

Game Content Design: Coursework 2

Single Player Level Report

Abstract

This report details on the design process of the single player level created by team gang.

Introduction

The following report outlines the design process of the single player level team gang was tasked to create. The level was created in Unreal Engine 4 (v4.21.2).

Design Brief

The team was tasked with creating a first person action level set in 2025. The main character (Derek Duty), a Glaswegian security guard and army reservist, gets kidnapped and beaten up by gangsters. While transporting him there is an explosion and the level begins at dusk. All of this is set in the East End of Glasgow.

The goal of the level is to create the feeling of tension in the player. The player should not feel comfortable or powerful. It should take 5 to 10 minutes to play through the level.

An overview of the assumptions you made regarding the experience of your end-user

The following assumptions were made regarding the experience of our end-user:

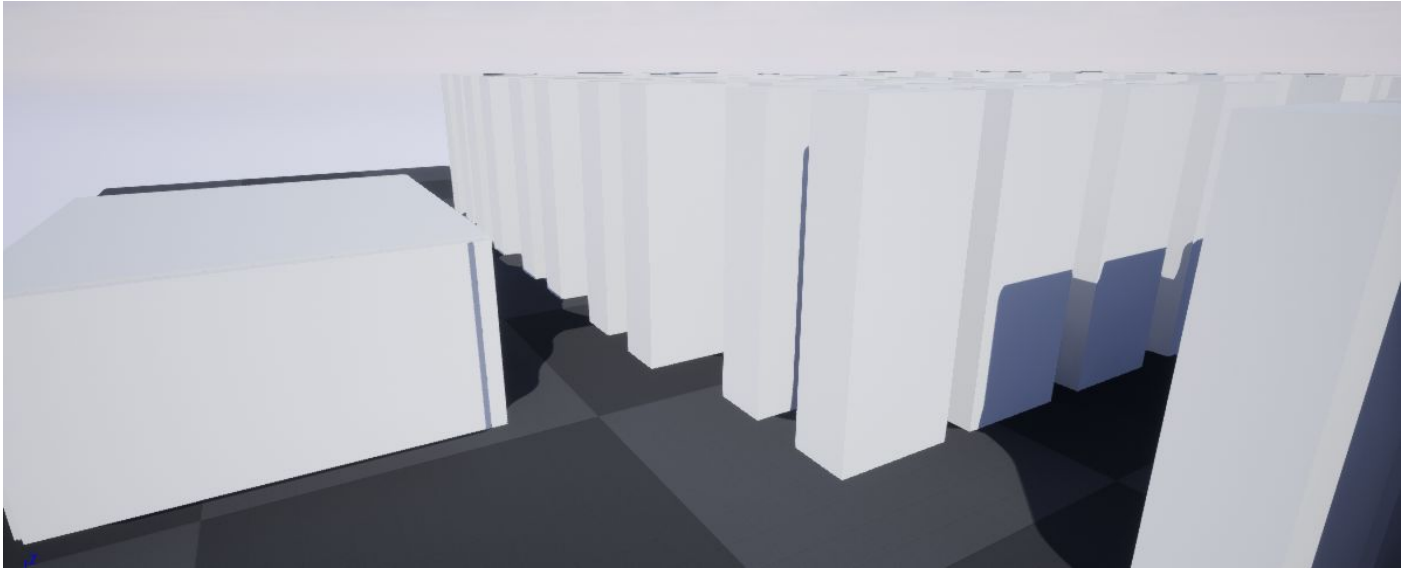
- Should be familiar with first person games
- Should be able to solve basic puzzles
- Knows the basic controls of first person games

A list of important design constraints you identified when reviewing the target platform

- The assets provided did not fit with the theme hence assets from unreal store were used.
- The base level wasn't opening on the team members personal pcs which was later fixed but impacted the iteration of our level designing.
- The team was not very familiar with blueprints in Unreal Engine 4 and it took time to make working puzzles with it.

Initial Prototype

A white box version was first made in Unreal Engine 4. Boxes which represent buildings were added. Due to this lanes were created which would act as stealth and combat sections in the level.



This was used to playtest the level in its early stages.

Assets were later added to make it look more like the East End of Glasgow.





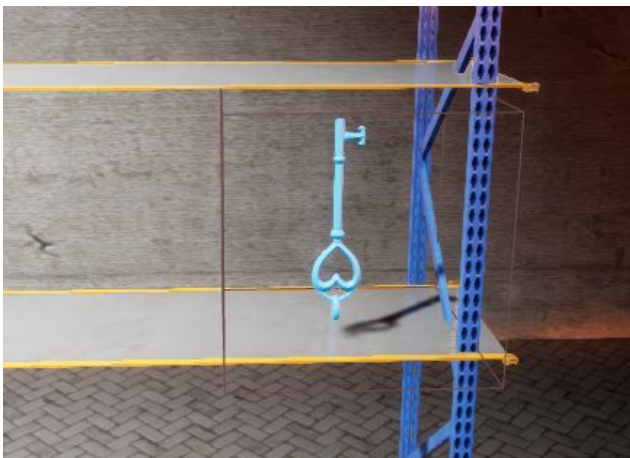
A warehouse was added which would serve as the start point of the level.

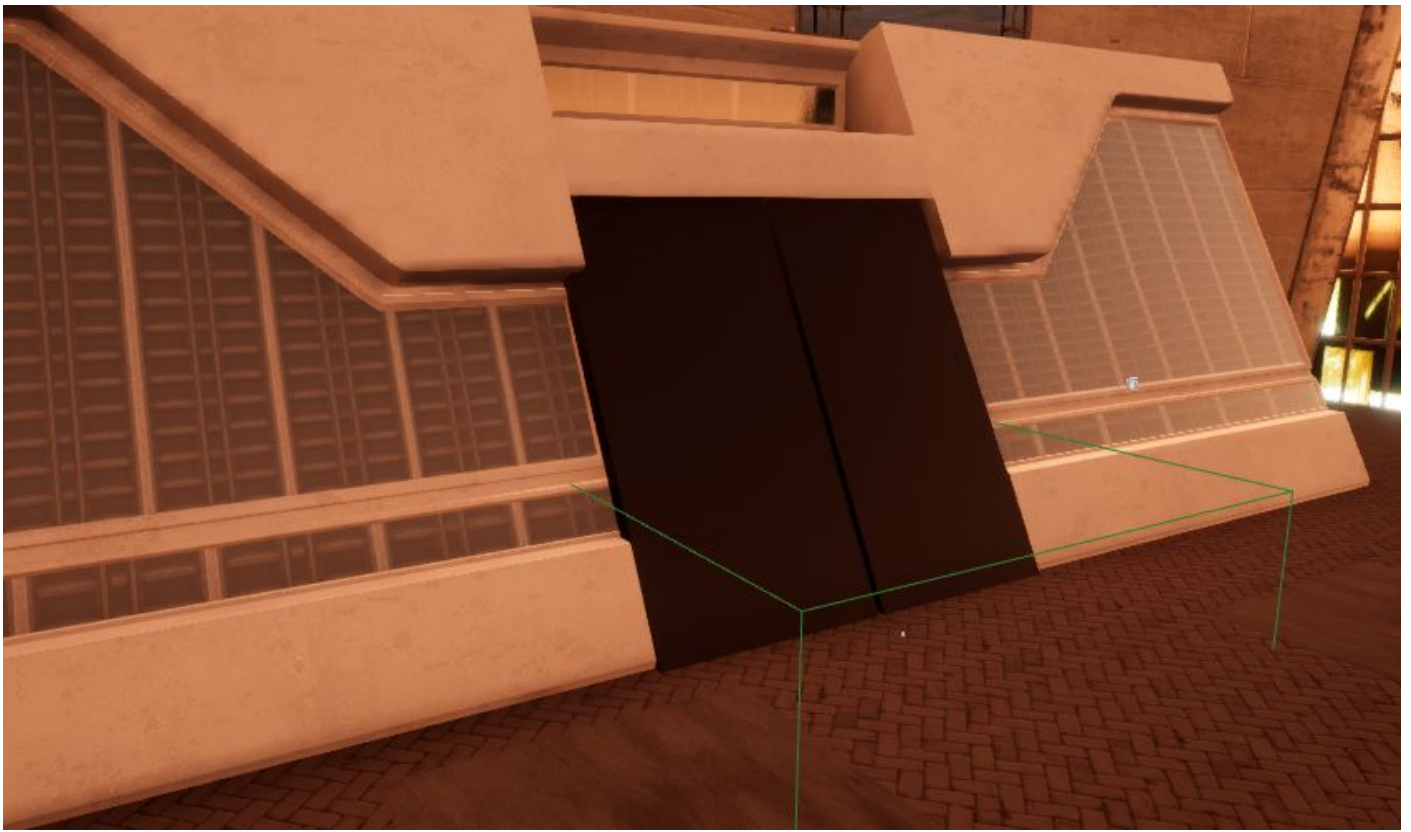


Various assets were added inside the warehouse so it would fit with the theme.

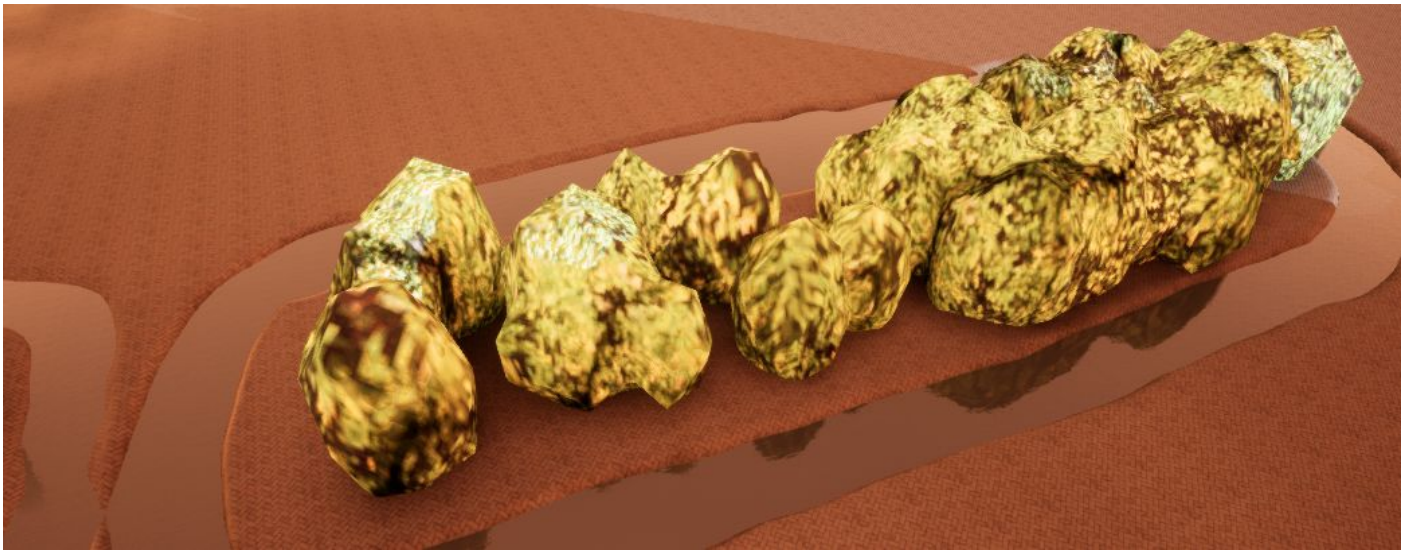


A puzzle which involved picking up a key and going through doors of a building was added. This would end the level.

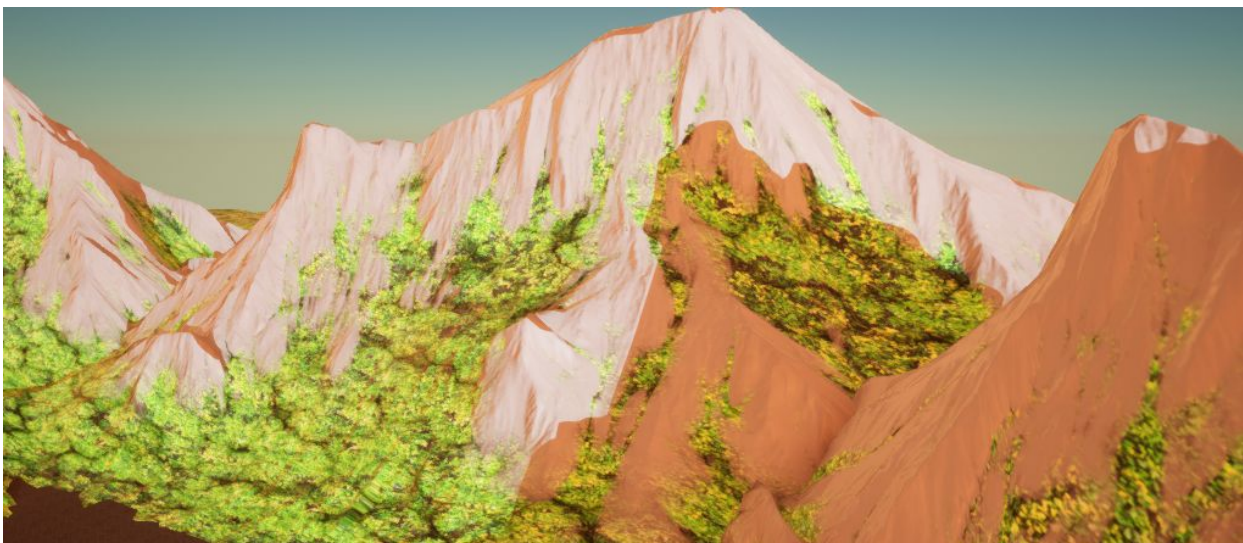




Bushes and water were added at the end of the city.



Mountains were added for aesthetic purposes.

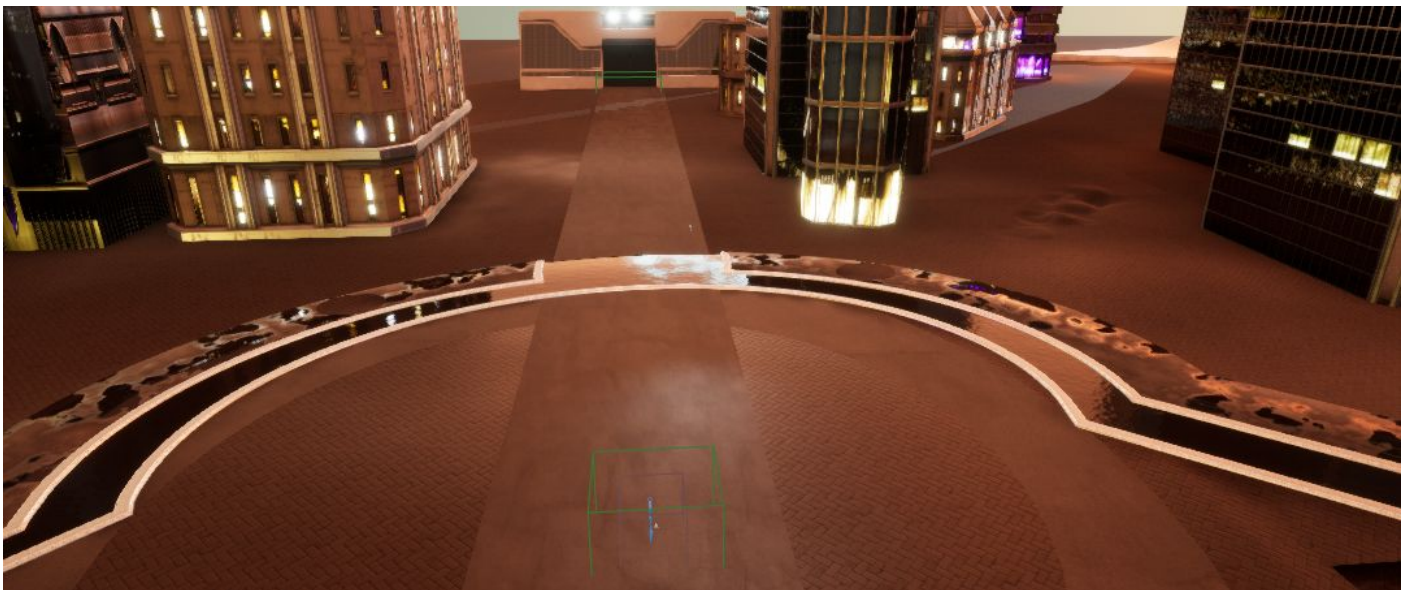


After playtesting, it was found that there weren't enough stealth or combat specific areas in the city so we decided to change the layout of the city so there would be stealth and combat specific areas.

Below is an example of a stealth area where the player can hide from the gangsters in the lane.



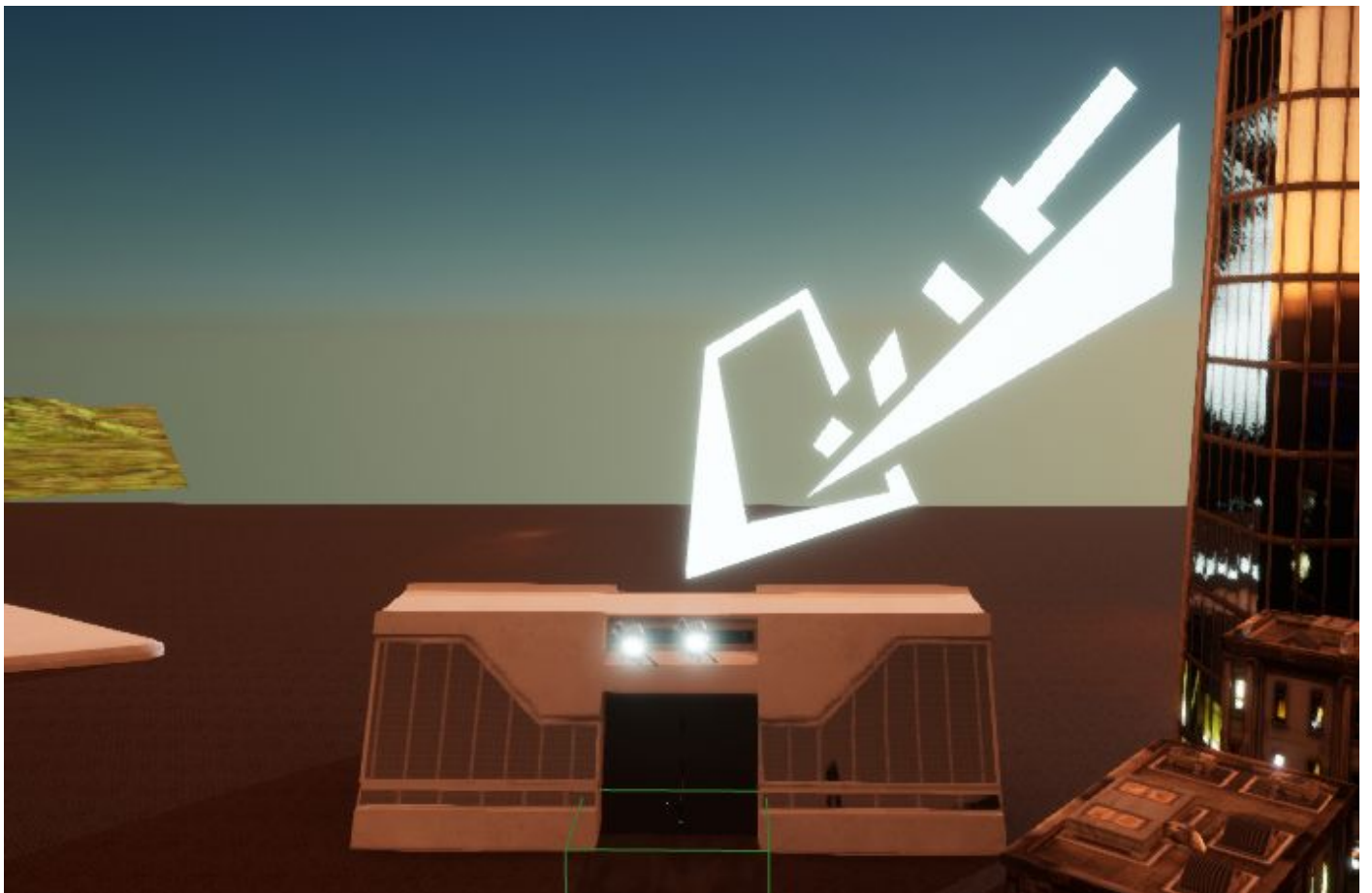
Once the player gets the key, he will fight with gangsters till he reaches the building and exits the level. Below is the path from the key to the building. It was kept small as we didn't want the player to have a tough experience getting to the end of the level.



The layout of the map was also changed as it was discovered after playtesting that the map was too big and it was confusing to find the end of the level.



An arrow was added on top of a building to show the player where he/she has to go.



Reflection

Mohammed Zeeshan

This project has given me insight on the designing of a single player level in Unreal Engine 4. There were challenges such as the project files not opening or making blueprints for the first time but we overcame them as a team and we made a great level. The extension helped us a lot but we still faced a few difficulties with the project files. I would definitely make a better level by putting different elements of stealth and combat and many puzzles in it if I could. Overall it was a great experience designing a single player level with Rishi and we learnt a lot through this.

Rishi Oberoi

We started off with a sophisticated whitebox version of the level and went straight to implementation of the final assets as they came already textured in the unreal store. I enjoyed putting together something that was focused more on aesthetics. During the CTF level assignment I have learned about gameplay and fairness where as here I have learned how to make a level approachable for a single player experience. Though on a very simple basis, through this assignment, I have managed to gain insight into world creation. We gave it a shot at puzzle creation, one of our puzzles was created by a simple trigger mechanic to open a door once the player stands on a certain place with the key picked up. Together with Mohammed I have overcome many hurdles such as project files not working and project iterations getting lost. All in all though we have managed to overcome and improve our skills as level designers.

Conclusion

The project gave us a good experience in designing levels and working with Unreal Engine 4. We faced some challenges along the way but we overcame them and designed a level that we are proud of.

References

<https://www.unrealengine.com/marketplace/en-US/slug/cyberpunk-alley-pack>
<https://www.unrealengine.com/marketplace/en-US/slug/utopian-city>
<https://www.unrealengine.com/marketplace/en-US/slug/soul-city>