

Project Deliverable H – Group 12
Prototype III and Customer Feedback
GNG 1103 - Engineering Design
Faculty of Engineering – University of Ottawa
March 18, 2024

Ella Siegner

Zahra Atrakchi

Zhaojie Bao

Introduction	2
Test Plan	2
Images of Prototype III	3
Analysis	5
Feedback	5
Links to Prototypes	5
Development and Reasoning of Final Prototype	6
Conclusion	6

Introduction

In Prototype I and II, our group prioritized two main objectives: firstly, establishing a cohesive and user-friendly environment for the player, and secondly, implementing audio elements while addressing any problematic objects. With Prototype III, our focus shifts to refining the player experience by ensuring seamless navigation throughout the city. This entails rectifying issues such as floating buildings and impassable walls, and ensuring all assets are visible within the VR environment. Additionally, we successfully developed code to enable the opening and closing of doors within the player's starting home as they explore.

Test Plan

Our test plan for this prototype includes ensuring that the player can seamlessly exit the building through the door. This functionality is crucial as it simulates the transition from indoors to outdoors after the player hears the siren. To achieve this, we intend to seek technical assistance from Unity experts to devise a solution for enabling the user to open the door and exit the building smoothly.

Images of Prototype III





By integrating various aspects and scenes within our game environment, we aim to provide our players with an extensive exploration experience. From the intricacies of the house itself to the bustling streets surrounded by the city, there's a plethora of sights

awaiting discovery, ensuring that players won't feel confined within a limited space. As they immerse themselves in the game world, they'll encounter a vivid depiction of urban turmoil, with boarded-up houses serving as a defense against the invasive sensory data of the robots, amidst a landscape strewn with debris, overturned cars, and scattered trash, showcasing the aftermath of chaos and disorder. Notably, the presence of sandbags stands as a testament to the inhabitants' desperate attempts to safeguard their homes and vital infrastructure from impending threats.

Analysis

Critical Components	Purpose
User Walking Out of Building Door	This is super important because the player's originally in a building and the whole point is that the user can see what has happened outside of the building due to the robots and how people have adapted. We made sure the door can automatically open so that the player can easily get out and know that they have entered the chaos outside.
Cars switched	Need to confirm the asset can be shown in VR game mode. The original car asset cannot be seen in VR environment, and we couldn't find out the reasons. The only option we have is to replace the car assets.

Feedback

- Player cannot go back to their building.
-

Links to Prototypes

Purpose	Video Link
Preventing users from walking through solid objects. This feature ensures that the environment feels tangible and coherent, maintaining the integrity of the game world and enhancing the overall player experience.	https://youtu.be/9X7l9NI9Pm0?si=JS6_B_QZ7LO-2JjQ

Development and Reasoning of Final Prototype

How:

In Prototype I and II, our group focused on establishing a cohesive and user-friendly environment, while integrating audio elements and addressing any problematic objects. With Prototype III, our goal is to refine the player experience by ensuring seamless navigation throughout the city. This includes rectifying issues such as floating buildings and impassable walls, as well as ensuring all assets are visible within the VR environment.

What:

Our primary objectives for Prototype III involve ensuring seamless navigation for the player within the city environment. This entails rectifying any issues with floating buildings or impassable walls and ensuring all assets are visible within the VR environment. Additionally, we aim to implement code that allows players to interact with and open doors within their starting home as they explore.

When:

The shift in focus to Prototype III comes after completing Prototypes I and II, where we established the foundation of the game environment and addressed initial concerns with audio and problematic objects. Now, with Prototype III, we are further refining the player experience by addressing navigation issues and enhancing immersion within the game world.

Why:

The emphasis on refining navigation and ensuring seamless player movement within the city is crucial for enhancing the overall player experience. By rectifying issues such as floating buildings and ensuring all assets are visible, we aim to create a more immersive and believable game environment. Additionally, implementing door interaction adds depth to the gameplay and allows players to engage more fully with the virtual world, contributing to a more enjoyable and immersive gaming experience.

Conclusion

Prototype III represents a significant advancement in our game development journey. Building upon previous prototypes, we've focused on refining player experience by addressing navigation issues and enhancing immersion in the game world. By overcoming challenges such as floating buildings and ensuring asset visibility, we've created a seamless and believable environment. The addition of door interaction adds depth to

gameplay, immersing players further into the narrative. Moving forward, we're committed to delivering an engaging and immersive experience that exceeds expectations.