GNG1103 - Engineering Design
Group 15
Project Deliverable F: **Prototype I and Customer Feedback**
November 4, 2023

-1 Feedback outline - Phil :

The following is a retrospective on the feedback we received during our client meeting. While most of the feed we received was positive and reinforcing, we did receive constructive feedback. The main thing that was often mentioned was the complexity of the project. Unlike other teams, our project incorporates much more discipline than just unity construction [Video, Media, Graphic design, Movement]. In the past, teams with too much ambition have struggled to complete their project on time, and it is an issue that were warned about. From the client meeting, our group was directed to limit the strength in the succession of broadcasting coming from the screens. Keeping this in mind, any reporting from the screens in the simulation will be made to be controlled, rather than intense as to be bothersome. To try to avoid this, we have decided to simplify a few things, especially in regards to the media and video recordings. We had also received feedback that focused on the lack of user movement in our simulation. To mitigate this, we have simply decided that instead of having automated timed prompts, we would have them activate following user inputs. We think that this will help us make our simulation more convincing and realistic.

-2 Protopype - Connor :

Develop a prototype which will be used to achieve the objectives your team has set out in the plan created in the last deliverable (i.e. you need to answer the "why", "what" and "when" of prototyping).

What: A visual prototype of the unity environment we wish to place our users in. It showcases the surroundings and perspective of the user.

When: We will conduct testing throughout the design process to get a steady stream of feedback from a diverse range of voices we deem important.

Why: We want to develop the best possible environment that is the most conducive to inspiring the user to demand change. This means we want them to feel concerned by what they see and how they feel; therefore, we must test to see if our ideas have the desired outcomes.

Remember: a prototype is not normal work on your project, it is something that has a smaller, targeted objective with specific tests and measurable results.

-3 Analysys of crit. comp -   Belden :

	Design Criteria	Relation (=, < or >)	Value	Units	Verification Method
		Functional Requirements			
1	Easy Navigation - Simple for users to navigate the VR environment	=	Yes	N/A or min	Test
2	Simulate Threat - VR environment should simulate the presence of autonomous weapons, even if they are not directly visible	=	Yes	N/A	Test - Qualitiative feedback
3	Safety Adaptations - Show how people modify the city for safety	=	Yes	Qualitiative feedback	Test - Qualitiative feedback
4	Educational Elements - Inform users about ethical concerns and consequences	=	Yes	N/A	Prototype
5	Immersive Experience - Make it feel real for decision makers	=	Yes	N/A	Test - Qualitiative feedback
6	One-Minute Duration - Keep it short for impact	<	1	Minutes	Test (Measure Duration)
7	Emotional Impact - Evoke emotions and empathy	=	Yes	N/A	Test - Qualitiative feedback
8	Compatibility - Ensure it works on common VR hardware and software	=	Yes	N/A	Test - Qualitiative feedback
9	Accessibility - Design for users with varying VR familiarity	=	Yes	N/A	Test - Qualitiative feedback
		Constraints			
1	Noncomplex	=	Yes	N/A	Test - Qualitiative feedback
2	Budget	<	50	CAD	Analysis
3	Time For Simulation	<	1	Minute	Test (Measure Duration)
4	VR Hardware	=	Yes	N/A	Test Compatibility

NonFunctional Requirements					
1	Performance - Response time	<	100	Milliseconds	Test - Simulate
2	Usability - Intuitive UI	=	Yes	N/A	Adhere to WCAG guidelines
3	Hardware Compatibility	=	Yes	N/A	Test

The camera, subject/content, and takeaway subsystems are all working seamlessly to fulfill our goal of communicating the potential threats posed by autonomous weapons to our world.

-4 Documentation of current prototype - Connor :
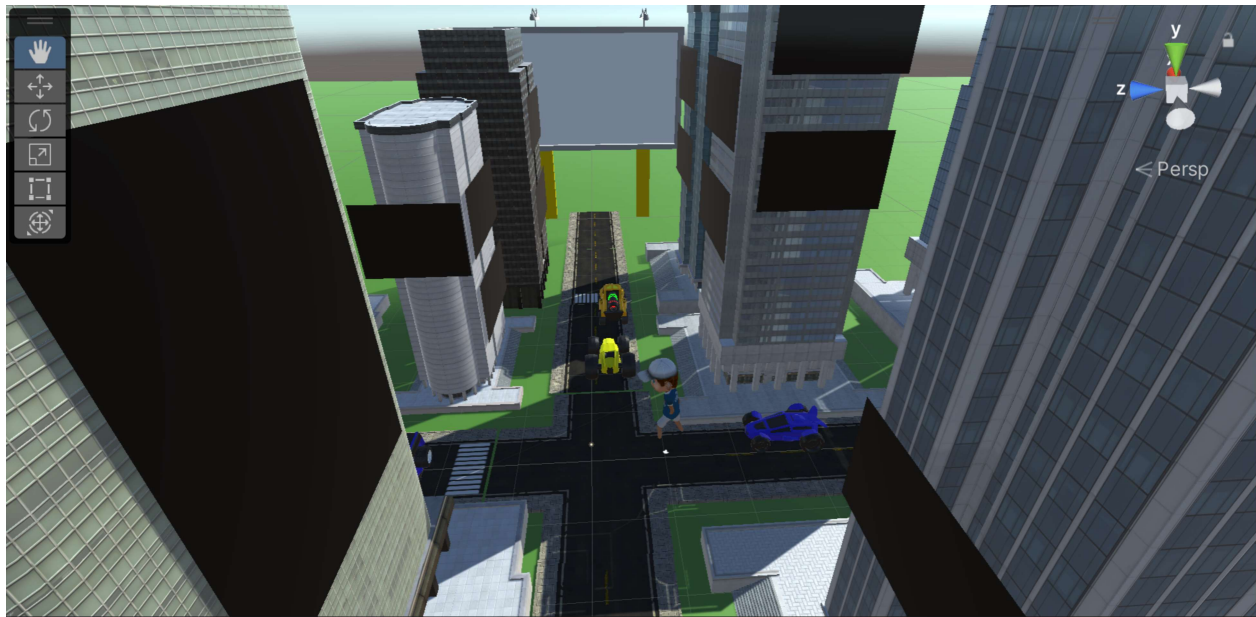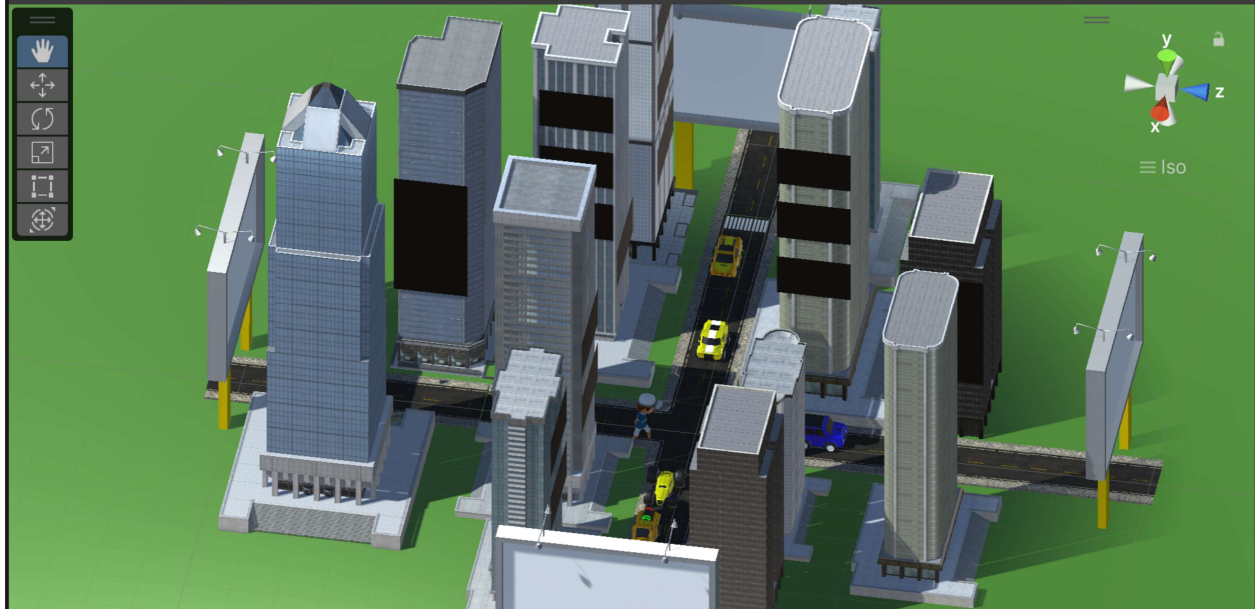
-5 Gather feedback - John Balewula :

Identified feedback providers: **Eldest sister, youngest sister, young brother**
   Commentary on brainstorming/ prototype/ progress:
- Deliverables are clear and precise
- Understood where the project is going and the approach for being convincing
- Called the design for the city accurate for the message we are giving
- Described the initial prototype as well done
- Could tell what all of us had in mind in our concepts just from the sketches
- Gave their thumbs up to proceed our course of action for this function
- Agreed automated robots capable of violence can be a threat to society in the future
- Identified the important aspects of the project to advocate for the ban

The idea of banning autonomous killer robots is very creative, as they would be a threat to human
society in the future. The design of the robots and the city outline is accurate and well done. I understand where you are going with this project and your approach. The deliverable is clear and
precise, and thumbs up to proceed. - Verbatim

-6 Update BOM - John Balewula :
There are no updates to our Bill of Materials from the last table, except the addition of a research style poster for Design day of an estimated $40.

-7 Prototyping test plan - Phil :

The following is our prototype test plan for the upcoming deliverables :

- Prototype 2
    - Objectives
        - Test interaction and other software based integrations
        - Analyzing usability and functionality of critical subsystems
    - Stopping criterion
        - Video integration works well
        - Interactions with intractable object function as defined
- Prototype 3
    - Objectives
        - Graphical fidelity work
        - Test Performance
        - Optimize optimize optimize
        - Test the package on actual users to get feedback
    - Stopping criterion
        - The whole team is satisfied with the work done.
        - The original vision is achieved to the extent of our original expectations

-Task Plan Updated - John :

https://trello.com/b/R5QTrMG9/project-timeline

Connor Bess   05/11/2023

Belden Winner   05/11/2023

John   05/11/2023

Phil H   05/11/2023