

Deliverable E: Project Schedule and Cost

Detailed design drawing

VR Description

The VR takes place in a small community where an invasion is taking place. The user is a citizen of the community and is accompanied by a friend, a first responder, who is aware of these types of invasions and knows how to stay protected. Together, they roam around the streets and try to help those in direct need, sheltering them from the AI weaponry.

Drawings

Concept A sketch:

This sketch depicts the destroyed city that the game will take place in.



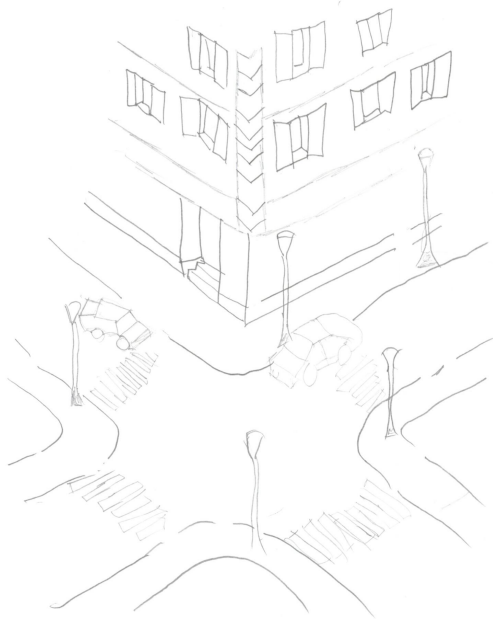
Concept B sketch:

This sketch depicts a rough sketch of how the leader-type character might look like.



Concept C sketch:

This sketch shows a crossroad in the destroyed city where the user will have the choice to pick a road and face different possibilities within the game.



BOM

Bill of Materials				
Item #	Item description	Quantity	Unit Price (\$)	Extended Price (\$)
1	Post apocalyptic city pack	1	\$8.99	\$8.99
2	Drone 3D model	1	\$5.00	\$5.00
3	City ruins asset set	1	\$20.00	\$20.00
4	Humanoid robot assets	1	\$15.00	\$15.00
5	People asset set	1	\$49.00	\$49.00
6	Fire and smoke	1	\$15.00	\$15.00
7	Explosion sounds	1	\$15.00	\$15.00
8	Gore limbs other body parts	1	\$10.00	\$10.00
Total before tax (\$)				\$137.99
Total after tax (13%)				\$155.93

List of equipment

<u>Item name</u>	<u>Description</u>	<u>Type</u>	<u>Prototype #</u>	<u>Source</u>
VR system (headset & equipment)	To test VR	Equipment	1	MakerLab
Unity Hub + Installer	To create VR	Software	1	https://unity.com/download
Laptop/ computer	To create VR	Equipment	1	Personal belongings
Headphones	To test VR sound	Equipment	1	Personal belongings

Project risks & Contingency Plans

Significant Risks that would prevent project completion.	Contingency Plan to Solve the Risk.	More Information.
Budget constraints	<p>With only a fifty dollar budget (and the grant), our main goal should be to prioritise the assets that meet the clients criteria before going above and beyond. This would include:</p> <ul style="list-style-type: none"> - Addressing the harm of autonomous weapons - How autonomous weapons should not exist in the future <p>With these aspects addressed, we can then split the budget on other aspects of the virtual reality experience.</p>	<p>As we only have a fifty dollar budget and the government grant, we need to make sure that everything we get is fairly cheap, but realistic enough to be able to convey the message. Whether it's small objects or a whole scene, as long as it gets the point across, it should be valid. We're always going to be looking to conserve money while making sure we meet the criteria. If any money is left over, we could just make past qualities better.</p>
Lack of interest	<p>With this project being so vast and technological, not everyone would have the tendency to find enjoyment out of it. In order to keep everyone on the same page and get the maximum</p>	<p>This part doesn't all have to do with technology. If someone really likes drawing or has a creative mindset, we can use that to our advantage and incorporate</p>

	<p>proficiency out of all group members, we should consider:</p> <ul style="list-style-type: none"> - Everyone contributes an idea of their interest. - Always improvising on the idea if more interests would spark on the project. <p>This would ensure that everyone has a role they enjoy when doing the project.</p>	<p>it in the VR. This could also be used when writing the script, having it generated with their idea. This would directly lead to what each person should be assigned to in the play, ultimately keeping everyone interested in the project.</p>
<p>Technical difficulties</p>	<p>With the rise of technology, we may experience some aspects that lead to the project malfunctioning. These include:</p> <ul style="list-style-type: none"> - Compatibility with parts - Bugs and crashes on software - Software or hardware speed/quality being too low <p>In order to prevent this, we would always make sure to keep testing everything right after it is finished. This would prevent a lot of errors from happening in the end and would increase productivity. For hardware, we could check for ports and compatibility before going out and purchasing.</p>	<p>We could also use more trusted technology/software in order to ensure that problems don't occur. For the most part, it is just safer to keep testing right after completing until there are no errors. We should also think about using trusted and common technology and software. This would include mp4 files for videos, wav files for audio, and even common ports for hardware such as aux for speakers.</p>
<p>Limited resources/ knowledge</p>	<p>Given the unique nature of this project, there is a likelihood of group members not having any experience with it. This would lead to limited resources and knowledge. With the knowledge portion, we should consider watching videos and tutorials online in order to enhance the project more. This would help build the skills of the group and extend the limits of how far the project could go. With the resources aspect, we could always do research on how to obtain a certain resource. If not obtainable, we could result in creating it ourselves as we have the technology to do so.</p>	<p>In general, the main solution for this is to research and find answers, and if not possible, to create the answers using the resources that we currently have and are given. This would include:</p> <ul style="list-style-type: none"> - Laser cutting - 3D Model printing - Creating portraits on inkscape.

Prototyping test plan

Test ID	Test Objective (Why)	Description of Prototype Used and of Basic Test Method (What)	Description of Results to be Recorded and how these Results will be Used (How)	Estimated Test Duration and Planned Start Date (When)
1	Evaluate VR design	<ul style="list-style-type: none">- Seamless transition from scene to scene- Realistic/of good quality	Testing assets, using the VR headset, and how they fit together in the software	February 27 - March 4
2	Evaluate requirements	<ul style="list-style-type: none">- Safe for use- Minimal motion- French option	Testing photosensitivity, using the VR headset, and allowing the user to have minimal motion as well as a French option	March 5 - March 11
3	Evaluate story	<ul style="list-style-type: none">-5 minutes or less-very emotionally and educationally impactful- Attention to details of the story	Verifying using the VR headset that the story is engaging and complete in a short time	March 12 - March 18
4	Final review	Verify that the VR works and all design criteria are met	Ensuring that the experience is free from bugs and everything needed by the client is included	March 20 - March 28