# Deliverable G: Prototypes Set 2

Group 1

# Contents

# Introduction

The next portion of this project is the next set of prototypes. The group is working in sets of prototypes due to the nature of the project, and the dates of submission. These prototypes are working up to more comprehensive prototypes, integrating the other prototypes into one, and testing its capabilities.

# Referenced Problem Statement

Mine's Action Canada needs a VR experience that demonstrates the dangers of using killer robots in warfare, and the potential consequences that come with it. The experience needs to provide an emotional connection that displays fear, concern, and hope.

# Client Feedback

*No presentation feedback provided yet. That will be added on deliverable H*

- Erin gave us a tip, that we forgot to consider while presenting, which was to make to explain abbreviation or not use them at all. This will really help us in the long run for the final presentations later.
- Erin and Jason both seem confident in what we have for this project, and we have also acknowledged this as well prior to the meeting, this may have come from the fact we went into the presentation with a mostly finished environment.

# NPC + Environment Mapping Prototype

The current prototype is unusable; the script used in the Ibrian AI asset is not functioning, the error codes promoted were regarding locating undefined structures in the code, that appear to be defined in the settings of the component. This error has been continuously popping up throughout the past few weeks in prototyping. The last prototype was thought to have fixed that issue, although a bug tends to appear after enough changes are made without fixing the issue, where the structure is defined, although despite saving the project the error will come back after closing and reopening the project.

With a layout of the roads and sidewalks, mapping the area is a simple process, although with multiple entities the possibility of crossing different paths is great, especially with the script not functioning.

*Last Minute Update*

An edit to the Ibrain.cs script was made that fixed the issues listed above, by removing certain conditions associated with movement and finding paths, the script works, although not entirely flawlessly, there is movement to the NPCs, even if it is a little "janky" at the moment. A video of the progress below

https://drive.google.com/file/d/1QHbeSxxS2S6ptefw0Oz1GDjgi50MrX6O/view?usp=sharing

*We are leaving the above information for regarding issues with the script later references in case a similar situation occurs*

## City Environment Revisions

- Improved sky to set a glum tone for the experience.
- Added civilian and government media, with the government media vandalized by civilians, to show the civil unrest because of killer robots being implemented into society.
- Immersive aspects added to make the city feel alive and continuous outside the boundaries.
- Added boards and tarps on windows to show people's attempts to evade robot scanning's and the fear of the general public.
- Uploaded files of the project do not have correct orientations, this causes issues with the ai pathing, improvements must be made.
- The environment seems to work well with physics and boundaries, but further testing must be made.
- Though sound design has not been fully developed, it must be tested to work alongside the environment and the implementation of the VR headset.

## Audio

Background city noise has been implemented. There are now sounds that make the simulation environment seem more like a city and add to the immersion. Next steps will include adding the speaker system and a few specific background sounds such as the gun shot. Currently I have not encountered problems with this.

# Prototypes Test Plan Set 3

| Test ID | Test Objectives (Why) | Description of Prototype used and of Basic Test Method | Description of Results to be recorded and how these results will be used (How) | Estimated Test duration and planned start date (When) |
|---|---|---|---|---|
| 1 | Improve Ai and NPC mapping: Scrips currently not working | The NPC mapping is vital to the functionality of the simulation. Although without a working script for the NPCs to follow, the NPCS just look pretty without any actual function to them. | The result to this testing is a confirmation that the movement of the AI works flawlessly without change to the overall script (hopefully) | This should be completed by the due date of deliverable H to keep on schedule, if not earlier. |
| 2 | Creating the user character and VR useability with the simulation and proper title screen. Without a dedicated starting position and title screen the simulation will look and feel strange. | The test method for this prototype will be a functionality test, a sanity check, and a small user input section, to confirm we are on the right track. The prototype will look like a simple title screen with possible a small introduction and a play button. | A functionality test, a sanity check, and a small user input section, will be recorded for all. | This should be completed by the due date of deliverable H to keep on schedule, if not earlier. |
| 3 | Total integration of other prototypes and functions into a full comprehensive prototype. | Testing will confirm functions of all other prototypes working as one. Testing methods include a functionality test, as well as a | Results will be mostly user feedback from different people around. | This should be completed at max of a day before design day, with a plan to have it done just after the 19th of November. |
| 4 | Recording the video for the customer. | Showing features of the simulation, that captures its effectiveness regarding the problem statement. | A 30 second video. | After the last of the tests are done. |

# Wrike Update

Newest Snapshot of Gantt chart.

https://www.wrike.com/frontend/ganttchart/index.html?snapshotId=0Ow09CFGlvtVFygf0osDOeP9ckNPHhW9%7CIE2DSNZVHA2DELSTGIYA

## Conclusion

We needed to push the integration of the NPCs and the environment, to fix some errors that occurred with the NPC pathing, although great progress was made with the environment as a whole with improved features that make it more interesting and much less chipper, the environment now looks the part. City sounds, are ready to be implemented into the city. As for next steps, the simulation is ready to set up a more comprehensive prototypes as well as a full title screen and user starting positioning.