

## Deliverable E – Project Plan and Estimated Cost

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## **Abstract**

This document depicts the breakdown of required materials for our design prototypes. These materials are listed and a researched price for the product is listed alongside it. These prices will be crucial going forward as they will keep us within our budget as we progress through the prototype stage of the design process. Also, sketches of our possible prototype will be included in the document as we enter the prototype phase. Moreover, a prototyping plan was developed to guide our team through the next steps of our design process. The last piece of this document was to identify possible risks we may experience while prototyping and testing our design. The completion of all the tasks detailed in this deliverable were essential in the progression of our project for Mines Action Canada.

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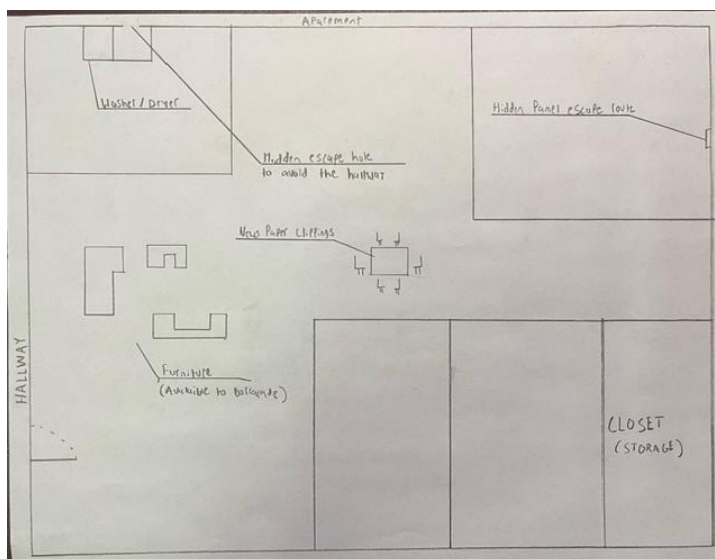
## Overall Concept:

Our game will take the user on a journey through our virtual environment by progressing through different locations. First, the video will have the player start in their apartment. They will be moving from one scene to the next using unconventional travel methods such as holes through apartments, sewers etc. The goal is to have the player traverse from one small scene to the next learning more about the city they live in. They will be able to witness the small scenes as they pass and (if time allows) interact with small objects throughout the scenes to give them more information. This progression through different scenes will give us numerous opportunities to display a variety of realistic defense mechanisms for autonomous weapons.

## Concept Sketches:

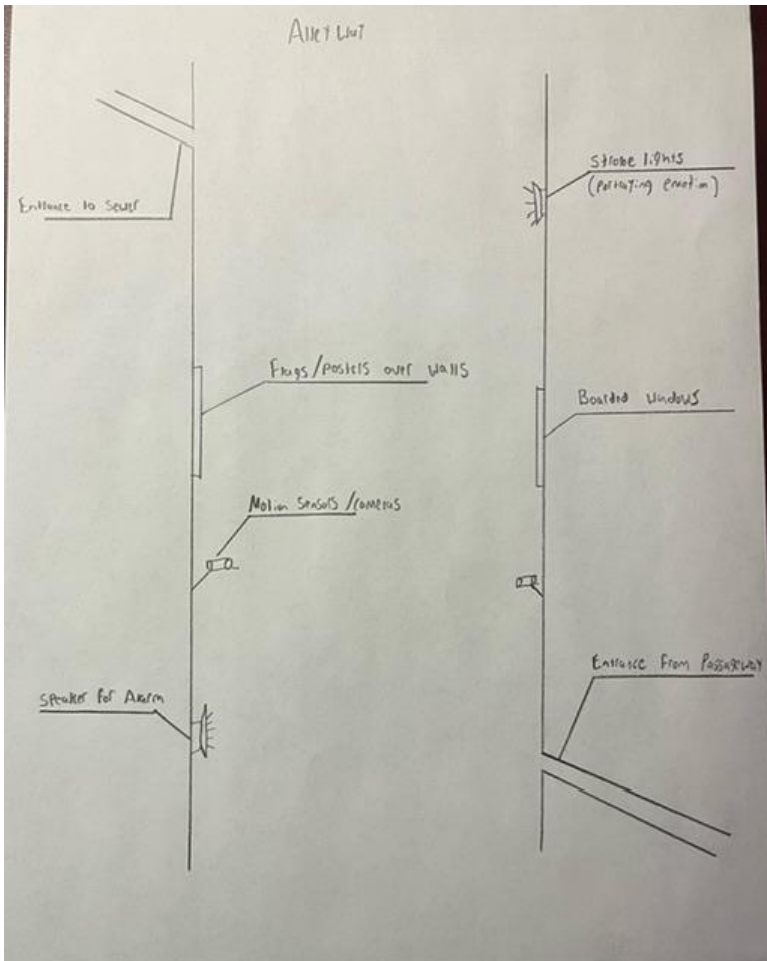
### Scene 1: Apartment

The apartment will have features like a wall panel that can be triggered to reveal a hidden escape route or holes for civilians to use. Furnitures that could serve as barricades and storage areas for basic needs like food, water and possible protective tools.





Scene 2: Alleyway



## Prototyping Plan:

### *Prototype I: Walking around small room in VR*

The first prototype will feature a basic room (the apartment) that the player can walk around and interact with. Erfun and Lane will be responsible for the VR functionality of the product.

What we want or stopping criteria	Why (we want it)	How (we will test it)	Time Frame
A small barebones apartment setting that the user can walk around	These small environments will be the blueprint for all our scenes going forward.	Game development will be done by Lane and Erfun and testing will be done by Erfun	February 25 <sup>th</sup> - March 3 <sup>rd</sup>

### *Prototype II: Moving between scenes + Sound Design*

Moving between scenes falls under VR functionality so Erfun and Lane will be responsible for it. Abdulwahid and Mercy will be responsible for sound design and other smaller features that will detail the scenes.

What we want or stopping criteria	Why (we want it)	How (we will test it)	Time Frame
A transition between our first scene and our second	This will be how the player gets from one story beat to the next.	Game development will be done by Lane and Erfun and testing will be done by Erfun	March 3 <sup>rd</sup> – March 10 <sup>th</sup>

Sound design and voice acting	The story will be communicated through narration and sound	Mercy and Abdulwahid will write scripts and record voice-overs as well as create soundscapes.	March 3 <sup>rd</sup> – March 10 <sup>th</sup>
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*Prototype III: Detailing and Video*

Erfun and Lane will detail the scenes and add additional features beyond the main scenes. Abdulwahid and Mercy will begin creating a video using scenes from the game and other sources.

What we want or stopping criteria	Why (we want it)	How (we will test it)	Time Frame
Detailed Scenes with sound and atmosphere	Detail will be added to emotionally impact the user and create an immersive environment.	Integration of scenes and sounds will be done by Erfun and Lane. Testing will be done by Erfun	March 10 <sup>th</sup> – March 24 <sup>th</sup>
Final one minute video	This will be what is shown on design day to the judges	Mercy and Abdulwahid will use Davinci Resolve to make the video. All team members will provide feedback and share ideas before and after.	March 10 <sup>th</sup> – March 24 <sup>th</sup>

**Bill of Materials (BOM):**

Item #	Item Description	Quantity	Unit Price (\$)	Total Price (\$)
1	<a href="#">Alleys and City Pack</a>	1	45.00	45.00
2	<a href="#">Assault Cyborg</a>	1	10.00	10.00
3	<a href="#">War Sound Effects</a>	1	5.00	5.00
4	<a href="#">City Sounds</a>	1	5.00	5.00
<b>Total: \$65 (\$73.45 after tax)</b>				

\*These are all examples of assets we may need. Effort will be made to find free or cheaper alternatives

## List of Equipment:

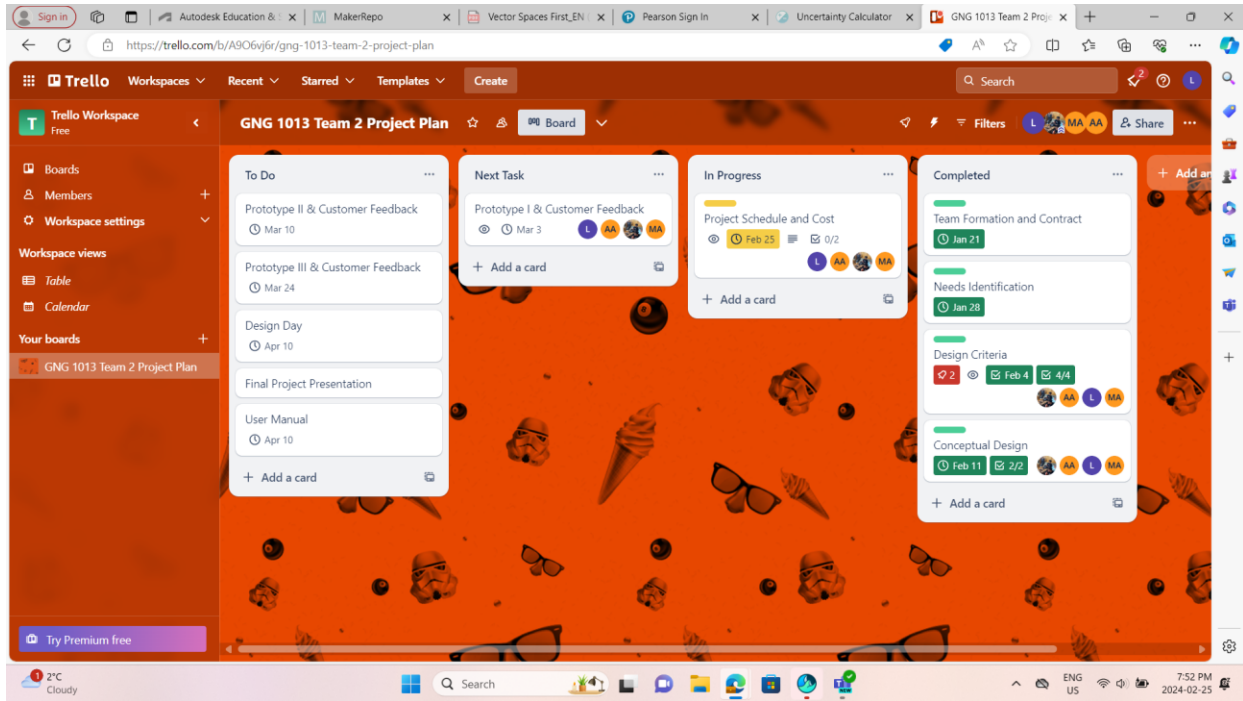
Item Name	Description	Prototype	Source
Meta Quest 2 VR Headset	VR hardware for testing and running game	1, 2, & 3	Owned by group member <a href="https://www.meta.com/ca/quest/products/quest-2/">https://www.meta.com/ca/quest/products/quest-2/</a>
Unity	Game making software	1, 2, & 3	Free + Free License <a href="https://unity.com/download">https://unity.com/download</a>
Davinci Resolve	Free video editing software	3	Free <a href="https://www.blackmagicdesign.com/products/davinciresolve">https://www.blackmagicdesign.com/products/davinciresolve</a>
Laptop / Desktop	Hardware for creating game and video	1, 2, & 3	Owned by group member(s)

## Project Risks and Contingency Plans:

Risks	Contingency Plan	More Info
Overambition	Regular team meetings to assess goals, track progress and reallocate resources if necessary to mitigate overambition.	This means planning for too much and spending too much time on one component
Budget Constraints	Use free and cheap alternatives wherever possible to free up budget for larger and more detailed assets.	Risk includes unexpected expenses, estimate error.
Hardware Malfunctions	Bring chargers/spare battery or multiple devices as back up.	Risk may include battery limitations, damage to hardware.
Sick Members	Each member will have an “understudy” who is prepared to present the missing member's portion	This means illness, unexpected absence, or the inability to complete assigned tasks.

## Trello Task Board Update:





Link: <https://trello.com/b/A9O6vj6r/gng-1013-team-2-project-plan>