

Stop Killer Robots Design Proposal

GROUP 15:

CONNOR BEGG, PHILIPPE HAMEL, JOHN BALEWULA, BELDEN WINN



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Problem Introduction

Mines Action Canada want autonomous weapons banned

- Autonomous weapon -> weapon that can detect threats and apply force without human intervention

We have been tasked to create a short simulation to create positive outcome



MINES
ACTION
CANADA

Needs Identification

*Need 1: Short and efficient

Need 2: Interesting, unique and memorable

Need 3: Evoke concern & inspire viewers to enact positive change

*Need 4: Easily understood by many audiences

Need 5: Realistic and tangible.

*Denotes Importance

Problem Statement

Mines Action Canada need a unique and convincing 30 second video showcasing what our world would look like with autonomous weapons because they want self-governing killer robots banned

Functional Requirements

Functional Requirements	Non-functional Requirements	Constraints
Clarity/unifying message	Ability to be used and understood by all sorts of users	Time (1 min)
Non-specific setting	Creativity	Cost (\$50)
Quality of assets	Optimization in VR (smoothness of simulation build)	For the cell above, \$500 was the suggested amount to be used for the proposal overview page

Generating Solutions - Subsystems

Camera

- How the user sees and interacts with the environment around them

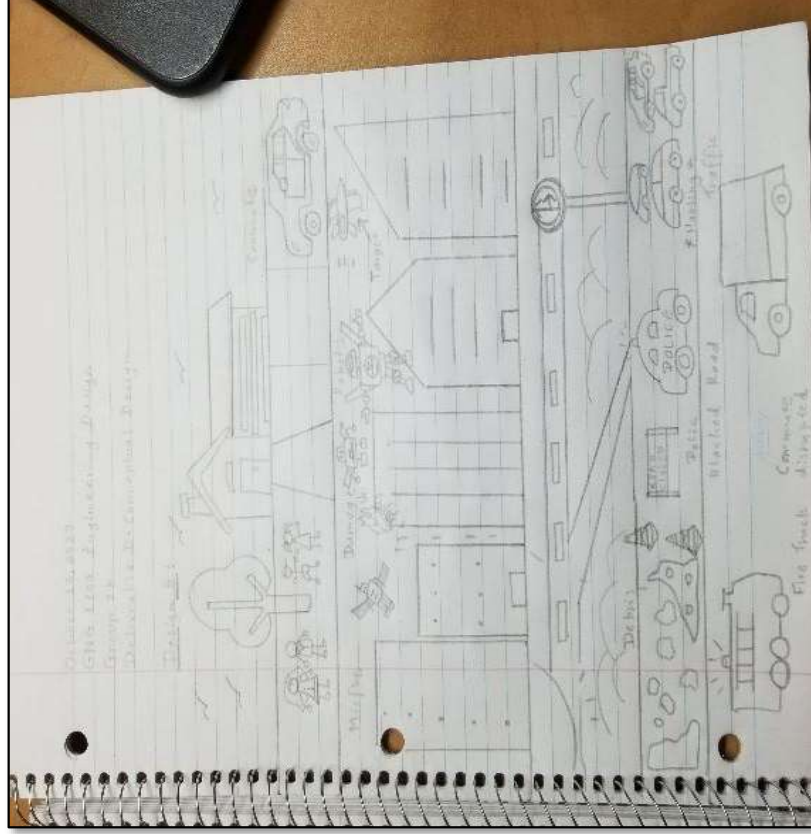
Content

- What is being shown to the user

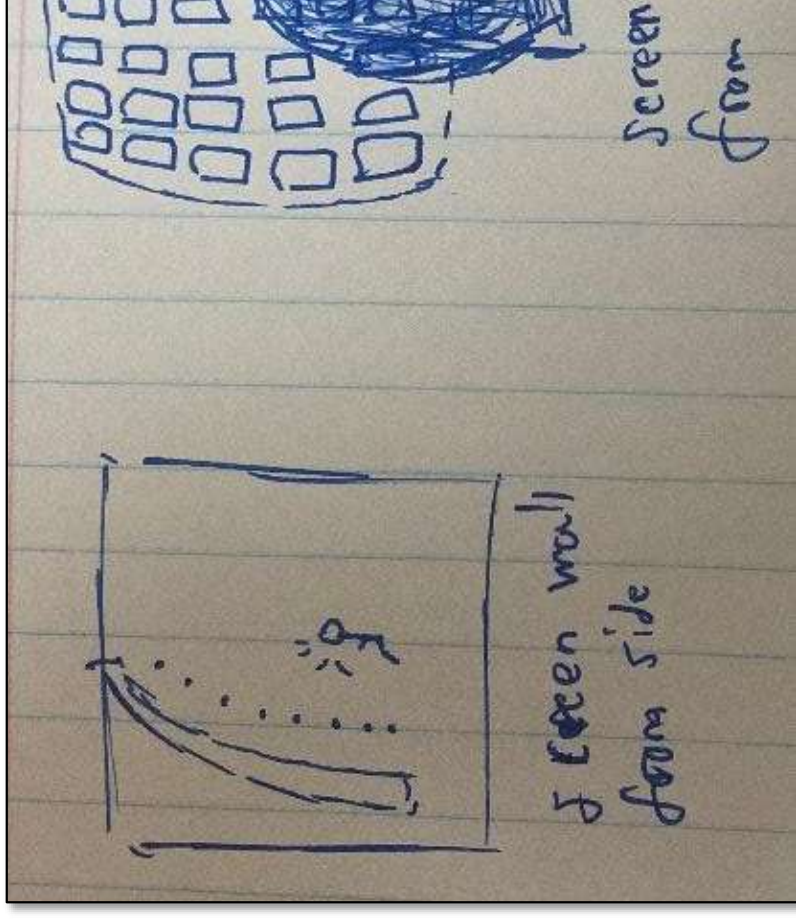
Takeaway

- How the user will feel after experiencing our simulation

Generating Solutions - Sketches

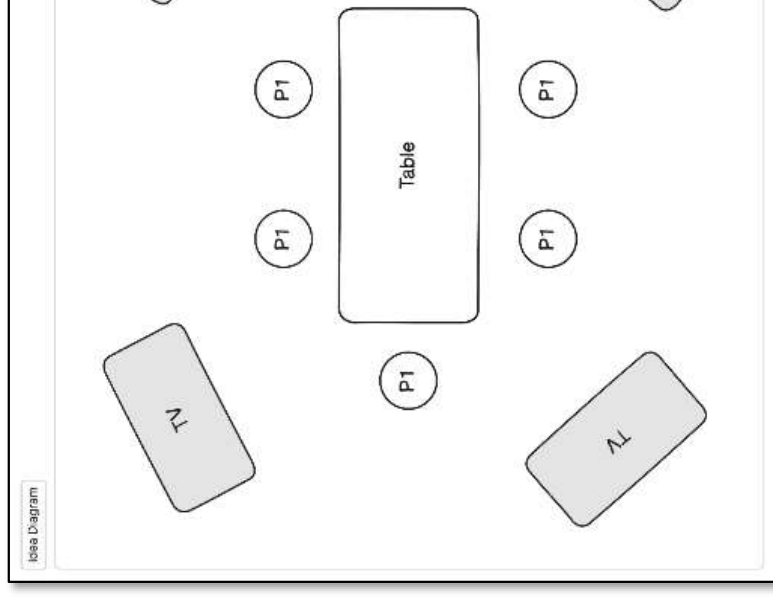
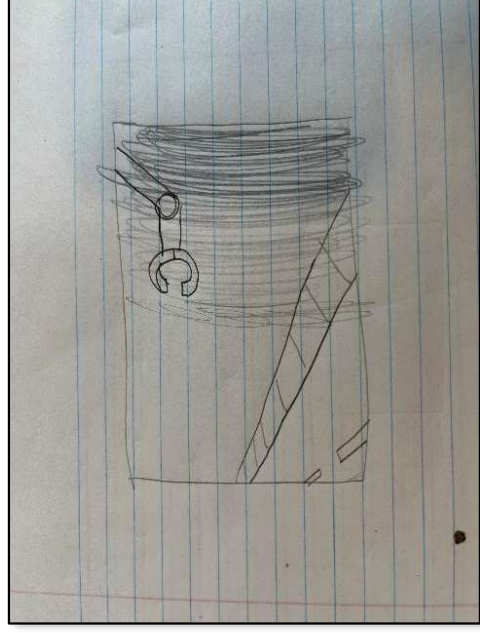
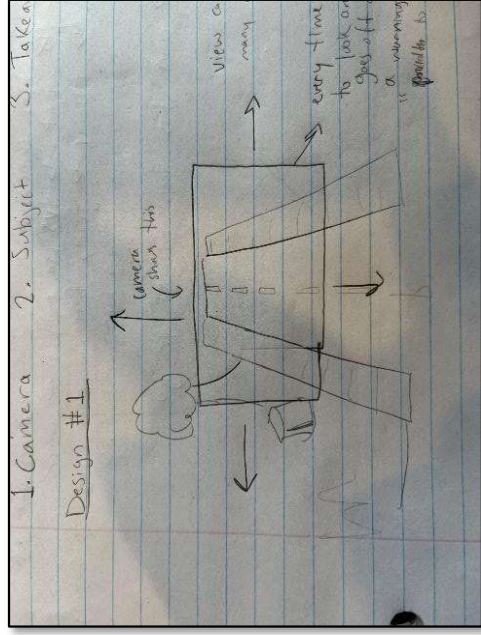


Design Proposal #1



Design Proposal #2

Generating Solutions - Sketches



Design Proposal #3

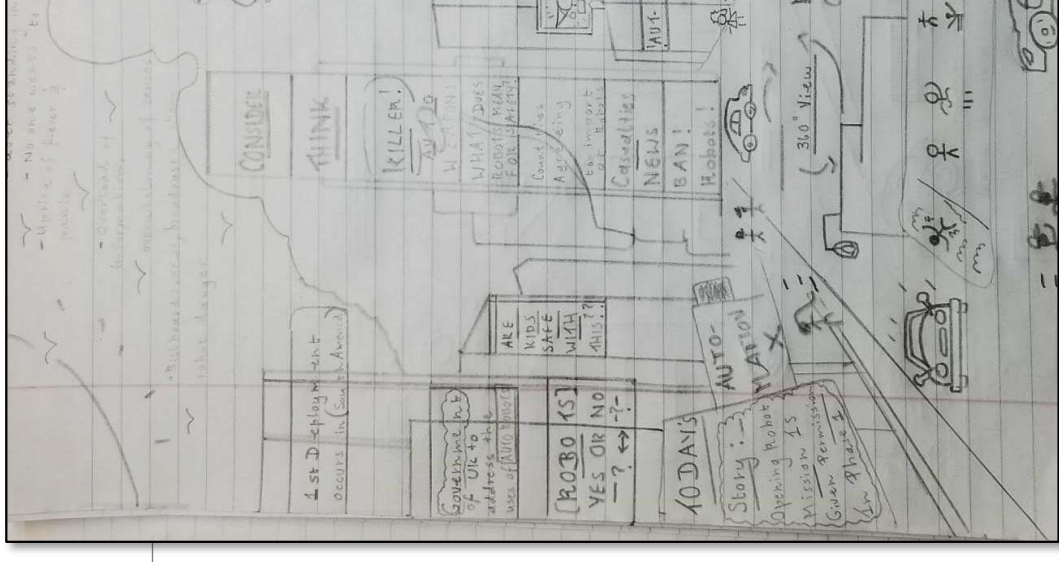
Design Proposal #4

Comparison Analysis

Rated from 1-5	Connor	Belden	Phil	John
Est. Run time [high number is better]	4	3	5	2
Effectiveness	4	3	5	3
Creativity	5	3	3	4
Clarity of message	5	2	4	4
Cost [high number is better]	2	3	2	2
Specificity of setting [less specific] (high number is better)	3	1	4	1
Total	23	15	23	16

Final Design Concept

- City environment
- Billboards and news broadcasts
- Free range to look around
- Simple story



Feedback

- Keep in mind deadlines and limit complexity
- Remove some interactivity of the environment
- Utilize “gaze” feature in Unity
- Make sure that the video can be understood by a wide range of audiences

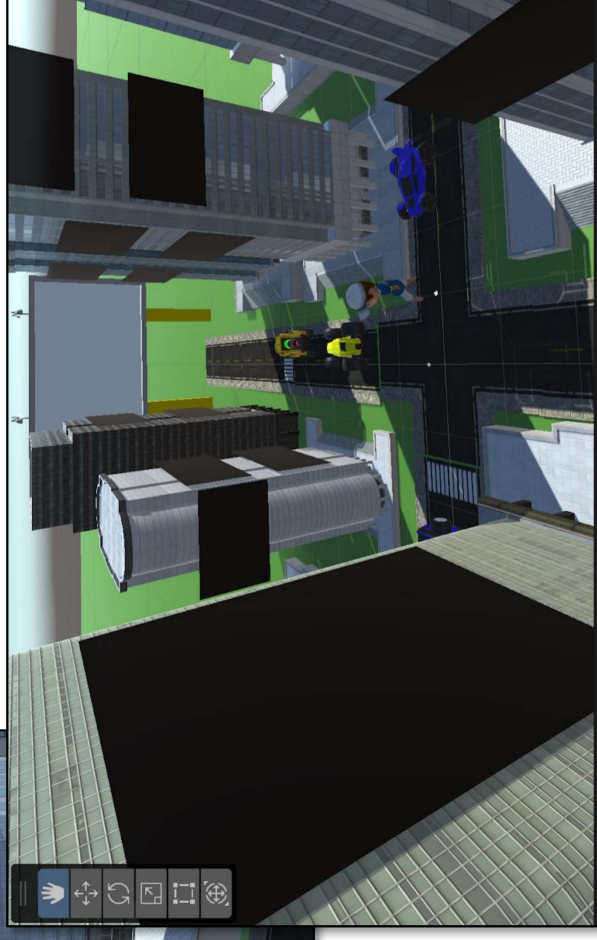


Prototype 1

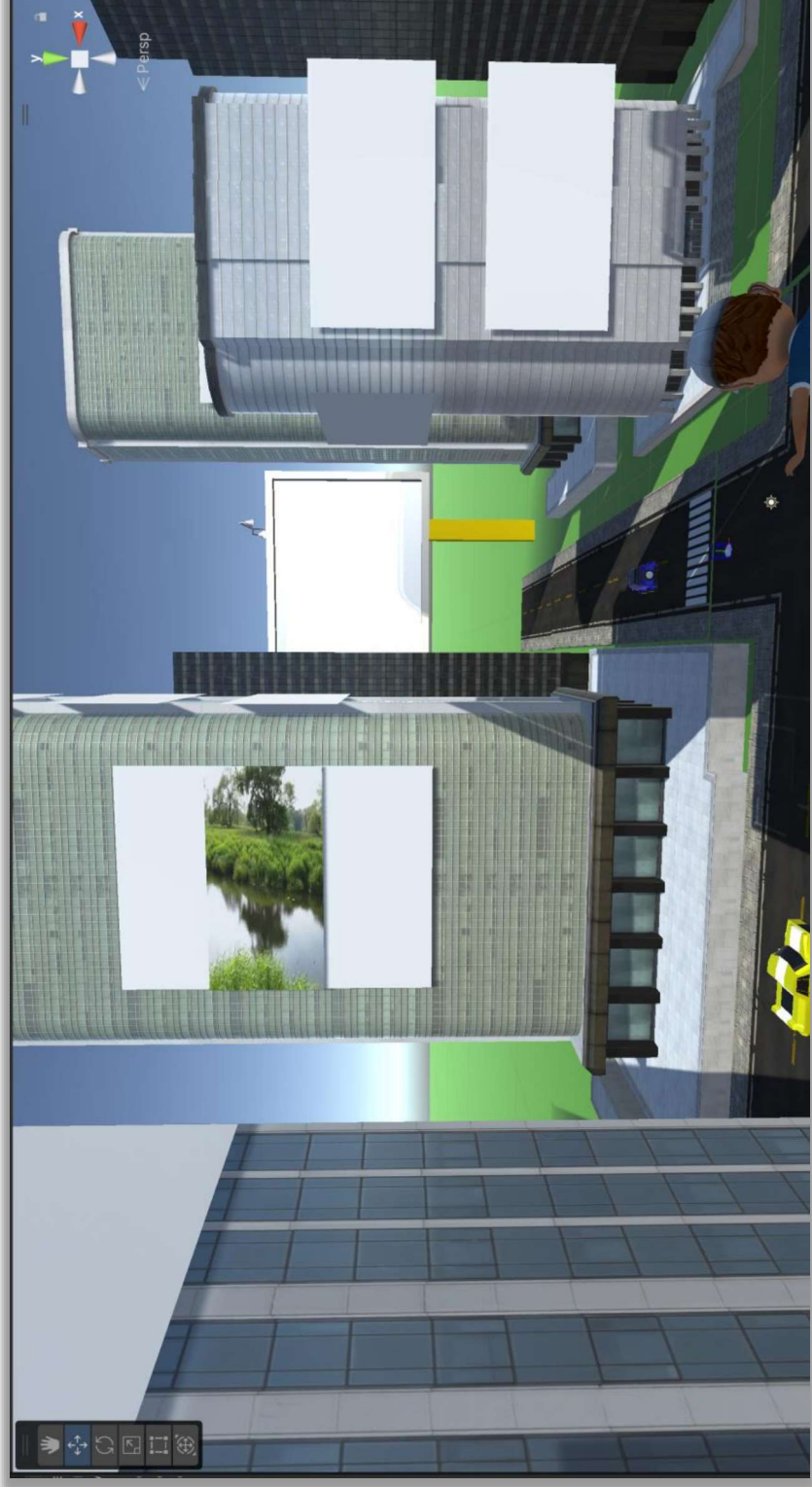


- Realistic city environment

- Focus on quantity of buildings



Prototype 2



- Adjusted size of environment
- Made simulation more immersive
- Implemented

What's Next ?

Final Project

Major redesign

More Streets

More Building

Seamless City

Media Broadcasts

Ai video generation

Easy

Ethical?

Ironic...

What we learned

- The importance of proper design
- The importance of proper communications
- The importance of proper project management

- To be improved in the future
 - The scenery
 - The script
 - The approach to the project

Questions?

