Project Deliverable G: **Prototype II and Customer Feedback**

Introduction

This deliverable focuses on the changes we have made to Prototype I and additions we have made in completion of prototype II. We also discuss user feedback from users thus far and how it will impact the final product.

Client feedback:

- Prototype 1 looks good, good implementation of the risk education
- Try to limit gore when it comes to the gore limbs asset

Ways that the feedback will reflect on the project:

1. Continue building on global concept 1: We will continue to design the small community where the invasion is taking place by adding key places in which the leader character will lead the user, for example, a bunker where families are taking refuge from the attacks.
2. Limit gore: We will try to control the gore level by receiving feedback from others regarding the level of gore in the VR and adjust accordingly.
3. Continuing on implementing risk education: We will be translating the signs in French from our previous prototype to ensure that all users can be fully aware of the risk autonomous weapons impose.

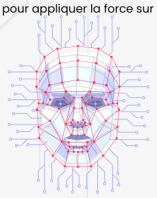
Prototype:

For this prototype we added more detail to overall design. We added a bunker in which the user and the leader character can take refuge from the invasion and see the wounded lined up in hospital beds seeking care from autonomous weapons. We also made french versions of our posters to meet the clients identified needs, developing from our previous prototype.

ARMES AUTONOMES: CE QU'ILS SONT ET POURQUOI LES INTERDIRE

QUE SONT LES ARMES AUTONOMES?

Les armes autonomes sont classées comme tout type d'arme qui agit sans intervention humaine. Ils utilisent l'intelligence artificielle et des capteurs pour appliquer la force sur les cibles.

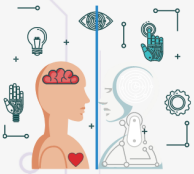


COMMENT FONCTIONNENT LES ARMES AUTONOMES

Une fois activée par un humain, l'arme autonome prend le tout contrôle, ne permettant pas à la personne de voir spécifiquement qui et quoi est ciblé ni quand et où cela se produira. Les armes autonomes utilisent des capteurs et divers logiciels pour faire correspondre les profils des cibles à l'environnement extérieur.

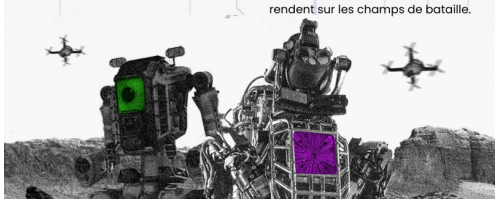
LA MENACE IMPOSÉE PAR LES ARMES AUTONOMES

La menace des armes autonomes est la perte du jugement humain lorsqu'il s'agit d'identifier et d'engager des cibles. Par exemple, engager des cibles lorsque des civils se trouvent à proximité ou distinguer les similitudes entre les profils des cibles et l'environnement extérieur sont des faiblesses que les armes autonomes ne peuvent pas surmonter.



POURQUOI LES INTERDIRE

Les armes autonomes sont des dangers qui attendent de se produire en raison de leur nature peu fiable en jugement et de précision, et de leurs aspects désensibilisants. Ils constituent une menace pour les civils innocents, les blessés et ceux qui se rendent sur les champs de bataille.



ARMES AUTONOMES: RISQUES & PRÉOCCUPATIONS

Pourquoi les armes autonomes devraient être interdites

PRÉOCCUPATIONS JURIDIQUES

Sous le droit international humanitaire, les combattants doivent seulement donner suite à des attaques spécifiques pour des fins d'évaluation juridique et jugement, que les armes autonomes ne peuvent pas mener avec précision.

Préoccupations éthiques

Les armes autonomes suppriment l'agence morale, ce qui désensibilise et déshumanise les situations de vie ou de mort présentes chez les soldats humains.

Risques

- Risque de biais codé en matière de sexe et de race
- Risque accru de danger civil en raison du manque de jugement humain

Inconvénients des armes autonomes

Les armes autonomes sont imprévisibles par conception. Le modèle de la boîte noire, le logiciel d'apprentissage automatique souvent utilisé, restreint les informations de processus internes de

Si nous arrêtons ensemble, nous créerons un avenir meilleur

Agissez et bannissez les armes autonomes

Why Prototype:
Prototyping is a crucial step in the design process as it allows us to test and validate our design choices before investing significant time and resources into development. By creating a prototype, we can quickly and efficiently identify any issues or areas of improvement, ultimately leading to a more effective and user-friendly final product.

What Prototype:
Our prototype will be a digital mockup of our game's user interface, which will include a basic representation of the game's environment, visuals, and overall user experience. The prototype will not be functional. Additionally, the prototype includes the custom signs that were chosen as our educational subsystem.

When Prototype:
The prototype will be developed during the early stages of the design process after the initial research and ideation phases have been completed. It will be used to validate the design direction and gather feedback from potential users and team members. The prototype will be refined and iterated based on feedback, leading to a more potent and well-informed design.

Models**:**

Analytical Model:
Mathematical equations or formulas could be used to predict the behaviour of the virtual environment. For example, an analytical model could be used to predict the movement of objects within the virtual environment based on their mass, velocity, and other physical properties.

Numerical Model:
A numerical model for a VR project could involve using numerical algorithms to simulate the behaviour of the virtual environment. For example, a numerical model could be used to simulate the physics of a virtual object, such as its collision detection and response.

Experimental Model:
An experimental model for a VR project could involve conducting experiments within the virtual environment to gather data and test hypotheses. For example, an experimental model could be used to test the effectiveness of different types of user interfaces or navigation systems within the VR environment.

Documented prototyping test plan:

Prototyping Test Plan	Analysis	Results
Visual Aspect	- realistic and immersive environment of the destroyed city setting	The results are sufficient, as the visuals look appealing and engaging for the user
Resolution	- high level of detail and clarity in the environment, which helped to enhance the immersive experience.	The results are sufficient, as the resolution is great
City Details and Educational Posters	- have a high level of detail in the destroyed city setting - Flawlessly incorporated educational posters	The results are sufficient, which can be reflected amount of details and posters throughout the city

User Feedback on the prototype:

1. "The level of detail in the destroyed city setting is impressive. I really appreciate the attention to detail in the broken walls and the bunker.”
2. "I liked the bunker and all the hospital details added inside."

3. "The destroyed city setting is very realistic and immersive. Adding a bunker makes a great addition to the whole theme."
4. “The posters look incredible and are very well made, they are incorporated flawlessly into the game”.
5. “Adding a french translation of the poster makes the game more realistic and serves french speaking clients”.

Overall, the feedback and comments on a VR prototype can be very diverse and subjective. It is essential to take into account constructive feedback and use it to improve the VR experience. By listening to potential clients and users and making necessary changes, the VR prototype can become more immersive, user-friendly, and enjoyable for all.

Updated Targeted Specifications:

With our current ongoing project feedback, our targeted specifications are mainly targeted towards structuralizing and adding to the current prototype. Our ethical concerns currently did not exist in the presentation we gave, for future prototypes, we have to consider ethical concerns in order to make the virtual reality experience suitable and more impactful. In order to do that we will be thinking about:

- Lack of accountability for autonomous weapons.
- Due to robots being programmed, there could be malfunctions that lead to risk to civilians.
- Unfair and unethical decisions. Examples could be for having these in war or even to protect society, it would obviously be too harmful to a certain extent.

In order to have these in the prototype, we would incorporate meaningful messages that conveys the watcher to be affected by these.

Updated Bill of Materials

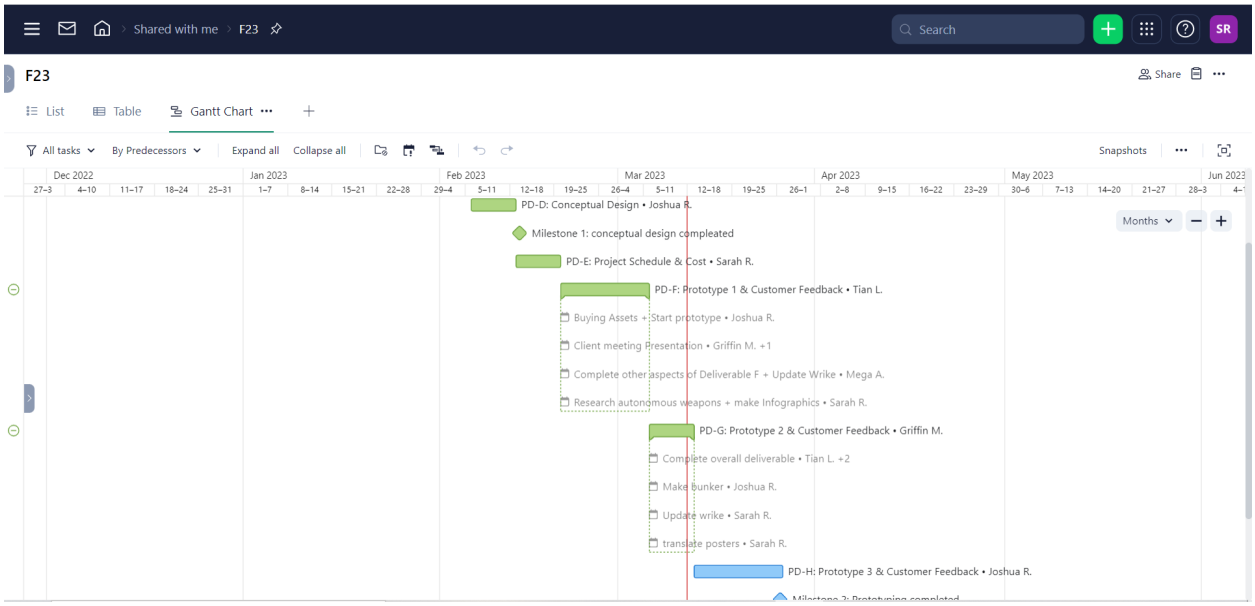
Bill of Materials				
Item #	Item description	Quantity	Unit Price ($)	Extended Price ($)
1	Post apocalyptic city pack	1	$8.99	$8.99
2	Drone 3D model	1	$5.00	$5.00
3	City ruins asset set	1	$20.00	$20.00
4	Humanoid robot assets	1	$15.00	$15.00
5	People asset set	1	$49.00	$49.00
6	Fire and smoke	1	$15.00	$15.00

7	Explosion sounds	1	$15.00	$15.00
8	Gore limbs other body parts	1	$10.00	$10.00
9	Vintage hospital props	1	$13.00	$13.00
Total before tax ($)				$150.99
Total after tax (13%)				$170.62

Prototyping Test Plan:

Prototypes				
#	Type	Objective	Fidelity	Stopping Criteria
1	Focused results and feedback.	Communicating and getting feedback for ideas.	High. This is to ensure that everything is met to the liking and usability of the client.	Eventually when feedback given is all positive and nothing is missing.
2	Focused ethicality.	Verifying feasibility.	Medium, although having a feasible project is good for criteria, there always could be a presentation that takes more time and has a lesser rate of success.	When all critical aspects of the prototype are met.
3	Focused commercial.	Reducing risk and uncertainty.	Low, most limits for risks and uncertainty are quite low, paying attention to certain things such as compatibility is important, but not necessary to monitor all the time.	When all parts are compatible, and all sufficient information is being learned.
4	Focused Emotional	Verifying if the main point gets through to users.	High, this is to guarantee the success of what the main focus of the product does. Without it, the product would be lacking and faulty.	When “stop autonomous weapons” gets really clear in virtual reality.
5	Focused limits.	Ensuring that everything has followed constraints.	High constraints are very important to follow in order to ensure that nothing is too much for the customer. Examples of this would be not too much gore.	Having a list and then evaluating to make sure that constraints are followed.

Updated task plan:


Shared with me
F23
Search
SR
F23
Share
List
Table
Gantt Chart
All tasks
By Predecessors
Expand all
Collapse all
Snapshots
Dec 2022
Jan 2023
Feb 2023
Mar 2023
Apr 2023
May 2023
Jun 2023
27–3
4–10
11–17
18–24
25–31
1–7
8–14
15–21
22–28
29–4
5–11
12–18
19–25
26–4
5–11
12–18
19–25
26–1
2–8
9–15
16–22
23–29
30–6
7–13
14–20
21–27
28–3
Months
PD-D: Conceptual Design • Joshua R.
Milestone 1: conceptual design compleated
PD-E: Project Schedule & Cost • Sarah R.
PD-F: Prototype 1 & Customer Feedback • Tian L.
Buying Assets + Start prototype • Joshua R.
Client meeting Presentation • Griffin M. +1
Complete other aspects of Deliverable F + Update Wrike • Mega A.
Research autonomous weapons + make Infographics • Sarah R.
PD-G: Prototype 2 & Customer Feedback • Griffin M.
Complete overall deliverable • Tian L. +2
Make bunker • Joshua R.
Update wrike • Sarah R.
translate posters • Sarah R.
PD-H: Prototype 3 & Customer Feedback • Joshua R.