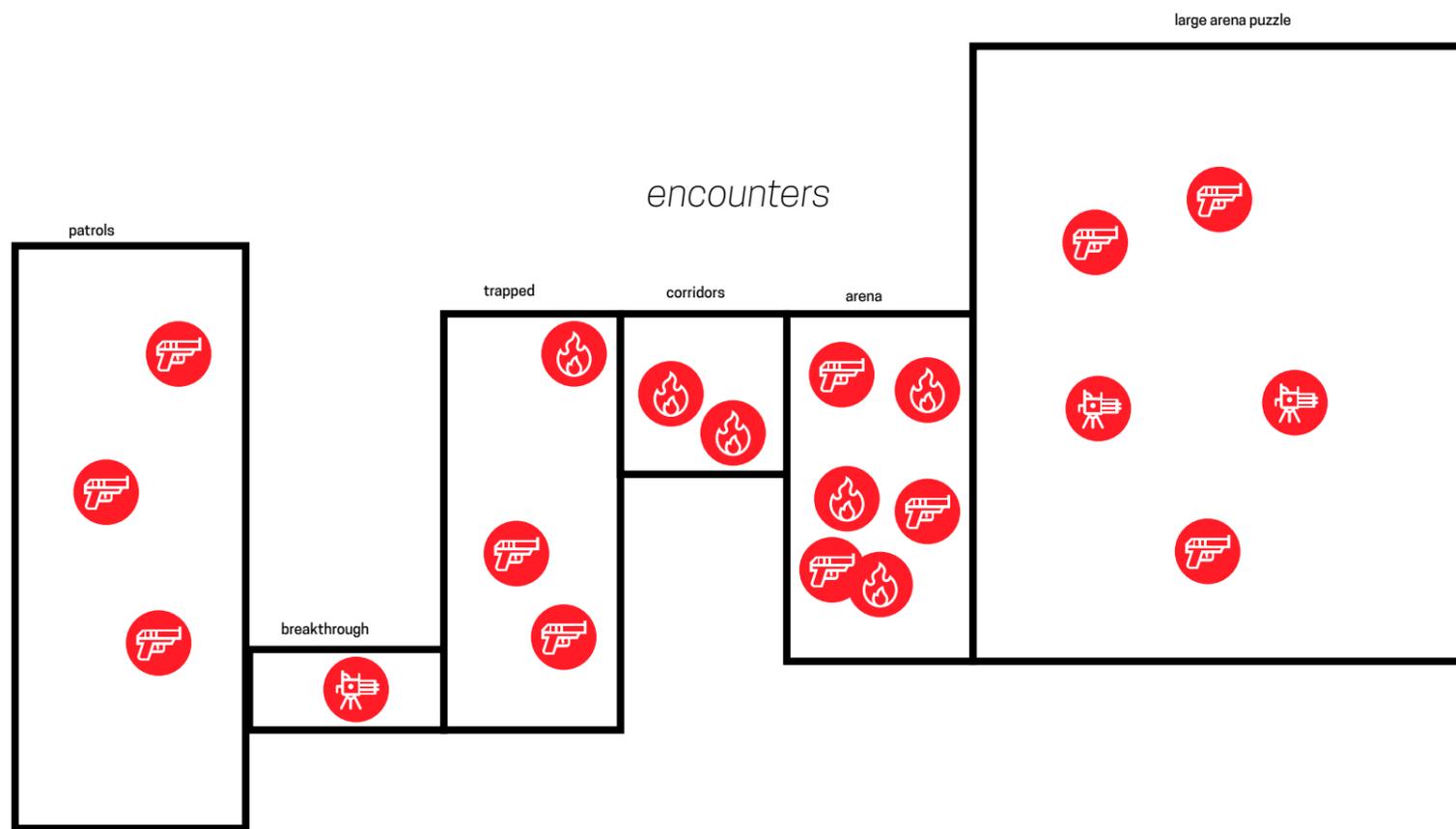


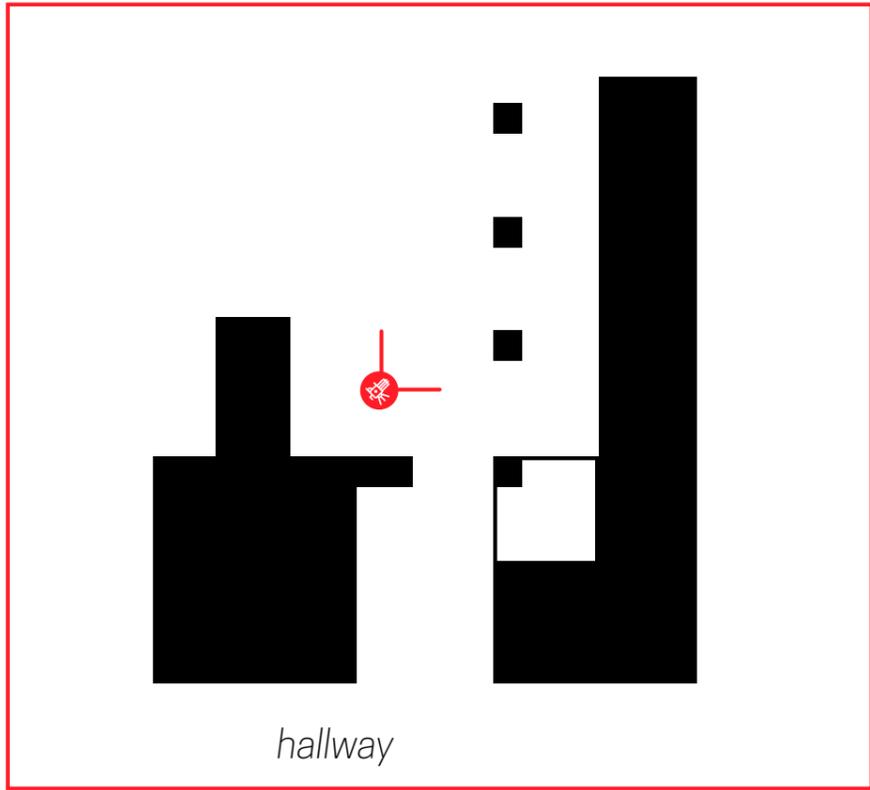
SKETCHES

Sketches in Notebook

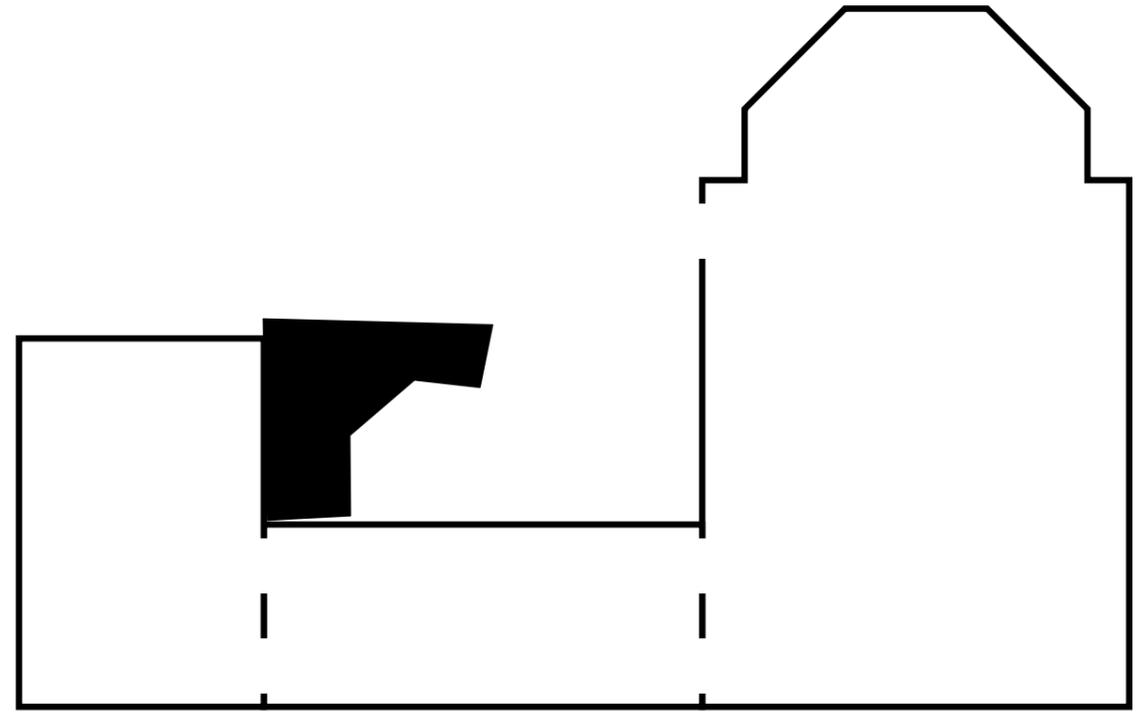


Layout sketches in Illustrator

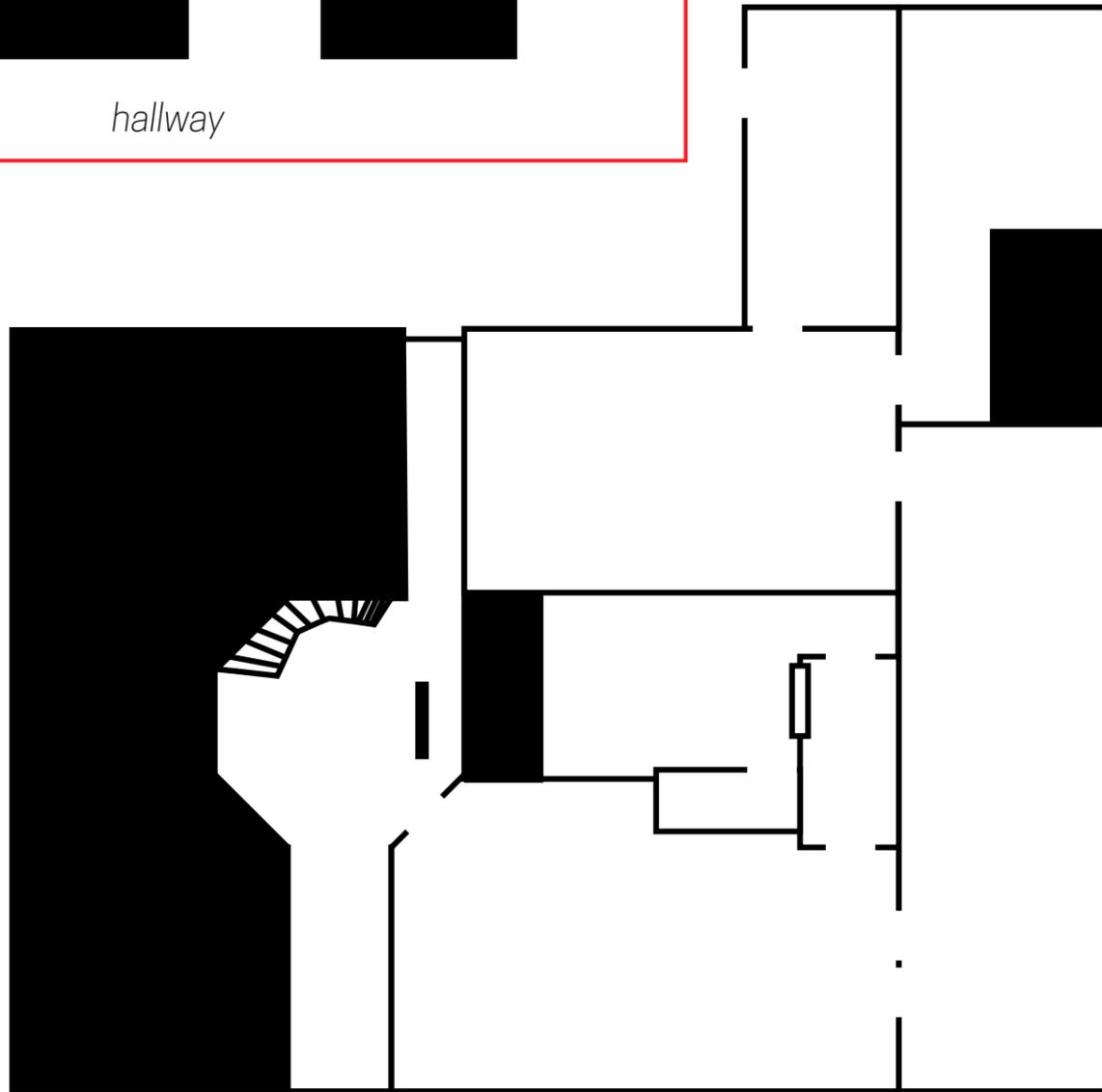




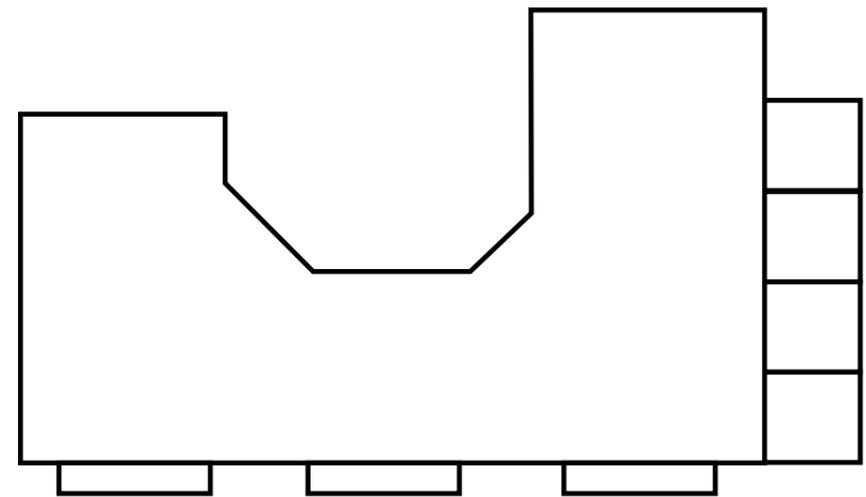
hallway



ballroom shape

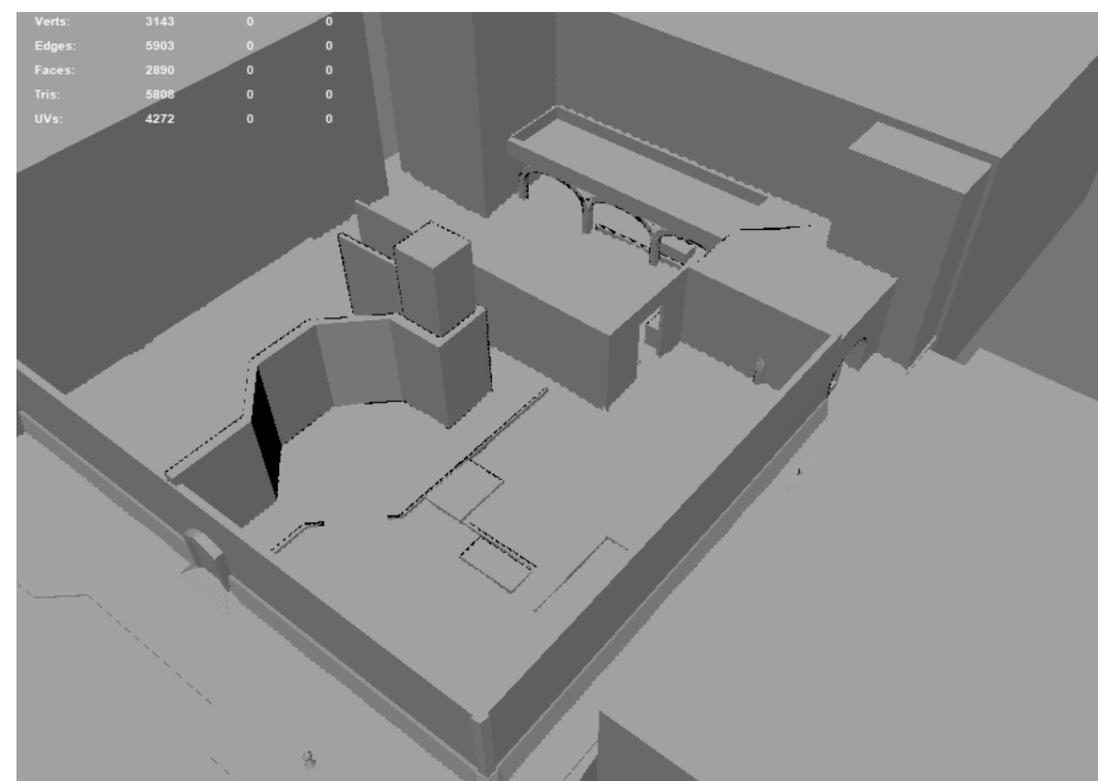
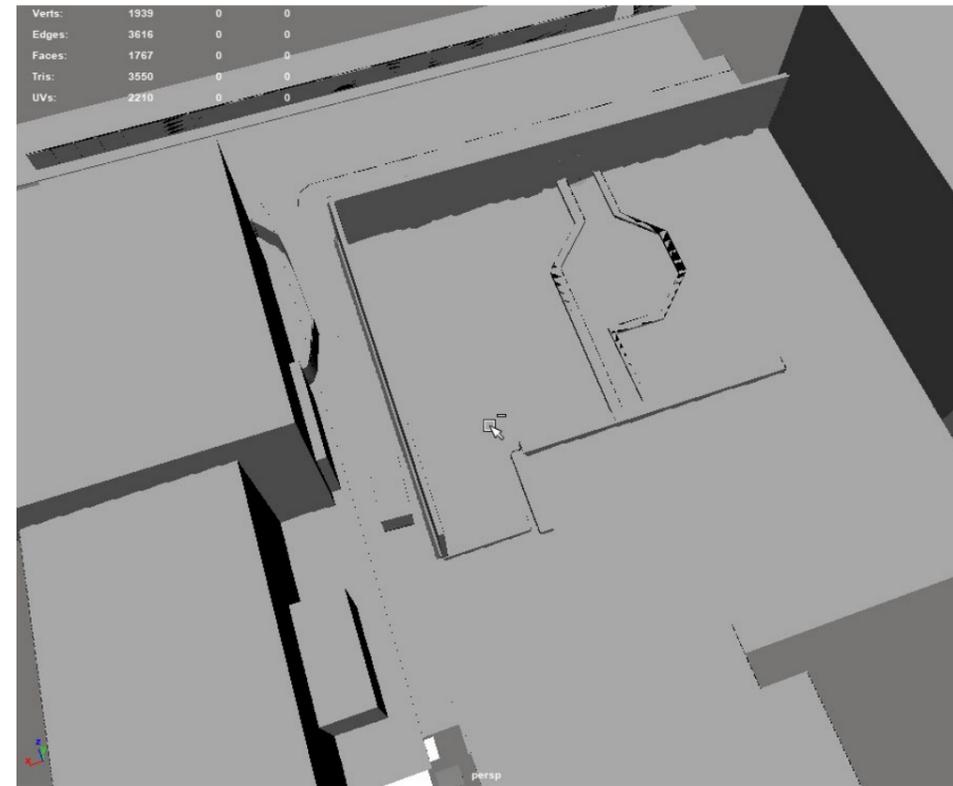
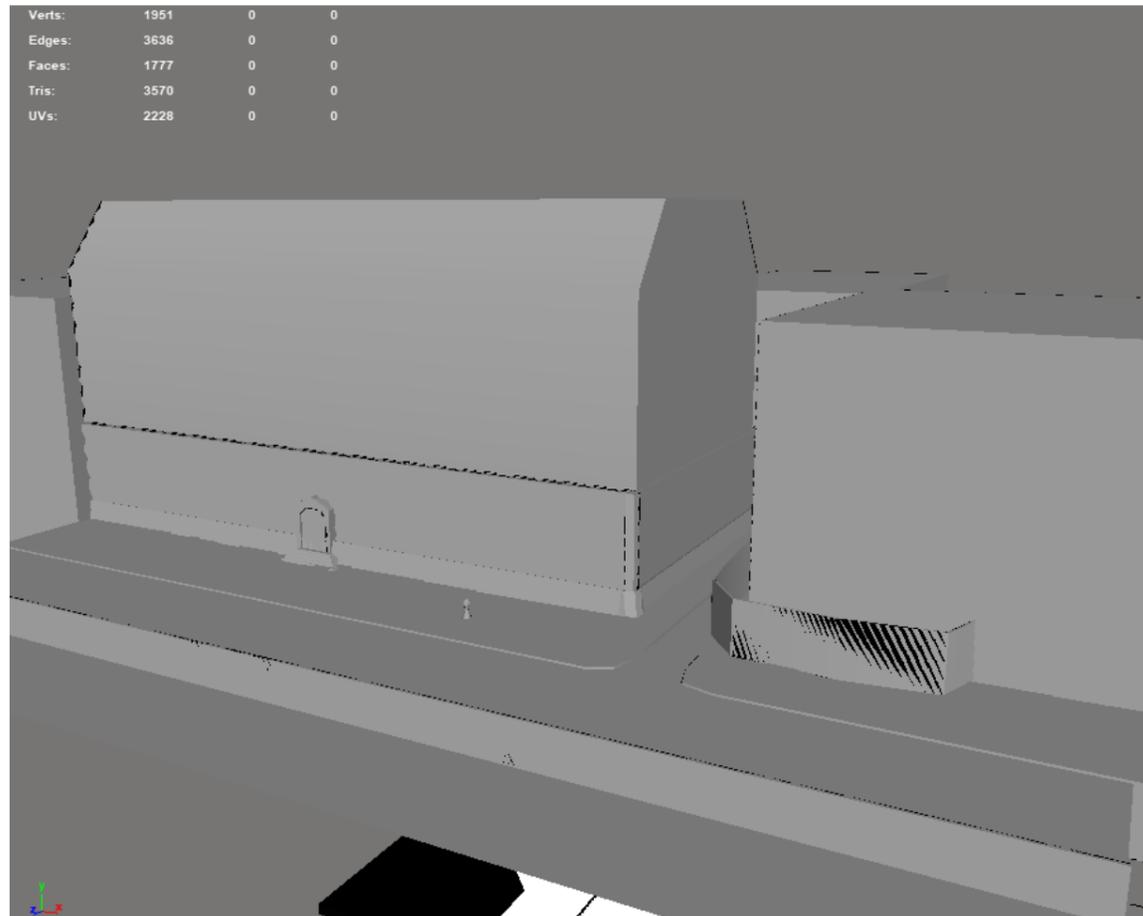


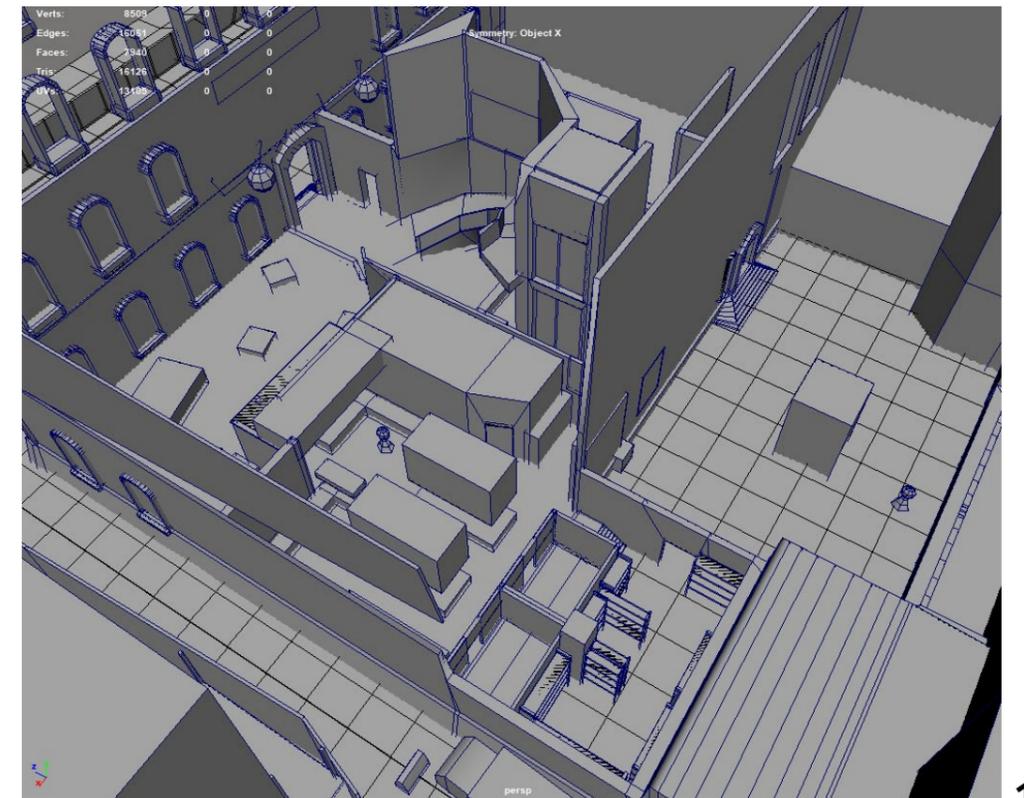
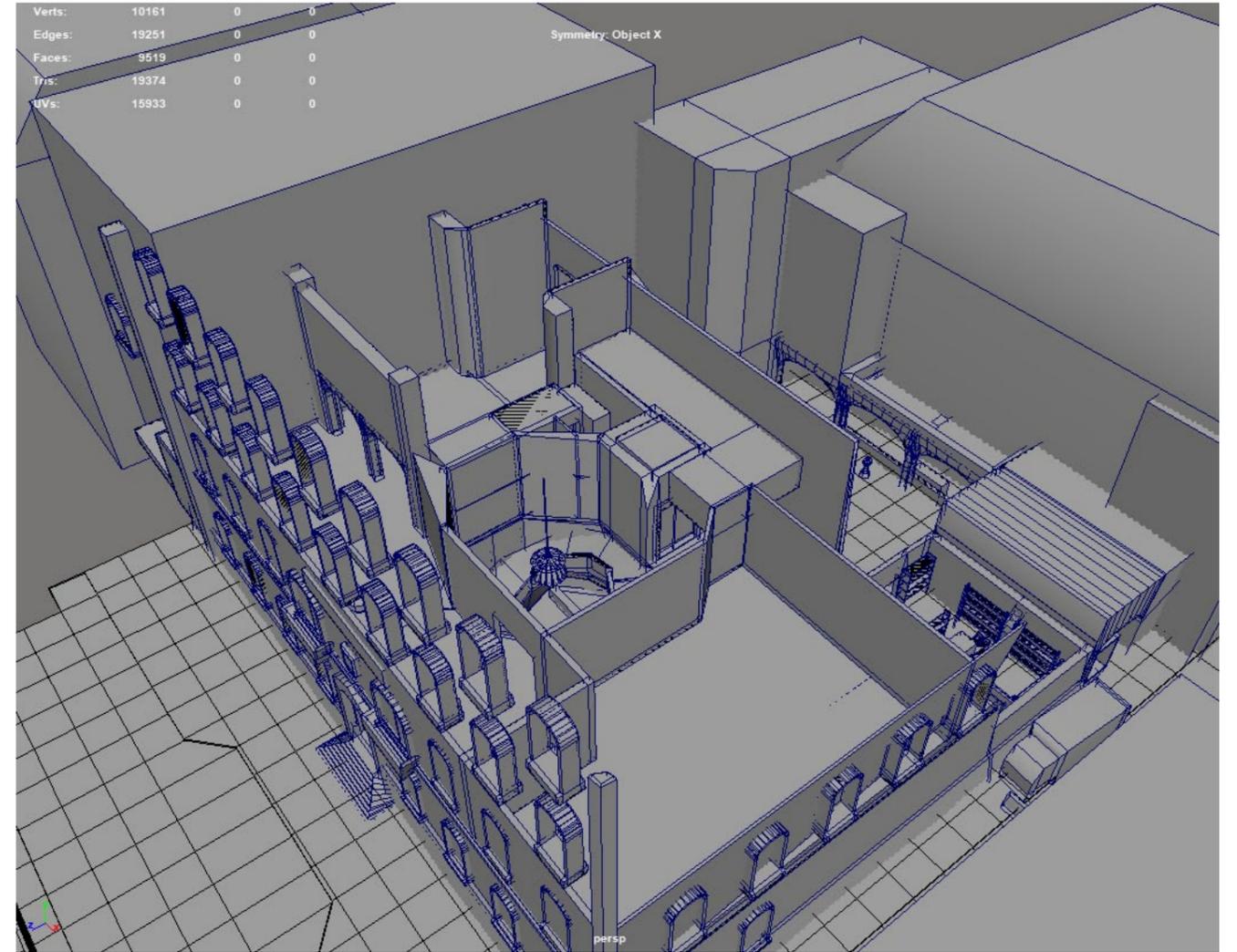
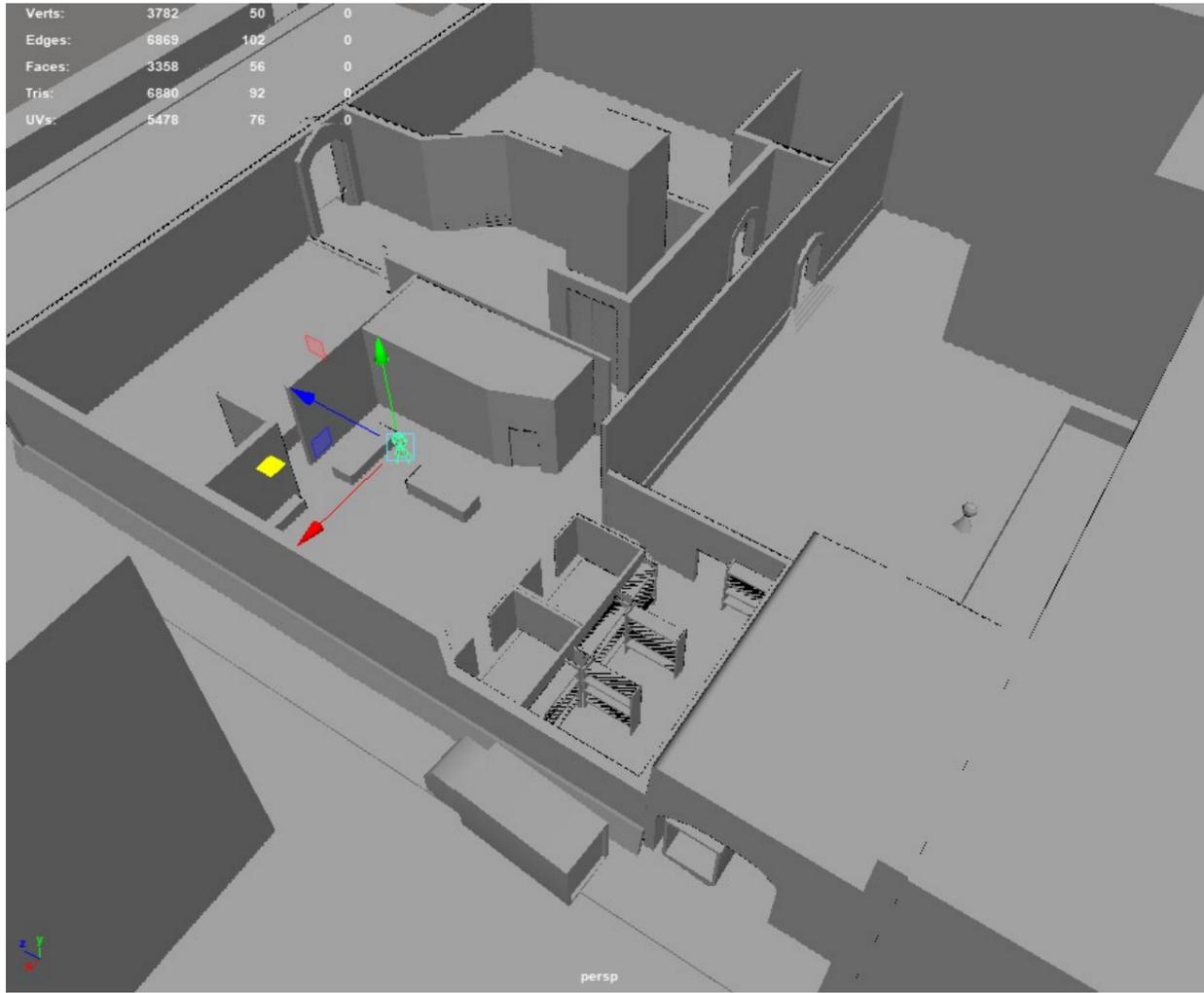
ground floor

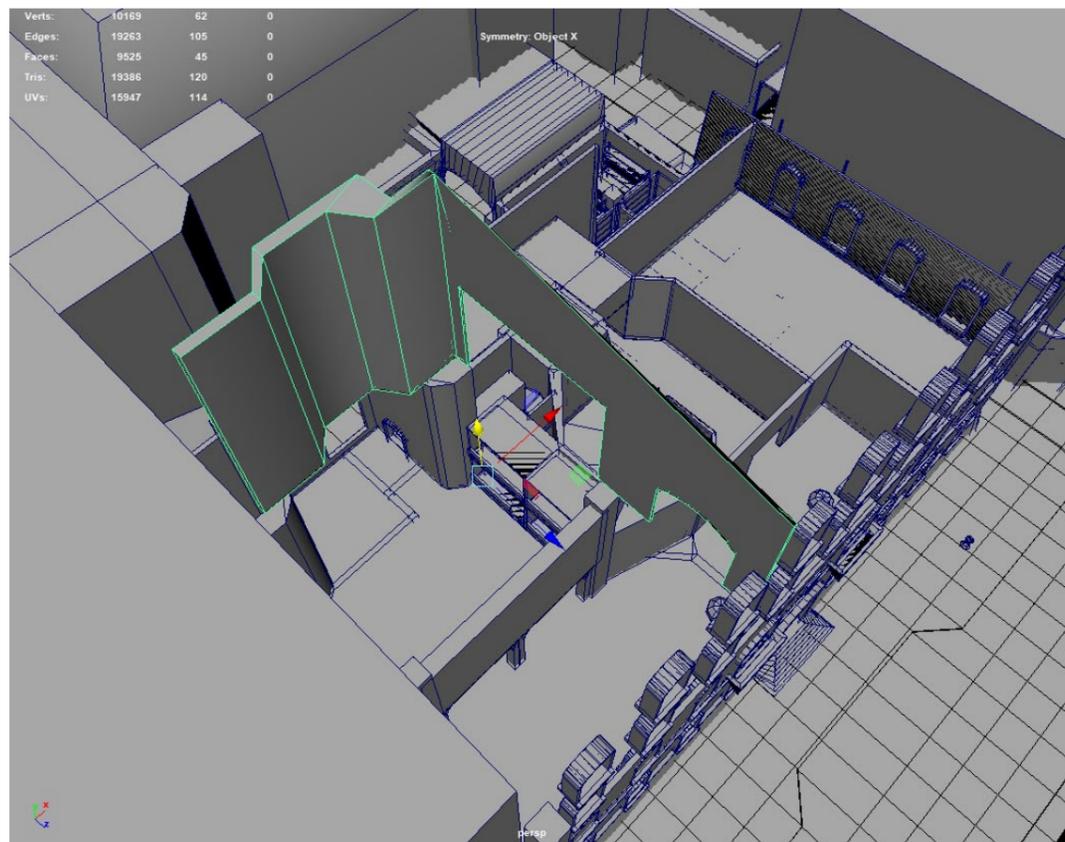
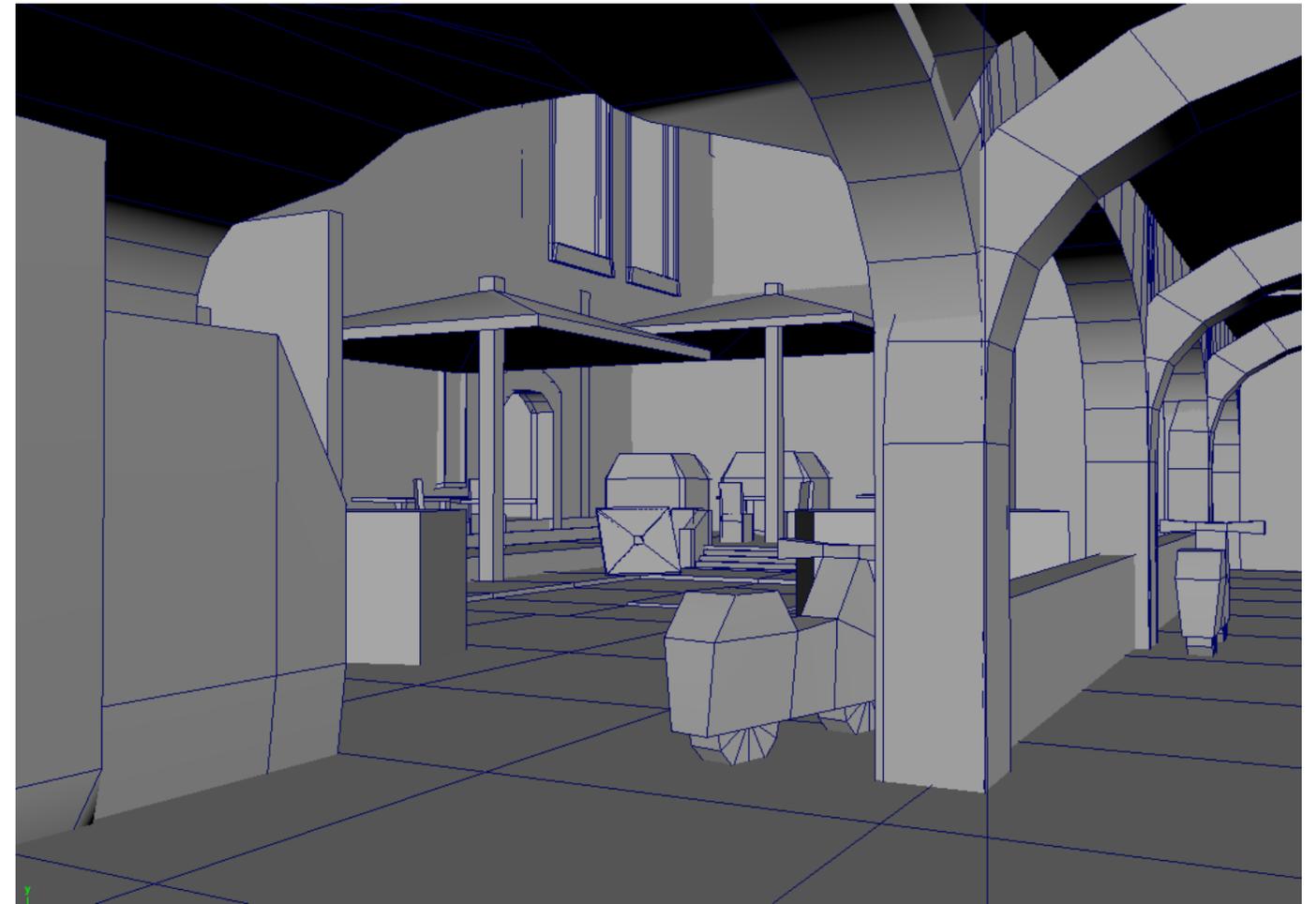
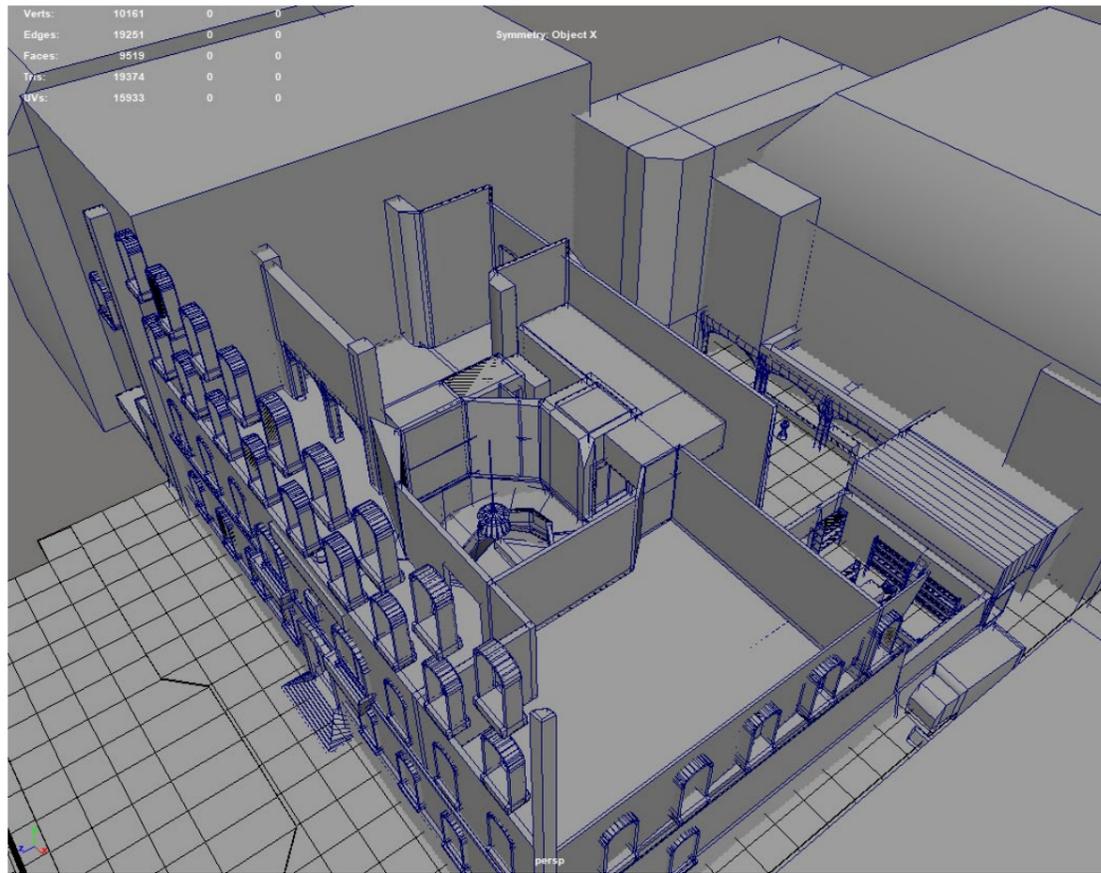


ballroom shape

ROUGH GREYBOXING







THE DESIGN

LEVEL FLOW +
ENEMY BEHAVIOUR

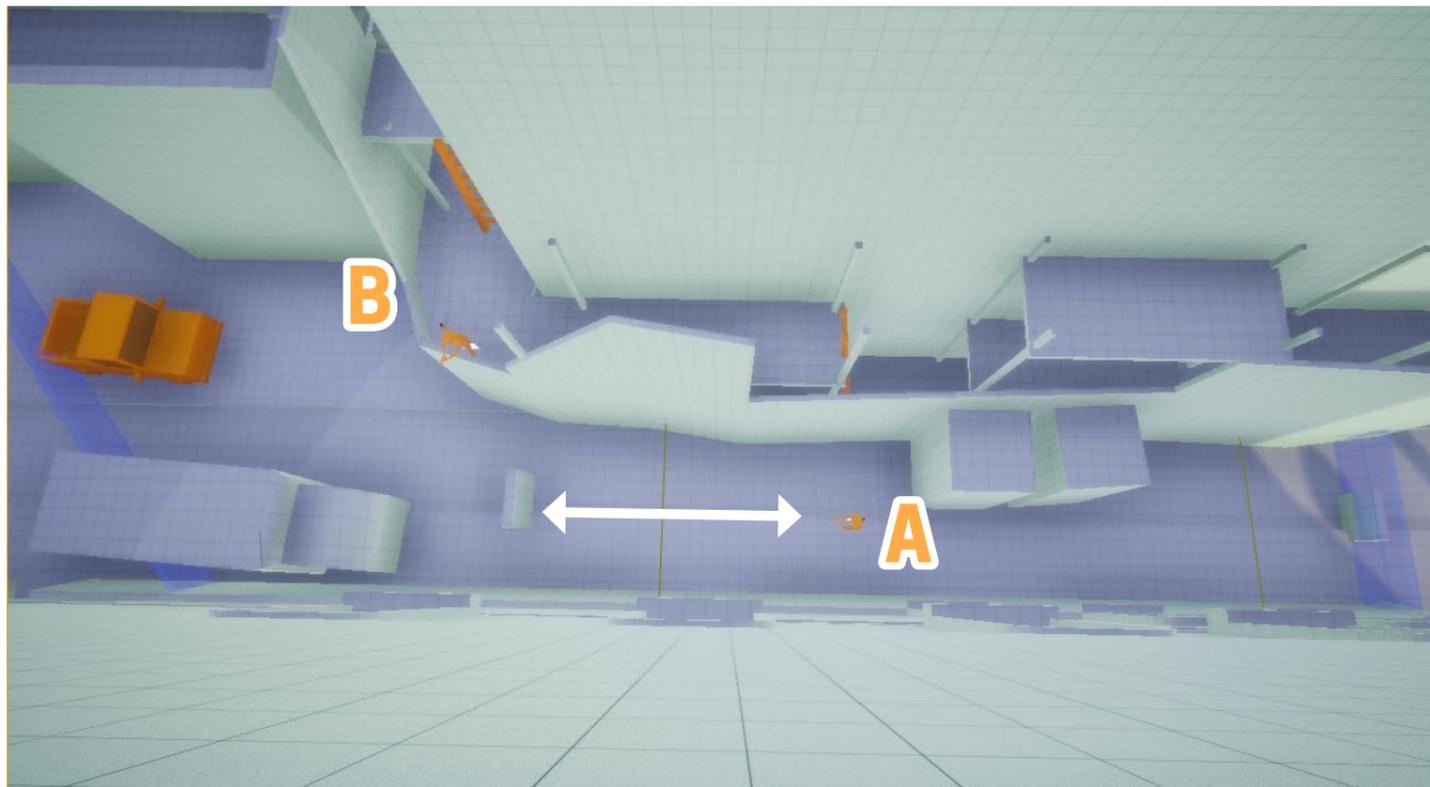
“Patrols”

STREET

The player finds out they can't just walk in the front door and explore a side alley. They can simply stay on the ground level and walk the street or go the sneaky way: behind the fences surrounding the construction site next door. This gives them high ground over every enemy and an advantageous point to go clear the hallway from before they go in.

A: Slowly paces back and forth in the alley. Gives the player plenty of opportunity to shoot them in the back.

B: Gives a verbal warning to the player on sight and then starts blasting.



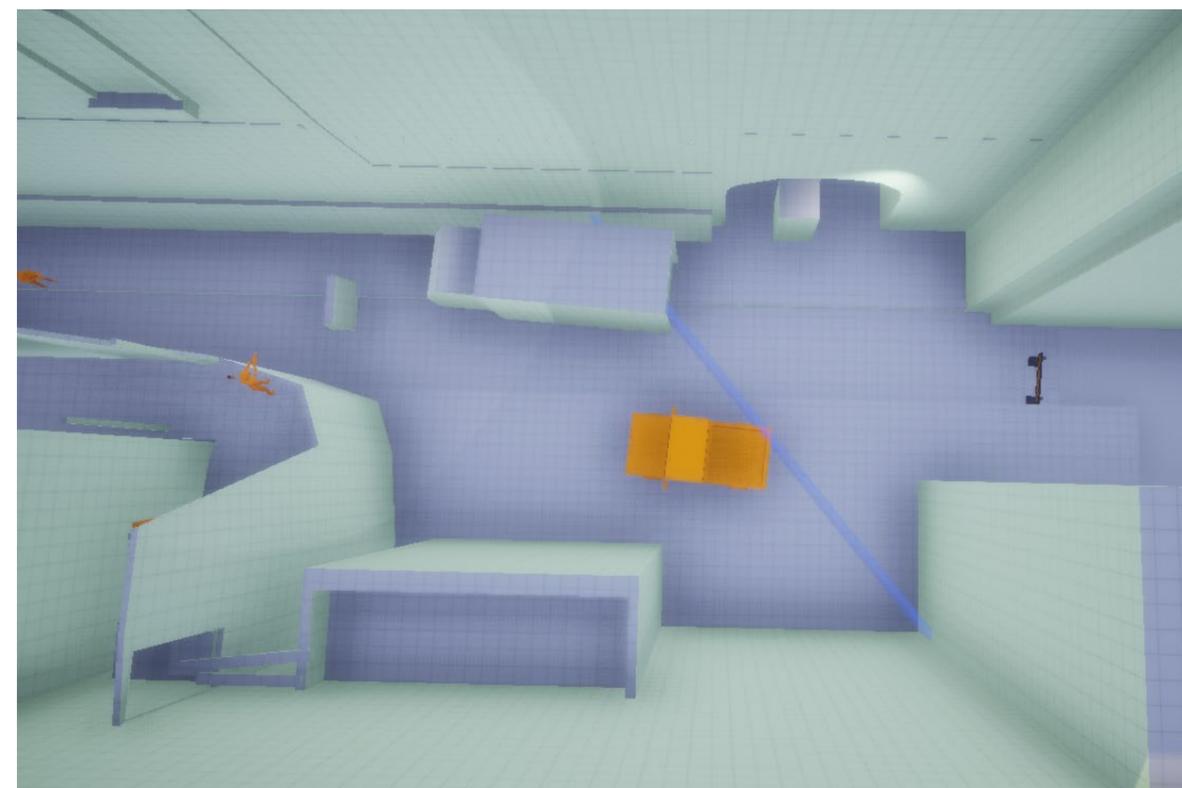
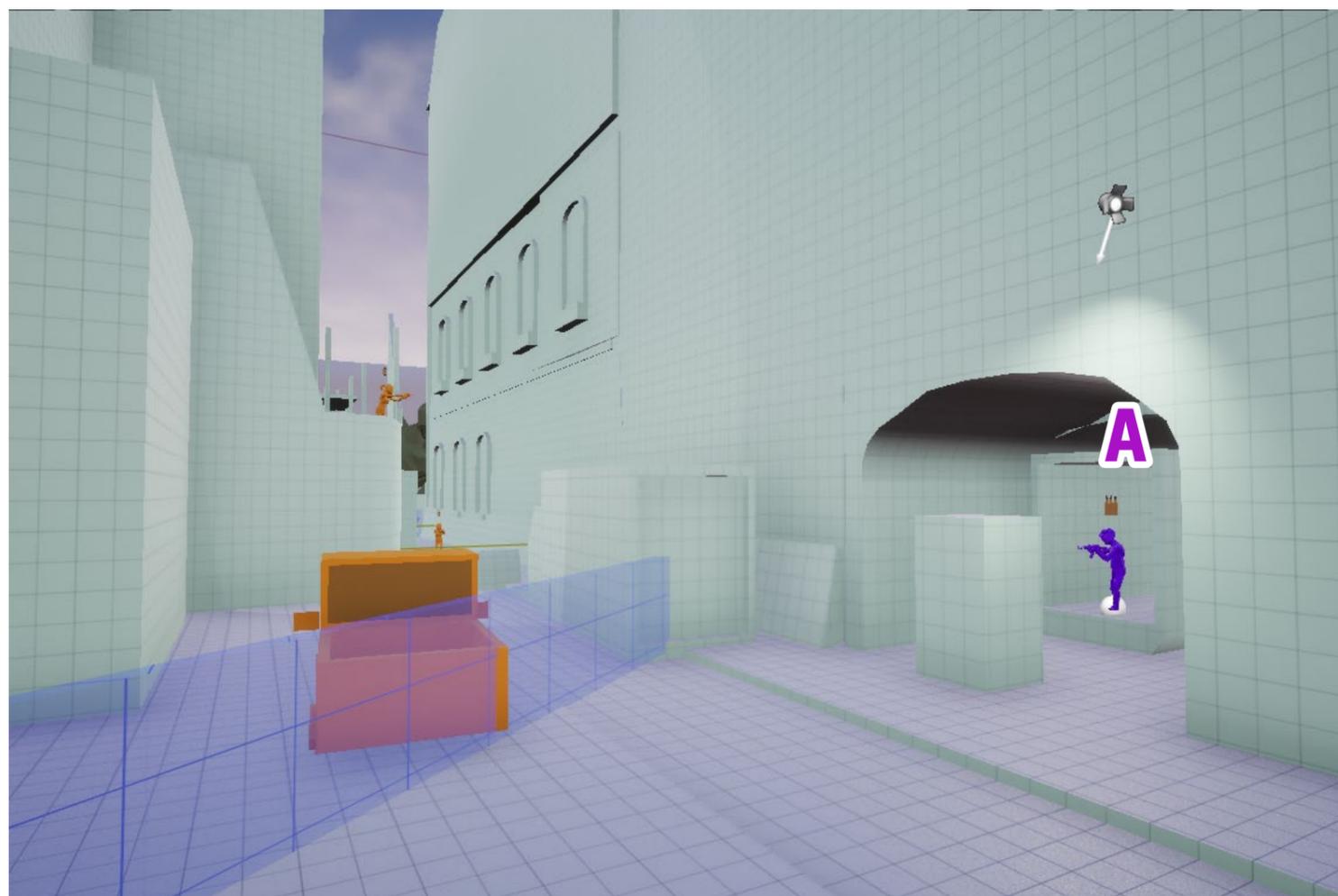
HALLWAY

“Breakthrough”



A safe encounter for the player to deal with their first Machine Gunner. A is static in an enclosed space (the back of a truck) and the player has a lot of space to maneuver and hide behind objects.

A can be killed even more safely from the Balcony in the streets if the player chose that path.



“Trapped”

BACKLOT

Enemies on all sides. The attention is first drawn to the A and B on the terrace and the entrance that they seem to be guarding.

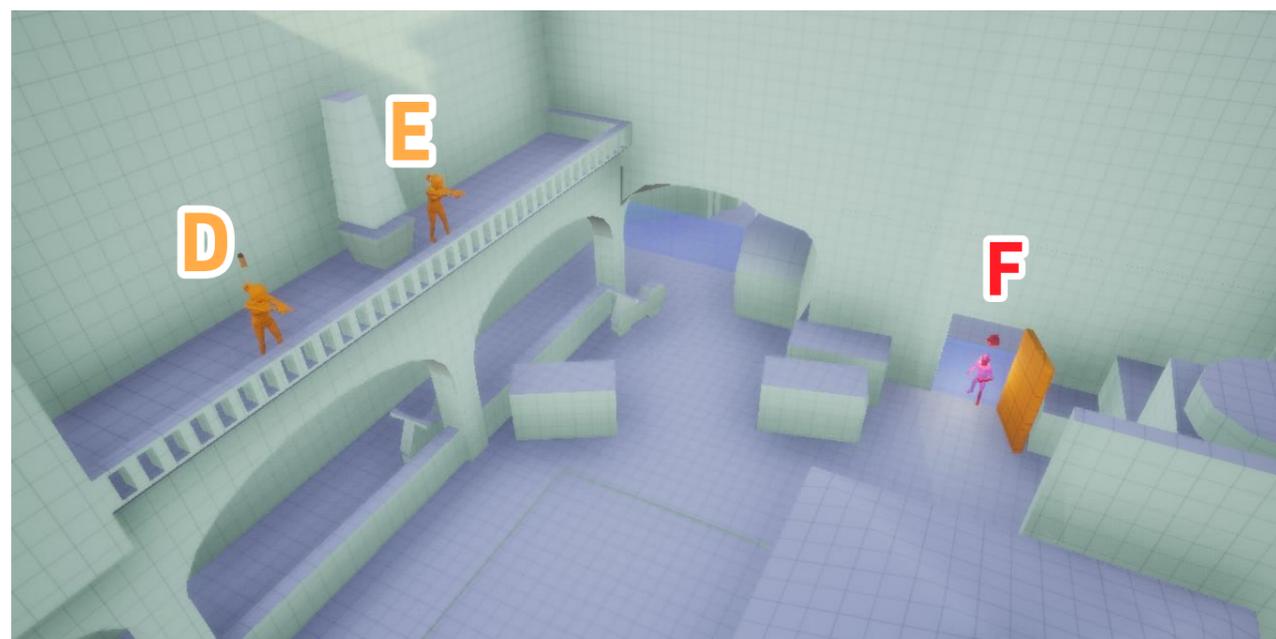
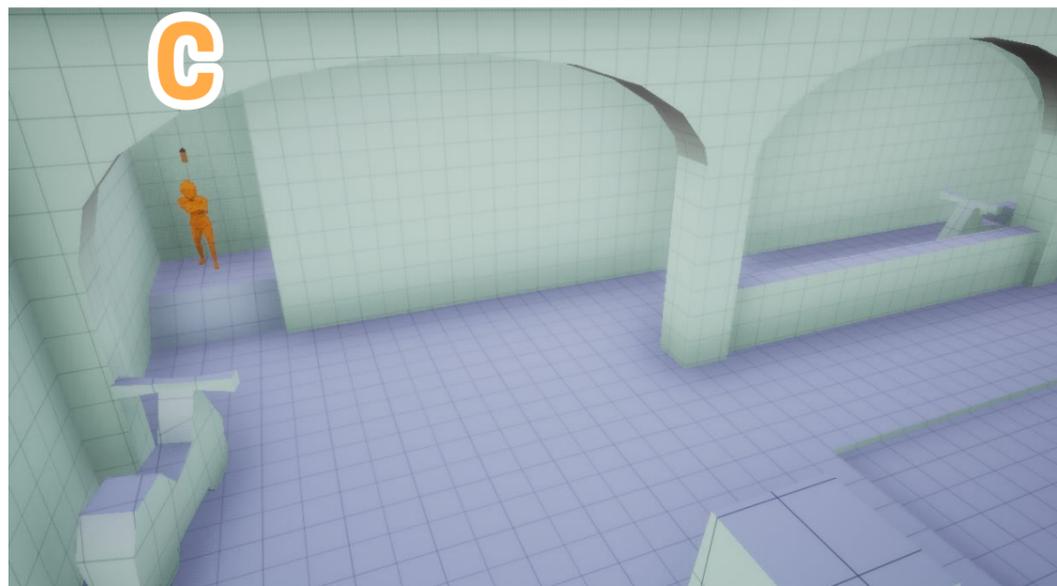
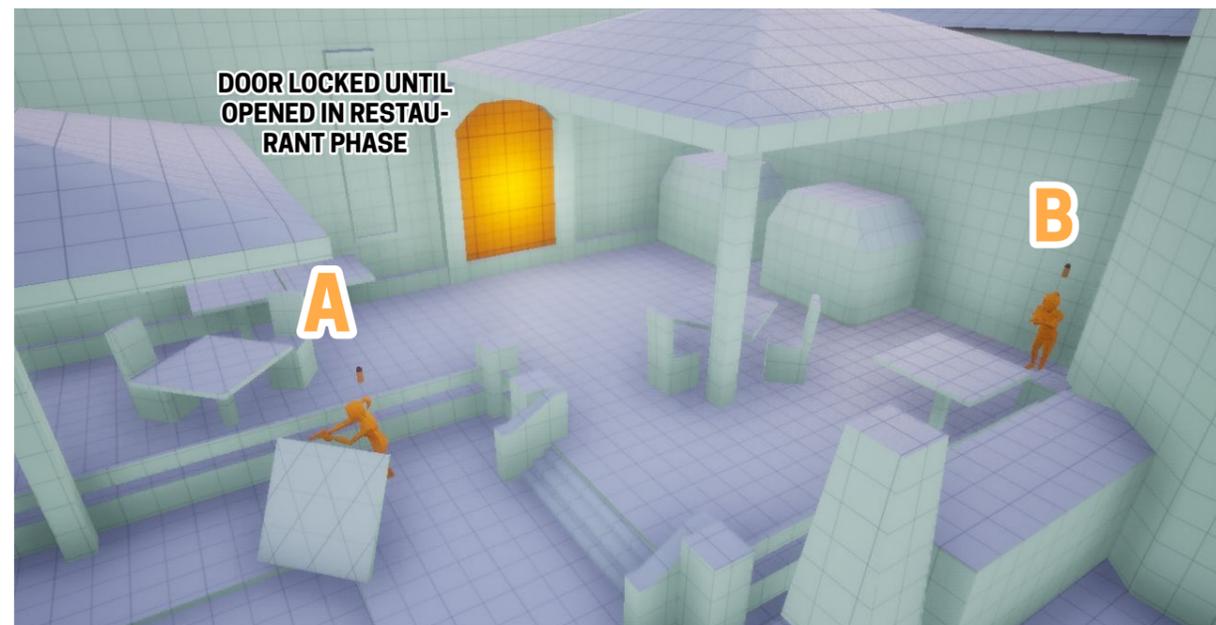
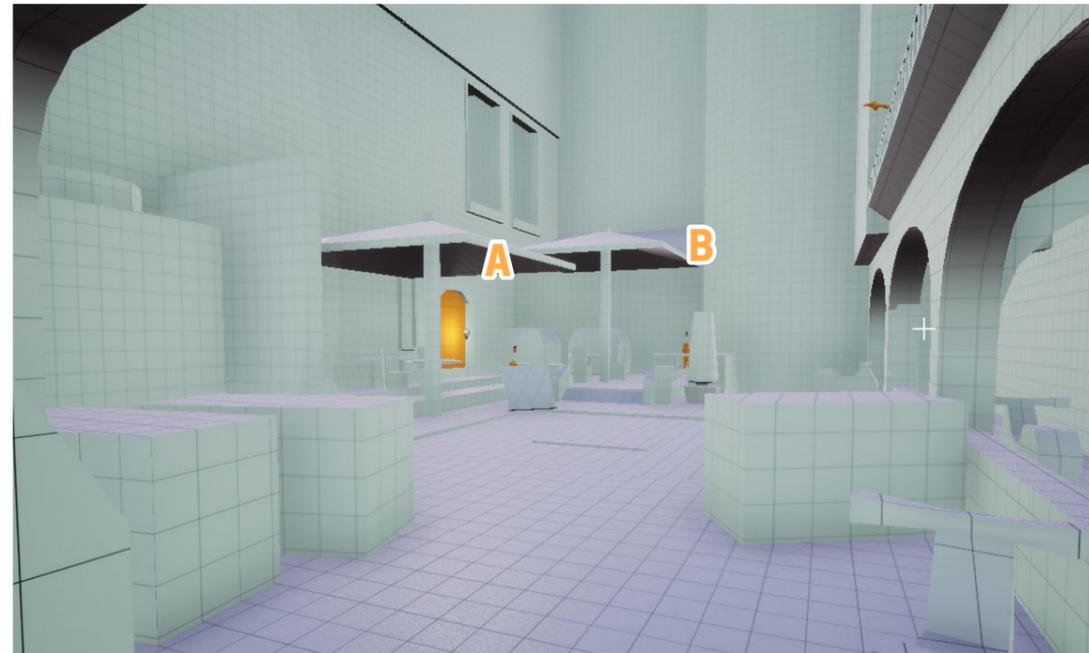
If the player chooses to storm at them straight ahead, they will be shot at from the balcony to their right and C hiding in the lurches. Instead, the player is directed from the start to work the room in a counter-clockwise motion (still being surprised by C, though).

F is a flamer that opens and comes through the kitchen door when only one of ABCDE is still alive.

A: Holds ground.

B: Moves towards player, but keeps high ground.

CDEF: Freeroaming once it first sees the player.



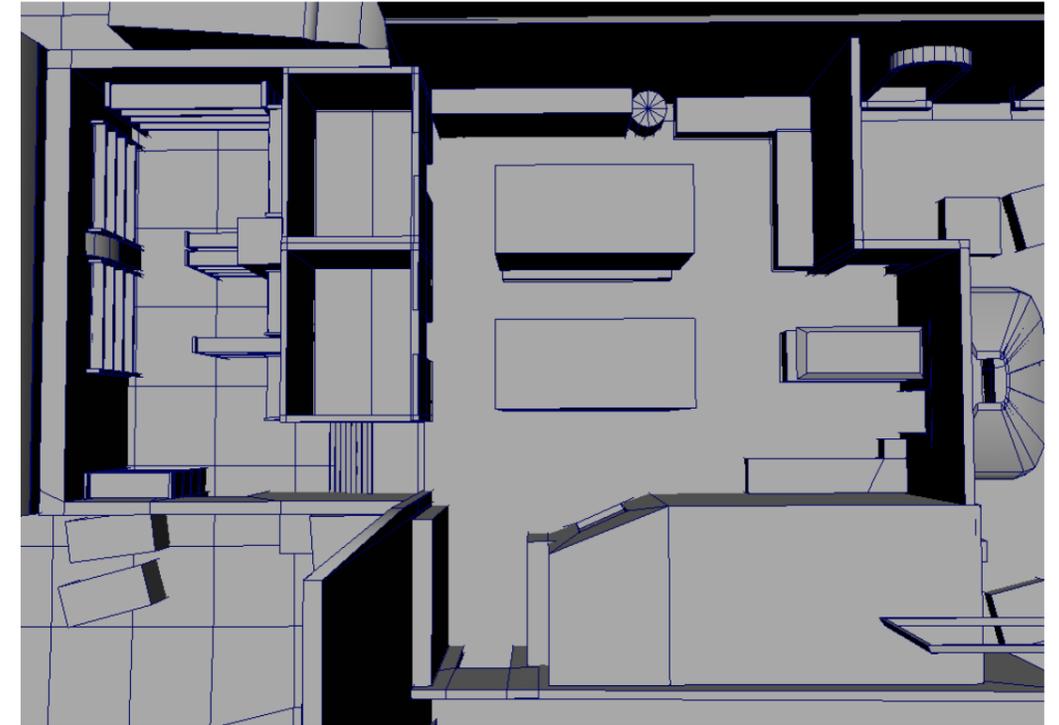
“Close Quarters”



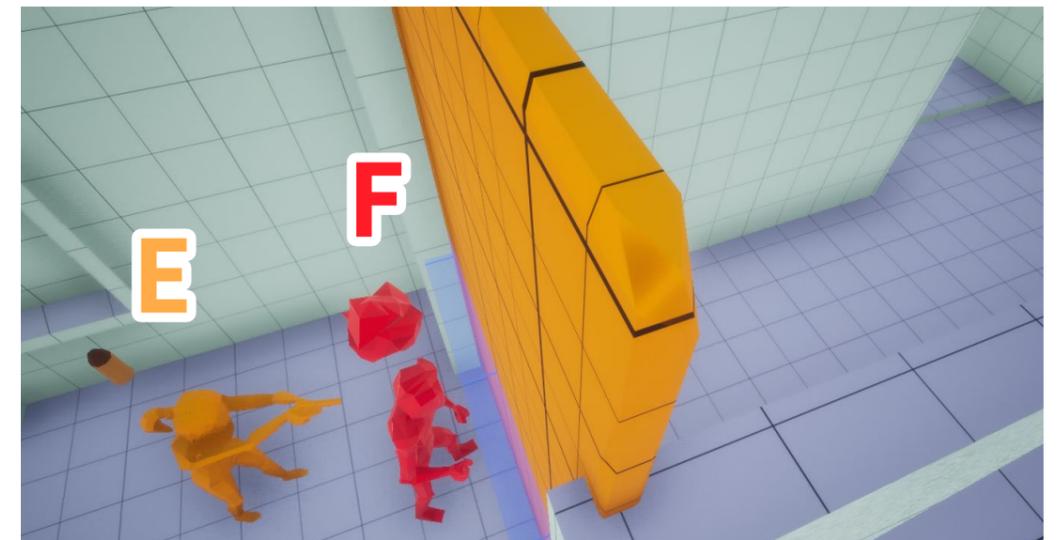
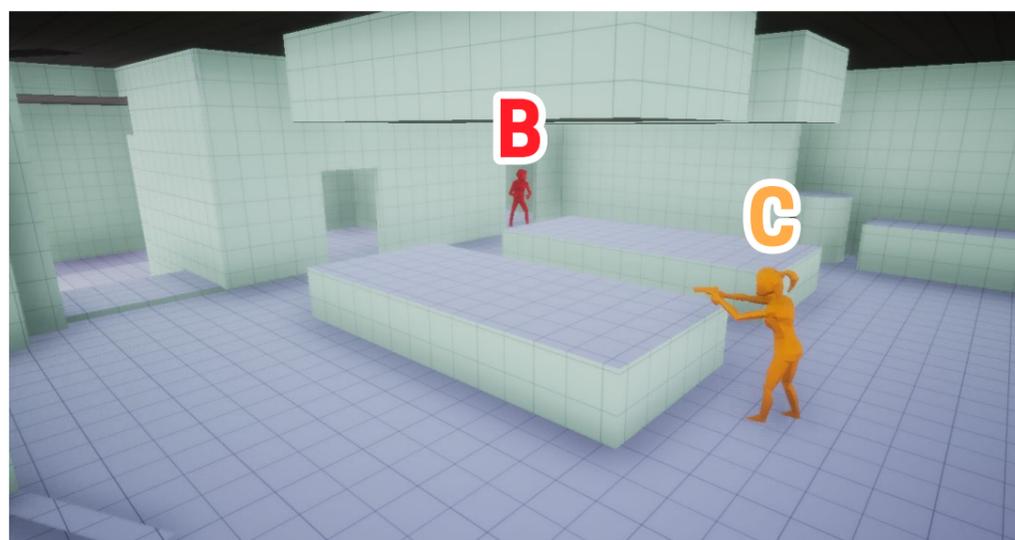
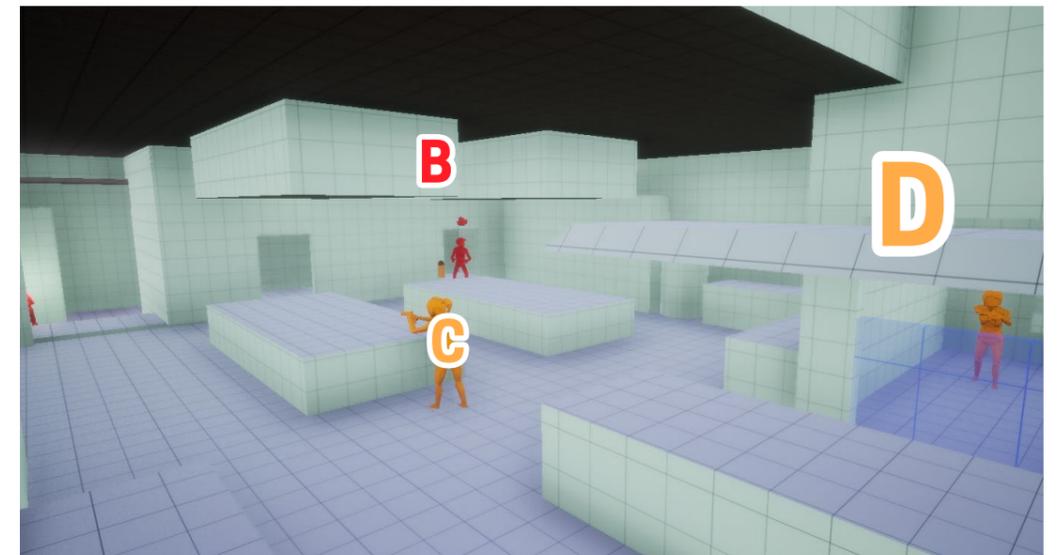
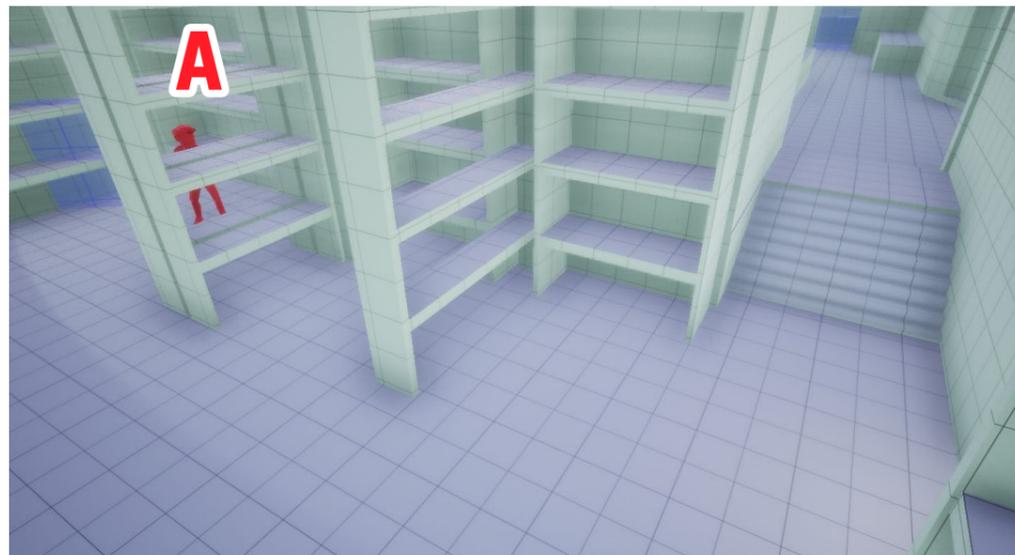
KITCHEN

Having been introduced to a flamer at the end of the backlot, we start throwing more at them. There are two exits into the restaurant phase.

E&F open the door and burst in when B is killed.
D walks in when C is killed.



ABCDEF: Freeroaming when they see the player.



“Arena”

RESTAURANT

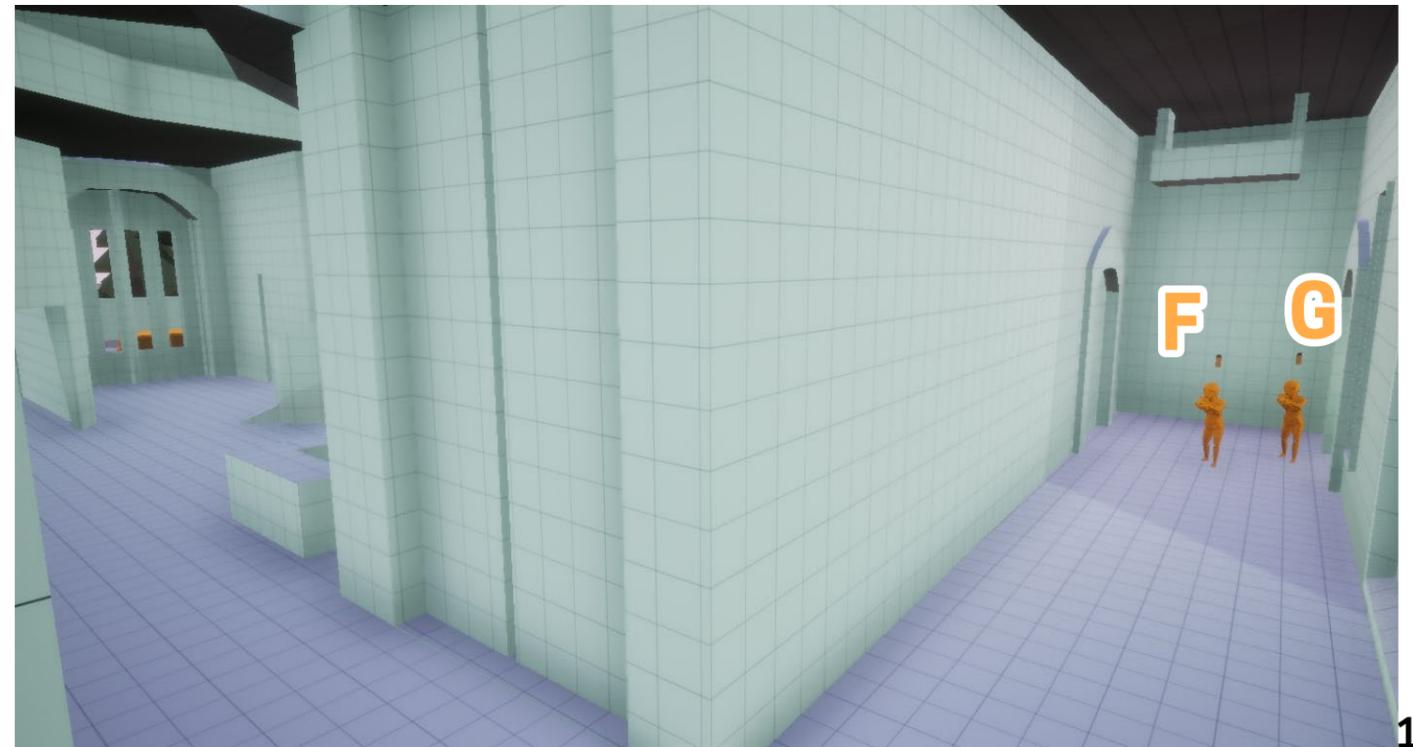
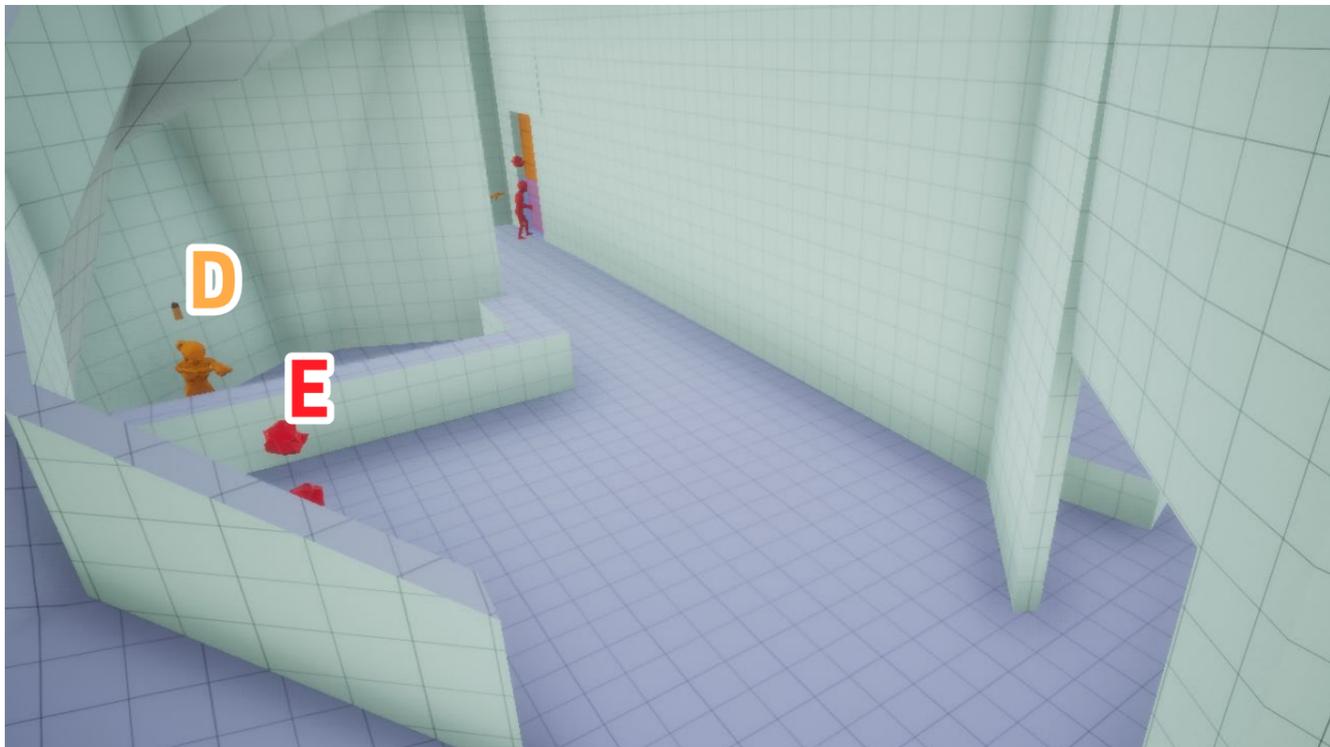
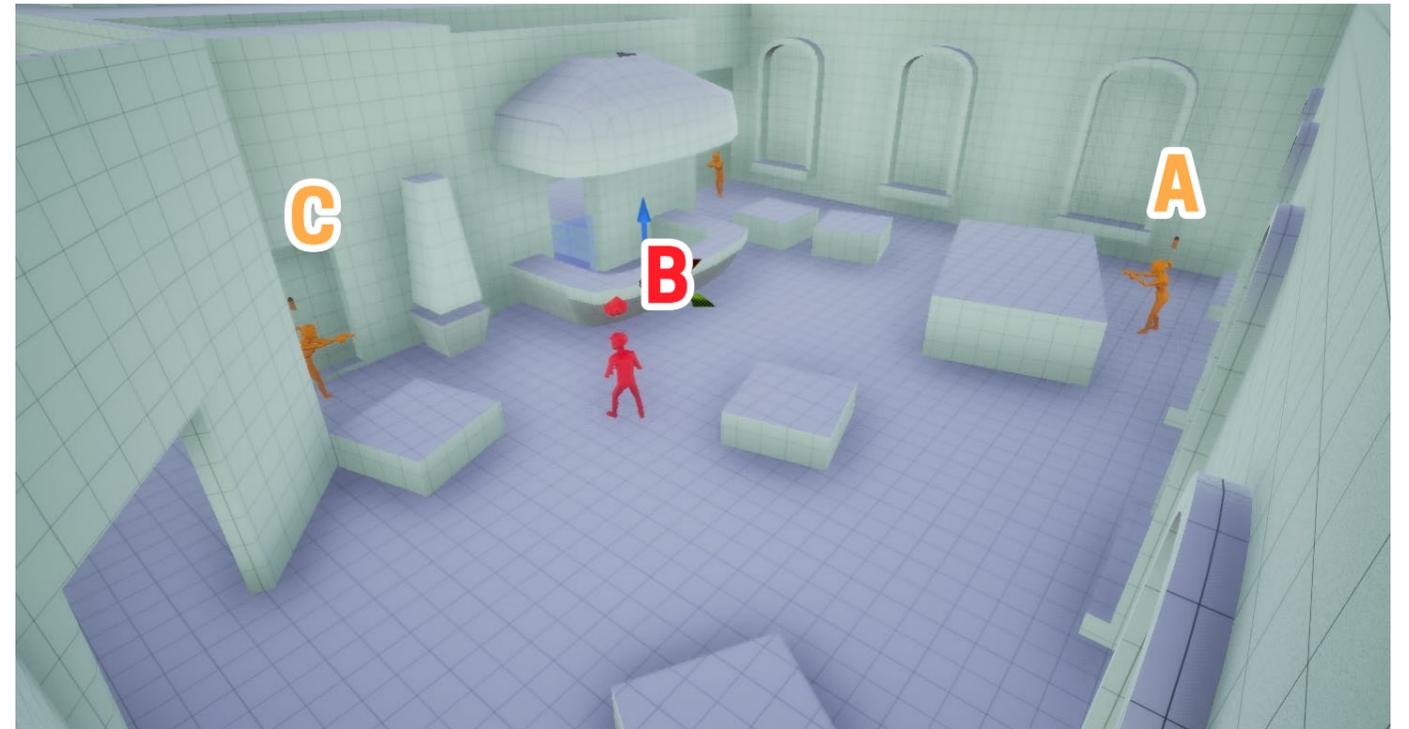
The Restaurant phase takes place in the dining hall next to the kitchen and the hallways of the ground floor. More standard rooms/hallways mode. A moment of slowness before the grand finale of the ballroom.

F&G are reinforcements that spawn when A dies. When they spawn they open the door to the backlot and start walking towards the kitchen.

ACE: Hold ground.

BE: Freeroaming when they see the player.

FG: Freeroaming.



BALLROOM

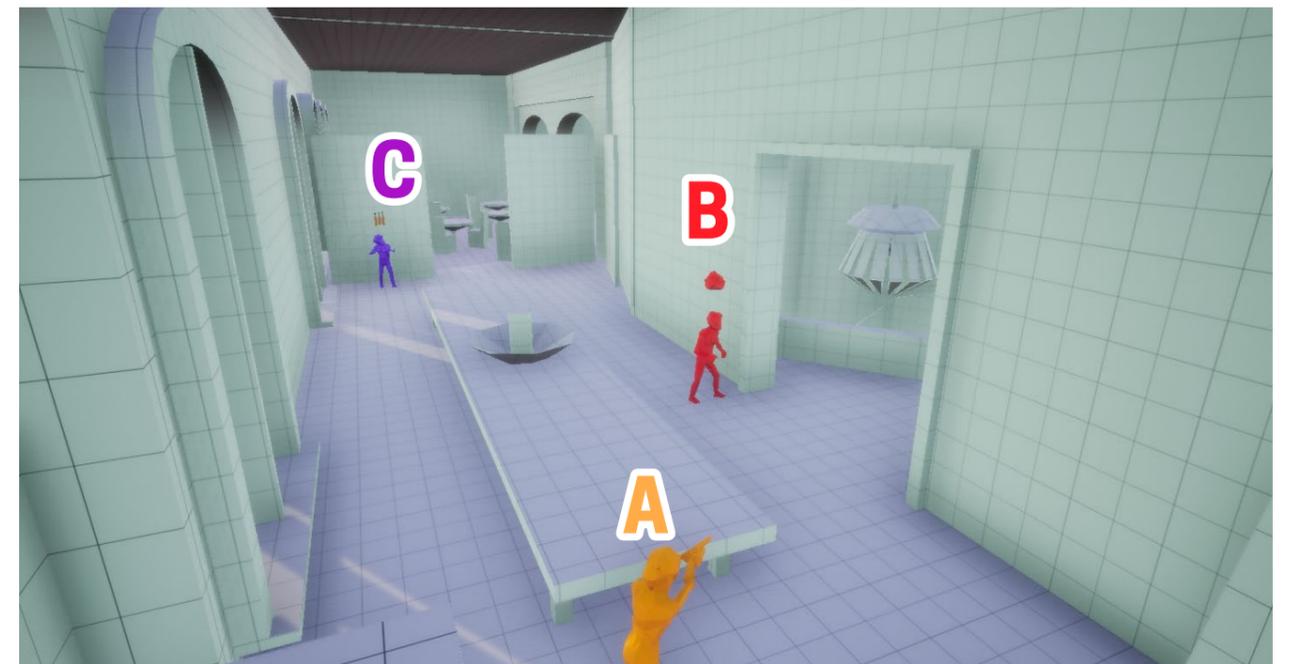
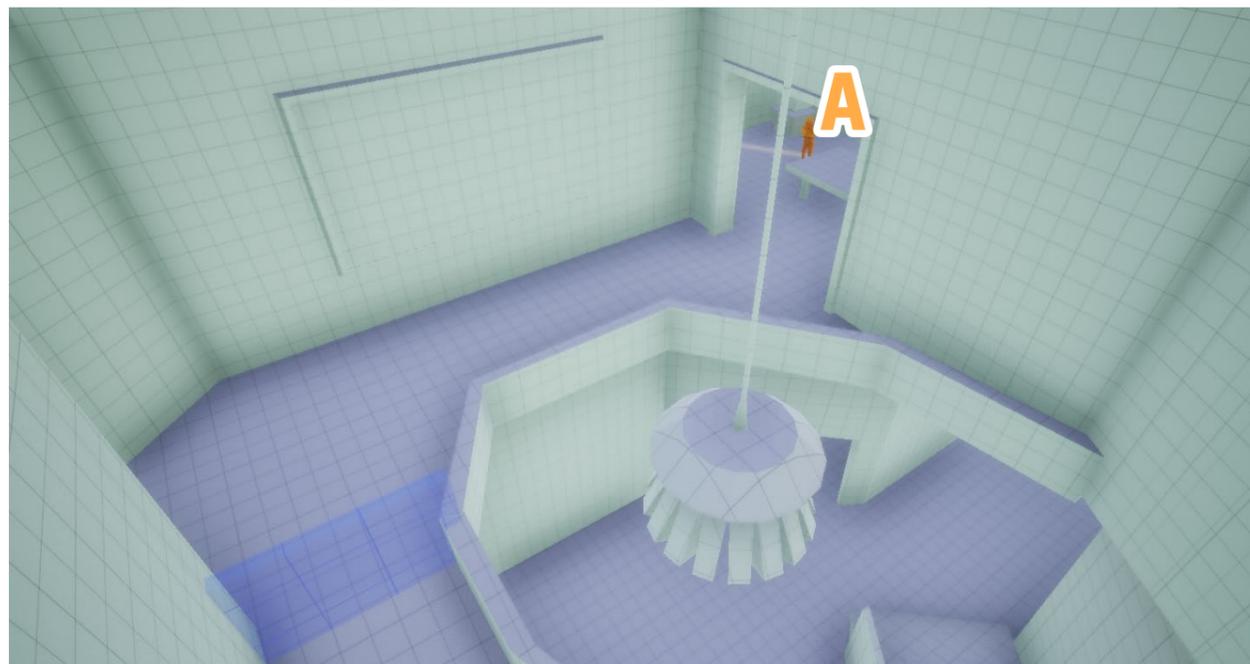
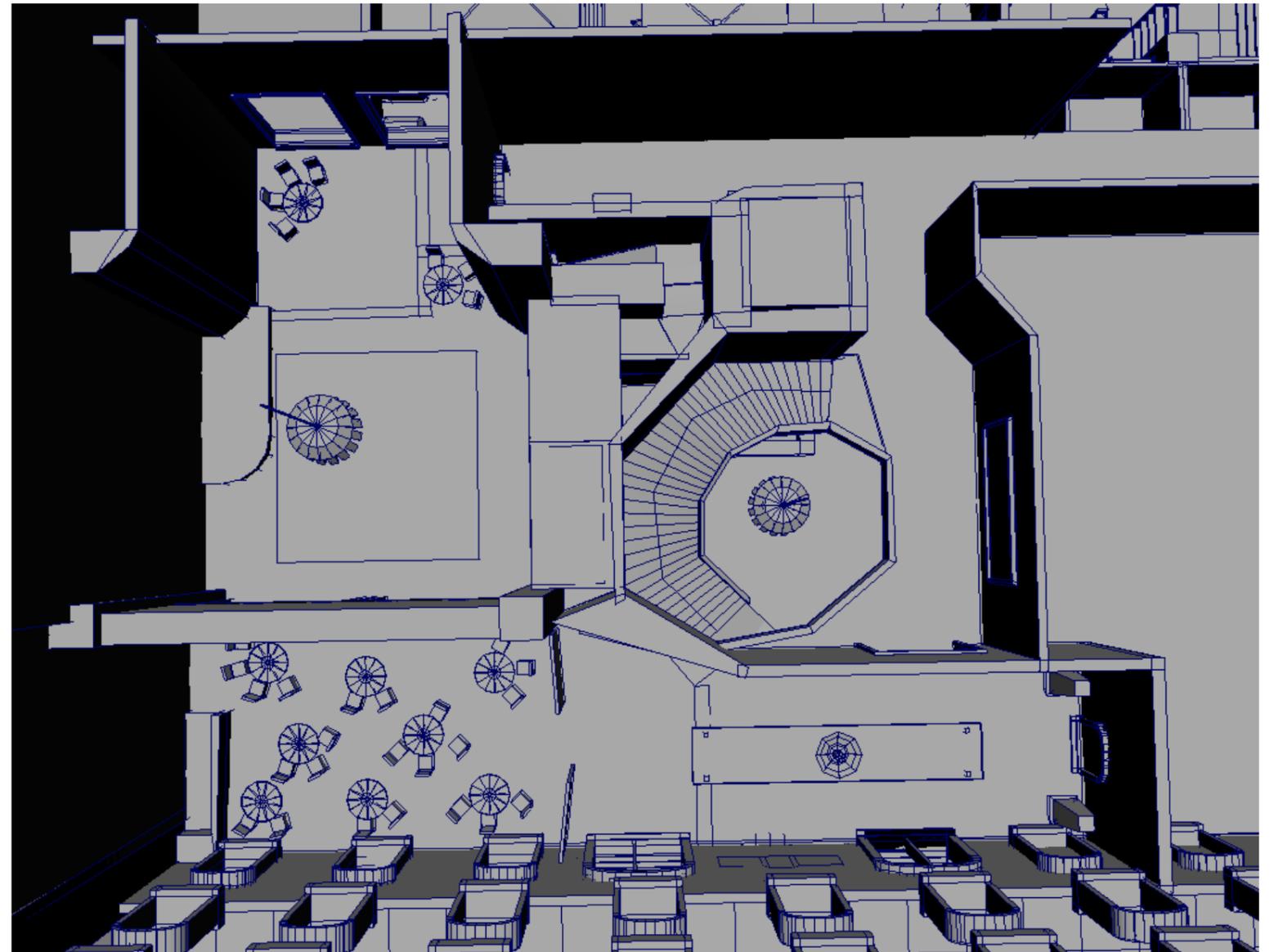
“Large Arena Puzzle”

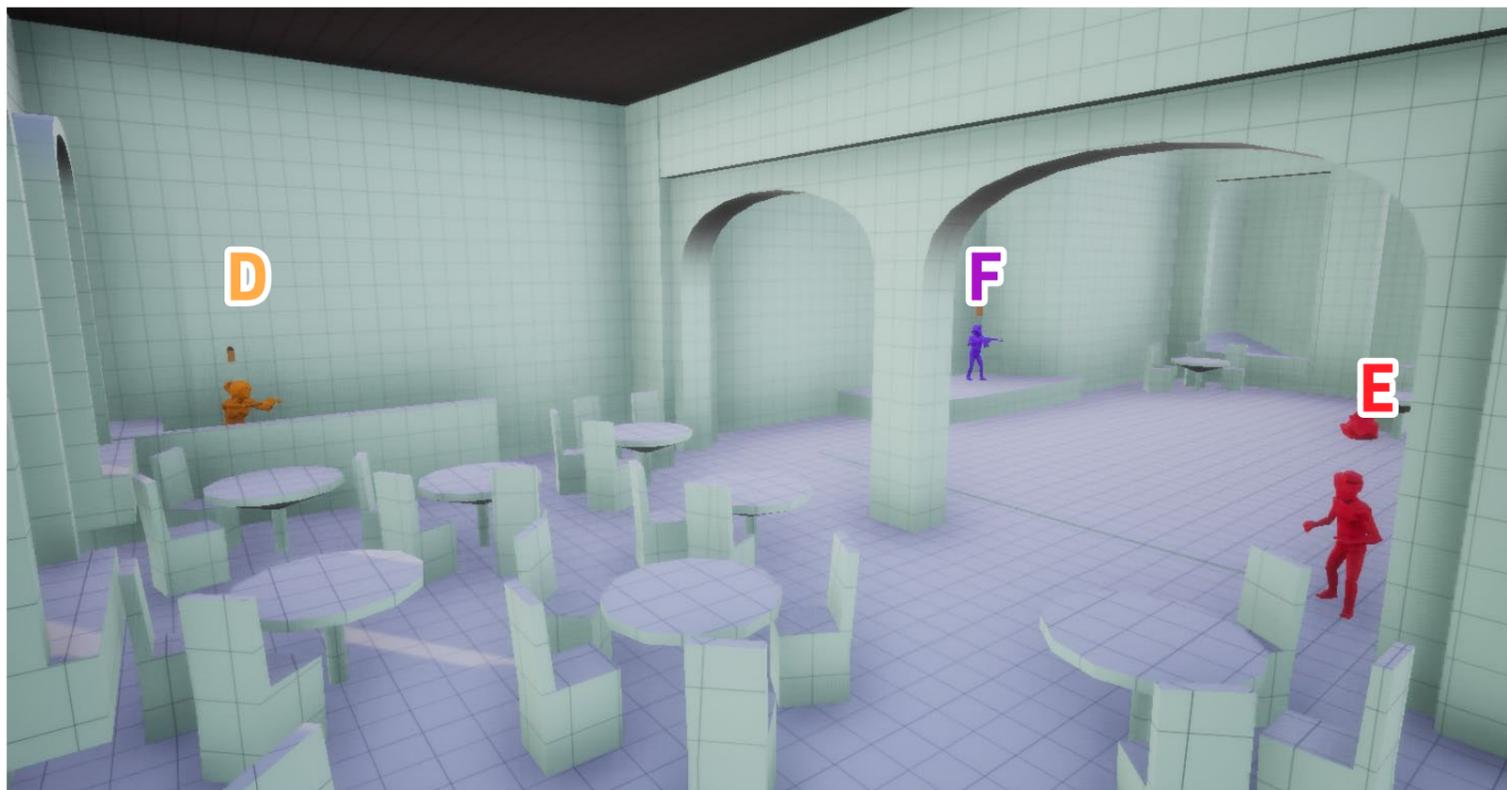
The entire first floor is dedicated to the ballroom encounter. When the player climbs the stairs, they are immediately assaulted from the right by A. When they engage, they are joined by B for support.

Don't enter their room too quickly, though. Because C is around the corner. You can engage, but most players will likely turn around and try the other path in the hallway. Kill H&I and then work their way through the ballroom from that side.

The player can sneak around into the box seats and take everyone out from the high ground.

A challenging finale with a full variety of enemy types that rewards exploration.



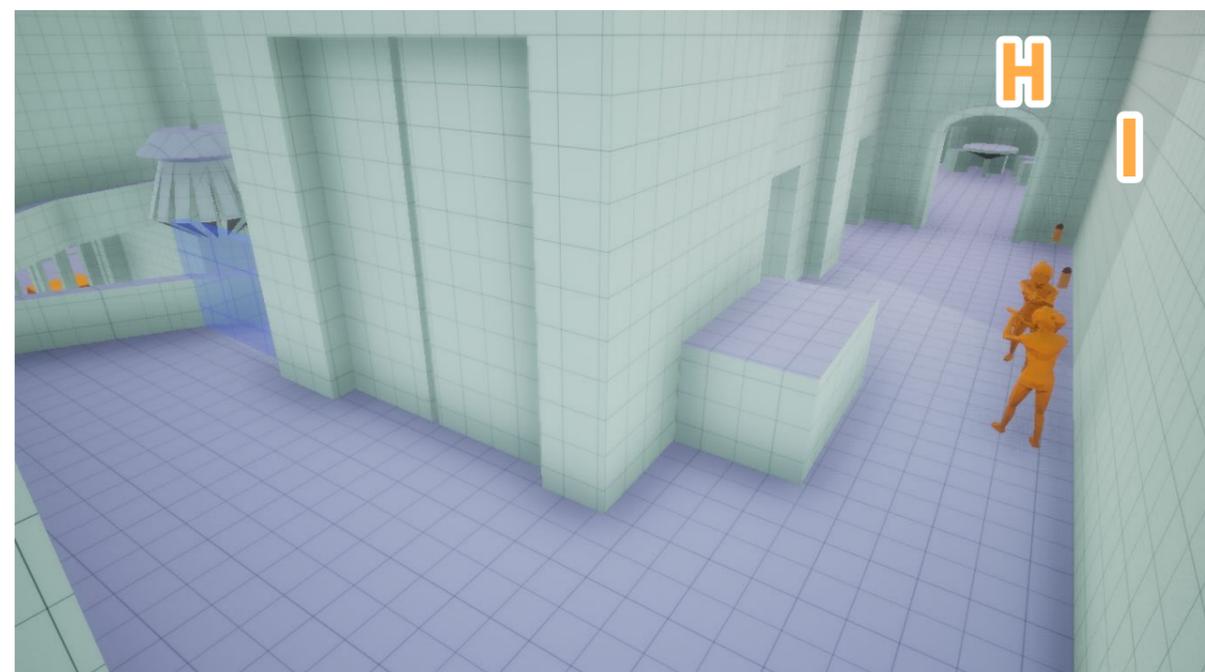
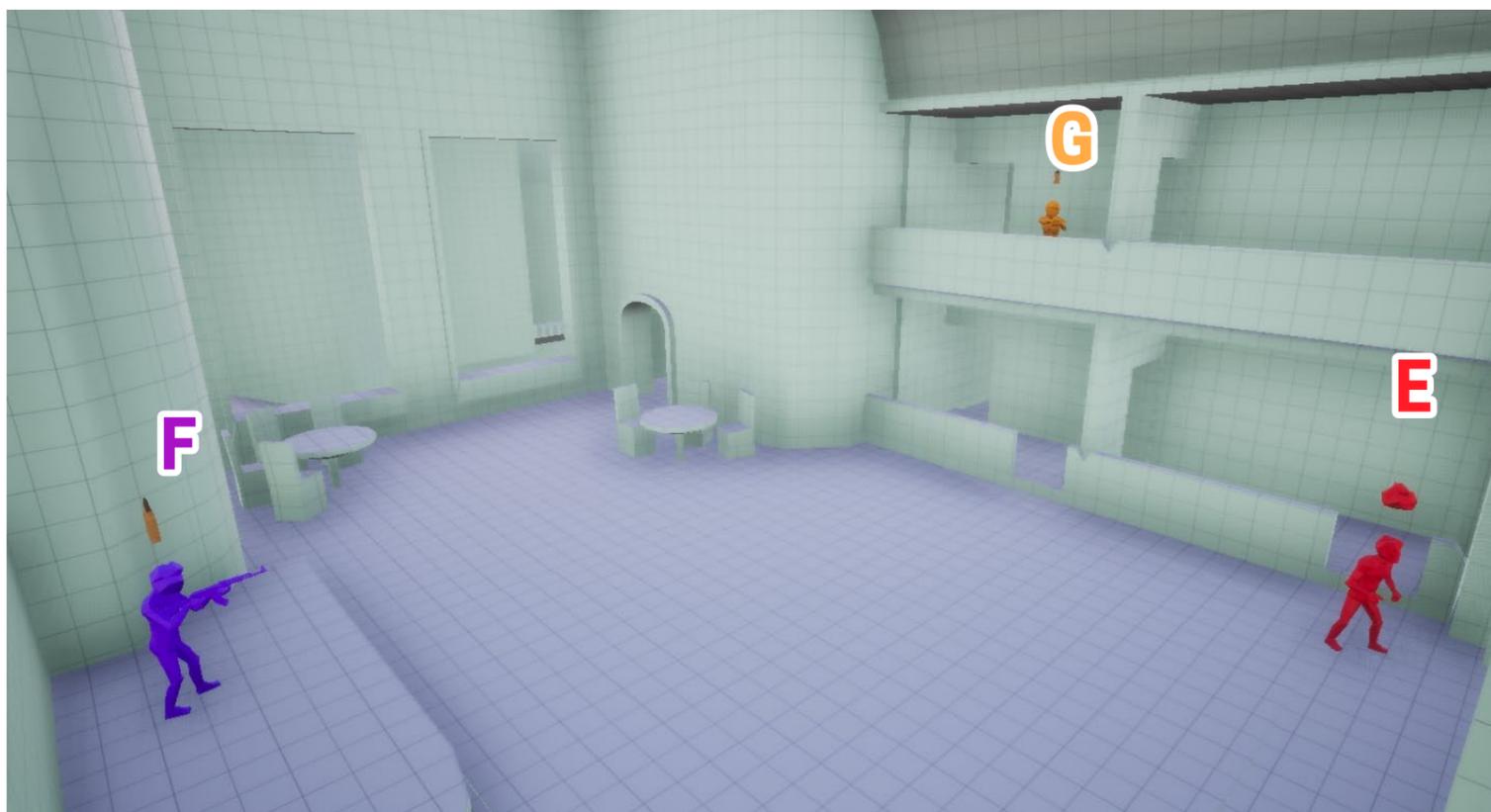


The ballroom is designed to have a constant presence from the outside of the building to indicate the goal of the mission. This can be further accentuated by bright lights/loud music coming through the windows.

This also gives the player an option to escape through when they are done with their assignment.

ACF: Hold ground.

BDEGHI: Freeroaming when they see the player.



THE DESIGN

VIDEO
FLYTHROUGH

VIEW
3D MODEL

Project files available upon request.

Thank you for reading!

*A more in-depth look into
my greyboxing process:*

[Greyboxing_Process.pdf](#)

My portfolio:

<https://oprel.work/>

