

Horrors of War: Historical Trauma in Game Design

Name: Lai Wei Jay

Bachelor of Art (Honours) Game Design

**Faculty of Creative Industry
Universiti Tunku Abdul Rahman**

May 2026

Declaration

I, Lai Wei Jay declare that this thesis report entitled “Horrors of War: Historical Trauma in Game Design” is my own original work except for the citation from references. This report has not been accepted or submitted to any party and will only be submitted to Degree of Bachelor of Art (Honours) Game Design, Faculty of Creative Industries, under University of Tunku Abdul Rahman.

Signature: 

Name: LAI WEI JAY

Date: 20 MAY 2026

Acknowledgements

I would like to express my sincere gratitude to my supervisor, Mr Ts Dr Ang Kok Yew and Ms Chow Mee Mooi, lecturers of the various courses that I have been taught in Bachelor of Arts (Honours) Game Design for their guidance, feedback, inspiration and support throughout the development of “Hullbound”. Their wisdom and feedback greatly helped the completion of this project.

I would also like to thank my friends and groupmates for their support, patience and encouragement in bringing this project to fruition. The feedback from playtesters, participants from the survey also contributed greatly towards the project and research. Their feedback and insights provided valuable insight for the design and research process.

Abstract

This project titled “Horrors of War: Historical Trauma in Game Design” explores the portrayal of historical conflicts and psychological horror within action video game design. Many conventional action games that depict militarism and warfare often prioritise spectacle of combat, military empowerment and action-focused gameplay while overlooking the severity of traumatic consequences, humanitarian crisis and psychological effects of war. This project seeks to investigate the portrayal of war in video games foremost as a distressing and immersive experience rather than entertainment.

Table of Content

Chapter 1: Introduction and Overview	7
1.0 Introduction.....	7
1.1 Game Objective	7
1.2 USP	8
1.3 Project Scope	8
1.4 Target Audience	9
1.5 System Requirements	10
1.6 Target Market.....	11
1.7 Game Mechanics	13
1.8 Narrative	13
1.8.1 Backstory.....	13
1.8.2 Berlin Wall Crisis of 61’	14
1.8.3 The Iron Curtain Falls	14
1.8.4 Redemption through blood.....	17
1.8.5 New World Order, Set Ablaze	18
1.8.6 Characters.....	19
1.8.7 Dialogue	23
1.9 Level Design.....	36
1.9.1 Tutorial Berlin	36
1.9.2 Main Map	37
1.9.3 Nuclear Wasteland	40
1.10 Game Flow Chart.....	41
1.10.1 Combat Gameplay & Callout Flow	41
1.10.2 Dialogue choices & Ending flow	43
1.11 Gantt Chart	45
1.12 Research Introduction	45
1.13 Research Objective	45
1.14 Research Question	46
1.15 Research Hypotheses	46
Chapter 2 Background & Literature Review	46

2.0 Background	46
2.1 Theoretical Framework.....	48
2.1.1 MDA Framework	48
2.1.2 Procedural Rhetoric	49
2.1.3 Immersion, Presence & Agency	51
2.2 Review of Key Studies.....	52
2.2.1 Game as Historical & Trauma Experience.....	53
2.2.2 War, Militarism & Representation	54
2.2.3 Conclusion.....	55
2.3 Research Gaps	55
2.3.1 War as a Playable Spectacle	56
2.3.2 Confinements in Horror Games	58
2.3.3 War Psychology in Game Design	59
2.4 Conceptual Framework.....	61
2.4.1 Design Elements.....	61
2.4.2 Player Experience.....	62
2.4.3 War Psychology	63
Chapter 3: Research Methodology	63
3.0 Research Design	63
3.1 Data Analysis Method.....	64
3.2 Sampling Technique	64
3.3 Ethical Considerations.....	64
Chapter 4: Data Analysis and Results	64
4.0 Questionnaire	64
4.0.1 Demographics.....	65
4.0.2 Historical Conflict & War Representation	68
4.0.3 Psychological Horror & Immersion	71
4.0.4 Ethics & Emotional Impact	75
4.1 Open-ended Questions.....	77
Chapter 5: Discussion and Interpretation.....	82
5.0 Interpretation of Results	82

5.1 Theoretical Contribution.....	82
5.2 Practical Implications	83
5.3 Study Limitations.....	87
5.3.1 Game Design Critiques	87
5.3.2 Tank System Limitation	87
5.3.3 Linear Tank Driving Mechanic	88
5.3.4 Lack of Destruction System	89
Chapter 6: Conclusion and Recommendations.....	91
6.0 Summary of Findings	91
6.1 Limitations & Challenges.....	91
6.2 Solutions & Recommendations.....	93
6.3 Conclusions.....	94
Chapter 7: Reference & Appendices.....	95
7.0 Reference.....	95
7.1 Appendix.....	97
7.1.1 Logbook FYP 1	97
7.1.2 Logbook FYP 2	100
7.1.3 Survey Questionnaire	106
7.1.4 Final Project Title Form	115
7.1.5 Permission Sheet	117

Chapter 1: Introduction and Overview



1.0 Introduction

The game chosen to be developed is titled “Hullbound”, a psychological horror tank simulator, story-driven game. Hullbound attempts to blend the action gameplay of tank combat and narrative heavy gameplay.

The core theme of the narrative focuses on the conflict between duty and morality, deterministic cycle of war, and manipulation of truth through propaganda. Our aim of the game is to instill the feeling of hopelessness, dread and despair brought on by the horrors of war through an immersive visual auditory design. Whereby many video games and popular media tend to romanticize, generalize or glorify war, our game instead will not be downplaying the sheer brutality that soldiers and civilians may face during war.

We took the creative liberty to dramatize a fictional Cold War scenario where World War III has occurred through the perspective of a Soviet tank gunner, and what they might have faced during combat.

1.1 Game Objective

The object of the game is to survive intense tank engagements to progress to the preceding area on the map while moral choices are delivered via scripted events like dialogues during gameplay. Through battlefield performance and moral decisions, the player’s actions would shape the course of the story, leading to one of the three possible endings.

1.2 USP

Tank Simulations meets Psychological Horror

- Combines tank combat with psychological tension. Our game aims to not just bring combat as physical threat, but also mentally as well.
- Uncertainty builds up along every encounter the player faced, be it from under enemy fire and witnessing the horrors of war.

Choices with Unclear Consequences

- Moral decisions are embedded into both dialogues and gameplay, often without immediate clarity on their outcome
- Players must choose between obeying orders or acting on personal judgement, with each decision influencing the narrative and endings.

Dynamic Crew Voice System

- Voice acted crew members would react contextually during combat gameplay. Going from calm communication to panic and strained callouts.
- This reinforces immersion and reflects the psychological state of the crew during combat.

Distinct 2D/2.5D Art Style

- A stylized blend of 2D and 2.5D visuals to create an uncanny, distressful and oppressive atmosphere.
- The environment, characters and animation are designed to be distressing, enhancing the psychological horror element rather than aiming for pure realism.

1.3 Project Scope

Our group “Spaghetti Code” consists of four members, starting with myself, Lai Wei Jay, Lee Kang, Yap Mei Ying and Thee Yee Hen.

Our individual role in this project is divided thusly:

Lai Wei Jay: **Lead Narrative & UX Designer**

In charge of:

- Narrative Design
- Level Design

- SFX Design
- VFX Design

Lee Kang: **Technical Artist & Programmer**

In charge of:

- 3D modelling
- Dialogue programming
- Music Composing
- UI Design Assistant

Yap Mei Ying: **Lead 2D Artist**

In charge of:

- Menu & UI Design
- Tank interior Design
- Character Designs
- 2D Sprite Animation

Thee Yee Hen: **Lead Programmer**

In charge of:

- Gameplay programming
- AI behaviour
- Game logic

1.4 Target Audience

- PC Players:
 - Predominantly male demographic
 - Players at the age range of 18-34
 - Gamers that enjoy an immersive and detailed game experience.
- History & Military Enthusiasts
 - People that are interested in Cold War-era geopolitical scenarios
 - People that appreciate history portrayed authentically
 - Alternate history fans
- Tank & Vehicle Simulation Fans
 - Players draw to detailed tank mechanics, weapon system and combat
- Narrative-driven Players

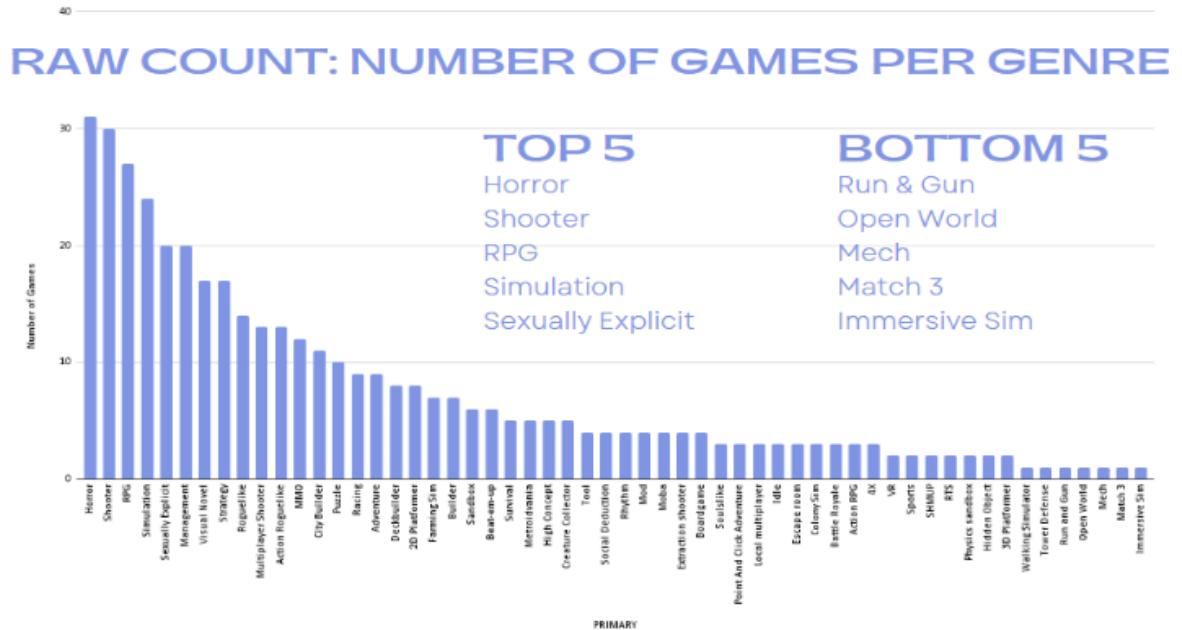
- Players that value storytelling, character development and branching moral choices in gameplay
- Psychological Horror Fans
 - Players who enjoy tensions, fear and moral dilemmas in their gameplay.

1.5 System Requirements

Aspects	Minimum Specification	Recommended Specification
Operating System	Windows 10	Windows 10/11
Processor	Intel Core i5	Intel Core i7
Graphics	RX460	RX570
Memory	4Gb RAM	8GB RAM
Storage	4GB available space	

1.6 Target Market

#1 Steam players LOVE horror games



[Figure 1.0: #1 Steam players LOVE horror games | Raw count: Number of Games per Genre]

In recent years, horror games have topped steam charts more than any other genres, especially made by indie developers. Horror games had a higher share of games with consistent players and reviews compared to other genres, indicating strong player interests.

According to a market analysis article by Zukalous (2023), horror games manage to gain rapid popularity mainly because of easy marketable ability. Horror games can quickly capture people's attention as horror content can trigger strong reactions in a short period of time. Players and developers alike could share short gameplay clips on social media to garner views and awareness on said games.

The article validates the development of Hullbound, as it shows horror fans are active and consistently engaged in the gaming sphere.

Military Simulation Games Market Is Booming Worldwide | Major Giants Dovetail Games, Ubisoft, Konami

09-19-2025 11:51 AM CET | Advertising, Media Consulting, Marketing Research
Press release from: HTF Market Intelligence Consulting Private Limited



Military Simulation Games Market

HTF MI recently introduced Global Military Simulation Games Market study with 143+ pages in-depth overview, describing about the Product / Industry Scope and elaborates market outlook and status (2025-2033). The market Study is segmented by key regions which is accelerating the marketization. At present, the market is developing its presence and some of the key players from the complete study are Bohemia Interactive, Dovetail Games, Ubisoft, Lockheed Martin, BAE Systems, Raytheon, CAE Inc., Eagle Dynamics, Red Storm Entertainment, Saber Interactive, Thales Group, Electronic Arts, Konami, Wargaming.net, Digital Combat Simulator (DCS), SimTech.

Download Sample Report PDF (Including Full TOC, Table & Figures) 📄

<https://www.htfmarketreport.com/sample-report/4358432-military-simulation-games-market>

According to HTF Market, the global Military Simulation Games market is expected to grow from 5.5 Billion USD in 2025 to 9.0 Billion USD by 2033, with a CAGR of 6.5% from 2025 to 2033.

[Figure 1.1: Military Simulation Games Market is Booming Worldwide | Major Giants Dovetail Games, Ubisoft, Konami]

According to OpenPR (2025), the market of military simulation games is expanding rapidly, with expected growth from 5.5 Billion USD in 2025 to 9.0 Billion USD by 2033. The market includes games that simulate realistic combat and military scenarios for entertainment.

Factors for the growth include the demand for realism, authenticity and advanced simulation technology in video games. As many mil-sim games have realistic weapon handling, combat system, vehicle simulations, communication and dynamic sound effects & environments.

The report shows clear growth and demands for military simulations, making the mil-sim audience as a strong primary market for our game Hullbound, as it portrays the intensiveness of tank combat alongside the psychological threats of war, and dynamic crew voices reacting under fire.

1.7 Game Mechanics

Tank Scope Gameplay Mechanics

- Control the tank's weapon system, shoot, reload, select shell types and operate coaxial machine gun.
- Choose between armour piercing or high explosive shells depending on target and tactical situation.

Tank Interior Interactable

- Click on fellow crewmen or radio to engage in dialogues.
- Interact with the ammunition carousel to manage shells.
- Access personal logbook/diary for exposition and notes.

Ammunition Carousel Interaction

- Reload the carousel during combat downtime by dragging and dropping shells and propellant charges onto each of its holdings.
- Misplacement or errors can cause inaccuracy or reduced damage.

Moral Choices and Scripted Events

- Dialogue choices affects crew relations, morale and story outcomes.
- Combat decisions including obeying or refusing orders that challenges your morals and conscience.
- Scenario QTEs that influences story progression and test player judgement under pressure.

1.8 Narrative

1.8.1 Backstory

You grew up during the Great Patriotic War (World War II), ever since as a child, you see the horrors of war. The bombing, massacre, burning villages and cities all scarred your mind since young. You never met your father, he served in the Red Army during the war, he never returned home. But in your home, you see his portrait, in uniform and decorated with medals. You only heard stories from your father's friends, how he was like, how he fought, but not why he did not return home. Everyone was saying he was a war hero that died in combat honourably for

the Motherland. You were inspired by your father's story, and one day hope to join the Army in his footsteps.

1.8.2 Berlin Wall Crisis of 61'

Late October, 1961, You're a tank gunner in the Soviet Army, first saw action in Berlin, at Checkpoint Charlie, where the Berlin Wall Crisis escalated.

You were one of the dozens of T-55 deployed to Checkpoint Charlie, up against you are M48 Patton tanks. The tense standoff between American and Soviet tanks became a firefight, it was unclear who fired the first shot. Soon, Berlin became a battlefield once more. During the battle you became a reliable gunner, scoring dozens of kills at Checkpoint Charlie, becoming a tank ace in a day.

Your tank took a direct hit, everyone in your tank was killed, but you were badly wounded. You were sent to a military hospital and treated. During that time, you were confronted by a NKVD Commissar, he explained that your father was a coward, who refused orders and abandoned his post. He died in a labour camp, stripped of his records and rank, but the family was told he died honorably in battle. The commissar tells you that you may redeem your family name, by going back to the front. He hands you a transfer order, as soon as your wounds healed, your heading back to the front.

1.8.3 The Iron Curtain Falls

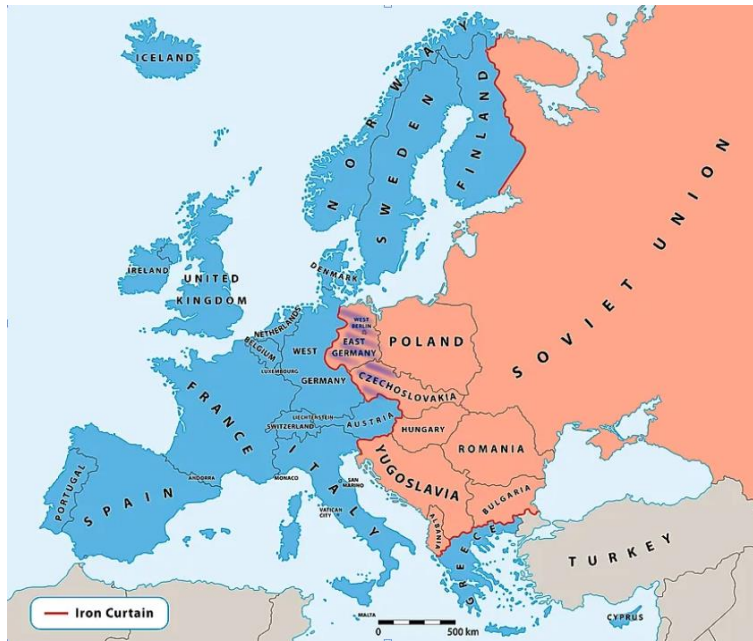
The skirmish in Berlin led to a full blown invasion of West Germany. NATO began to mobilize. By November, the Soviet Army retook West Berlin, and pushed deep into West Germany. NATO was not prepared for the sudden strike by Soviet armour, eventually the front collapsed. By December, the Soviet Army pushed NATO back to the borders of the low countries. The United States, Britain and France rushed in reinforcement and tried to stabilize the front, but the harsh winter limited NATO airpower to respond to Soviet breakthroughs.

Numerous negotiations and peace talks ended with failure, but backchannel diplomacy is still ongoing. High commands of both sides assumed the conflict would be short and localized, like another Korean War. The theory of Mutual Assured Destruction (MAD) made both sides even more reluctant to “push the red button”. Moreover, another reason to not deploy nuclear weapons on Germany is to preserve the war-torn nation, the Soviets and the Allies dedicated millions of men to liberate Germany during WWII, to flatten the nation after the worst conflict in history, would not only erase that sacrifice, but to condemn Central Europe to radioactive ruins.

New Year, 1962, NATO launched a counter-offensive, taking advantage of clear winter skies to pound Soviet logistics and supplies. Soviet divisions were lining up for their next offensive into France and the low countries, however, the clear winter skies welcomed NATO airpower. Long lines of Soviet tank columns destroyed by precision strikes. NATO’s superior airpower begins to tell, slowly but surely, NATO begins to retake West Germany.

February 1962, reports are flooding in of NATO offensives and breakthroughs in Germany and Czechoslovakia. The full might of NATO rushed into Germany and stabilized the front, reaching the border of Poland. By the end of February, NATO retook Berlin, most of East Germany, and parts of Czechoslovakia. The Soviet Army was in retreat.

The Scandinavian and Baltic Front saw limited actions as US and British air and seapower prevented any amphibious invasions, and the bulk of both Soviet and NATO troops were already deployed in Central & Eastern Europe. In the Balkans, Yugoslavia declares neutrality and refuses to join the war on either side, but small skirmishes occur at the Romanian border.



[Figure 1.3: Alternate Cold War map of Europe, East Germany and part of Czechoslovakia under NATO control]

March of 1962, the frontline stabilized at the Polish-German border, further negotiations of ceasefire and peacetalks were attempted again. During these times, your wounds are healed and you are to be sent back to the front. You were driven to the front by one Major Voroshilov, he explained on the way the Soviet Army will turn the tides of war, like how they did in Stalingrad. The Major further talks about his experience during the Great Patriotic War, how tank battles evolved and why he has confidence. He was part of an experimental tank development project, and with this tank, that you would be the gunner of, would turn the tide of battle. You were not fazed by the idea of one vehicle turning the tide of war, and exclaim that sooner or later, nuclear weapons would be used. The Major was vexed by your claim, saying if nukes were to be used, they would have been used by now.

While driving to the front, you witness the devastation of war once again. Columns of wounded soldiers and civilians marching the opposite direction, broke down and destroyed vehicles and tanks pushed aside to clear the road, and casualties by the truckload drove by you. A sudden flashback to your youth, seeing the resemblance of

the Red Army retreating from the fascist in the summer of 41'. You began to breathe frantically, fearing for the worst, but the Major reassures you, with this new tank, we can turn the tides.

You once again iterate how obscene this whole thing is, one tank would now be able to win the war. The Major ominously says you are here for a reason, and why have you been assigned to his tank crew. You were an excellent tank gunner and became a tank ace during the Berlin Crisis, your skills are again needed by the regime. He then reminded you about your fathers mistake, and if you were to repeat his mistake, you would be executed on the spot.

1.8.4 Redemption through blood

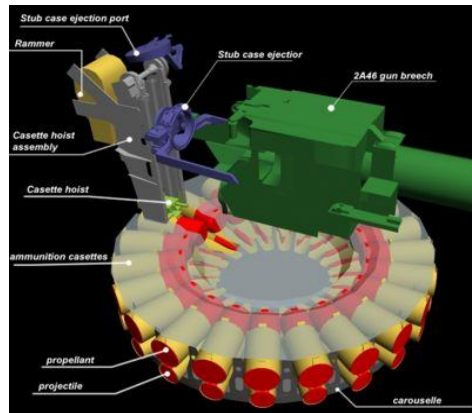
You are now reassigned to a new tank and crew, a new heavy prototype tank, T-279 (real life ref the Object 279), a tank built to withstand nuclear blast, but not to survive in a nuclear fallout. Quadruple threads to become the ultimate all-terrain-vehicle, capable of crossing deep snow, marshes, rocky terrains etc. Huge turbine-diesel engine, giving the tank 1200 hp, echoing high-pitched whirring like a jet engine inside the tank.



[Figure 1.4: Image of Object-279 tank]

Heavy and thick armour forged into a saucer shaped hull to deflect overpressure, debris and most enemy projectiles, it is impenetrable. It may survive exposure to radiation and fallout, but not indefinitely. Armed with a 130mm gun, outguns any western tank of the era. Fitted with Infra-red sight system to see through smokes and dark environments gives the tank a huge tactical advantage. The gun is

reloaded with an autoloading carousel system, offering a rate of fire of 8 rounds per minute.

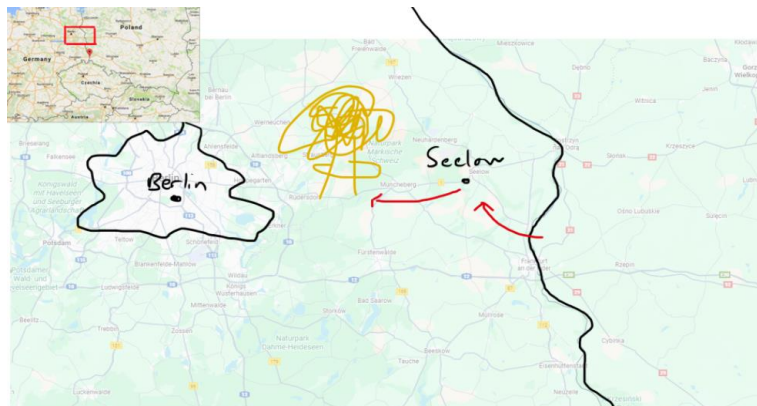


[Figure 1.5: Image of 2A60 carousel autoloader system]

While you are offered a fancy and advanced tank, you now hold resentment towards the regime. The war only brought tragedy, your country is on the backfoot, the front is collapsing. NATO forces have recaptured Berlin and most of East Germany and are pushing into Poland. You have no choice but to keep quiet and continue your duty to serve the motherland, and remove the stain of your father's name.

1.8.5 New World Order, Set Ablaze

Soviet High Command did not want to wait, a newly planned offensive was already underway during the negotiations. Intel shows enemy weak points north of Frankfurt, command wants us to break through enemy lines, head northeast into Seelow, then east into Berlin.



[Figure 1.6: Close up map of German-Polish Border, where the game takes place]

1.8.6 Characters

Commander



Major Stanislav “Voron” Voroshilov, age 38

- **WWII Veteran**
- **Highly indoctrinated fanatic**
- **Aggressive tactician**
- **Villainous mentor**
- **Cold decisiveness**
- **Disfigured**
- **Hubris (in the tank’s capability)**

Served in the Great Patriotic War, enlisted at 17 years of age, seen the worst of the combat against the fascist, was present during the Battle of Kursk, took part in Operation Bagration and Battle of Seelow Heights. Promoted to platoon leader by 1945.

During the war, he witnessed the many acts of horror man can do to one another. During Operation Bagration in 1944, he was part of the tank unit that spearheaded the breakthrough. The battle was decisive and brutal, German troops

were routed, many feared surrender so they fought to their last breath, because they knew being in Soviet captivity meant certain death. Even so, those that did surrender were brutalized, tortured and executed. Voron witnessed all these, and had a hand in some of these actions.

After the war, he contributed to further development of tanks, armoured warfare tactics and doctrine. He also took part in the suppression of the Hungarian Revolution in 1956, conducting “necessary” actions against the Hungarian populace. The suppression of the Hungarians reflected some of his actions during the war. He refrains from discussing his past conducts, but his actions then proved himself as an invaluable asset to the regime.

While not a political officer, he is depicted as highly loyal towards the regime and deeply believes in duty, the communist ideology and is confident in the machine’s strength, armour and capability to trump all western tanks.

The Major is decorated, indoctrinated, and has absolute faith in the Communist ideal. Hand picked by the NKVD to watch over you, seeing disobedience as dishonour, compassion as weakness, failure as not an option. However he is tactically minded, understanding terrain, ambush, gun and armour strengths to his advantage, albeit aggressive in his attacks as he has full confidence in the T-279’s armour, firepower and capability. And he appears to personally know your father.

Going down the “Good” Ending path, it is revealed that he would have taken part in the Battle of Berlin if he was not wounded in the Battle of Seelow Heights. He sorely regrets he did not see the end of the war in Berlin. He blames the West for having to split up Germany, political tensions would have been avoided if Berlin was under Soviet control. He later stayed in the Soviet Union contributing in armoured warfare doctrines and development of tanks, and never went to East Berlin since the peace treaty was signed.

Driver



Junior Sergeant Alexei Popov, age 19

- **The Newbie**
- **Quick learner**
- **Mechanically sounded**
- **May fold underpressure**
- **Indifferent toward war ideology**

The new driver is young, anxious, but practical. Fresh out of tank school and is assigned to your tank. Is depicted as competent with machines, but lacks combat experience.

He holds indifference towards the war, just wants to do his duty and hoping just to get it over with. Alexei may express doubt, stress and fear in the face of combat. But with Major at the helm, he does not openly question him, even with outrageous commands. Alexei is as important as any of us in the tank, if we are to survive together.

Gunner (the Player)

Senior Sergeant _____, age 26

- **Experienced and skilled**
- **Cautious & Pragmatic**
- **Morally aware**
- **Tainted legacy**

Grew up during WWII, witnessed horrors of war, raised thinking his father is a war hero, but later allegedly revealed to be a coward, disobeyed orders and died in a labour camp.

Was present during the Berlin Wall Crisis, became a tank ace, and was horribly wounded. In the hospital is where his father's truth is revealed. Is ordered to head back to the front after his wounds healed, to redeem his father's name. Excellent gunnery skills, the Major specifically chose you to be the new gunner of his new tank.

The Father

_____, age XX

- **War Hero, stripped of his pride**
- **A commander, stripped of his rank**

Your father was a tank platoon leader during the Great Patriotic war, respected by his men. He was compassionate, tactical and instinctive. Voron served under him during Operation Bagration, and observed how he was an exceptional leader. During Operation Bagration, your father refused orders to fire at surrendering soldiers, and told the men to hold fire. But in the end the prisoners of war were gunned down, your father could only watch.

While his compassion and skills are revered by his men, high command think he is disobedient and reckless, often willingly challenging orders that made him a target of suspicion. The NKVD took notice, and assigned political commissars to his unit.

March 1945, the Red Army advances across the Eastern Front, heading towards the Oder River, and Berlin. Your father's tank platoon is one of the leading spearheads on the front. Your father carried out the orders of a recon in-force mission, to find a weak spot on the Oder River to forge a crossing. Your father returned empty handed, the unit suffered heavy casualties. Your father exited his tank and angrily went to the command post to report, Voron followed suit.

Your father stated that the crossing cannot be carried out, saying the defences in the sector are more fortified than intel suggests. The NKVD commissar stepped in, questioning why have you defied their orders, your father denied this claim. Your father says the mission was impossible to be carried out. The NKVD rejected this and reprimanded him, some of the men tried to stop them, they were shot on the spot. Voron could only stand by and watch, as your father was dragged away. April 1945, a month later, Voron was promoted to tank platoon leader. Leading the same men that was once under your father, during the Battle of Seelow Heights.

1.8.7 Dialogue

Tutorial Berlin

TC:

Alright comrades, eyes up. Amerikan tanks showed up overnight, and we are tasked to hold this checkpoint. Do not open fire unless I give the command.

Player:

Roger, Comrade Commander.

(Tank moved to position)

TC:

Driver, halt. Gunner, keep an eye on those tanks.

(Tutorial for tank controls here, traverse the turret)

TC:

Hold your fire, we don't want to start another war here, comrade.

(Radio crackles, stating tensions rising in Berlin as tanks are at a standoff at Checkpoint Charlie)

(Suddenly a gunshot rang out, dont know where from)

(Second gunshot, an Amerikan soldier fell down)

(Followed by return fire from Amerikan soldiers, then tank fire)

(Confused radio transmission issuing orders to cease fire)

(Amerikan tanks start to shoot at you)

TC:

Chyot! Ogoy, Ogoy!! (Fuck, open fire, open fire!)

(Tutorial for tank combat, LMB shoot, R reload, 1 & 2 select ammo, no MZ autoloader yet)

(After tanking out X amount of tanks, your tank got hit and caught fire)

(Screen on fire, screaming, then fade to black)

—

(fade into this)

Hospital Cutscene:

(Open eyes, staring at ceiling)

(Groaning and screaming around)

(Heavy heart beat)

(A figure walks by)

Major Voron:

Wake up, comrade

Player:

Who are you..?

Voron:

Your new tank commander,

(hands documents)

Here, look familiar?

(documents of your father, it reads:

Action report. March 1945, Oder River

Captain [REDACTED]: Unauthorized withdrawal following heavy casualties

Detained for disobedience. Rank revoked.

Final decision: deportation)

Player:

What is this?

Voron:

The truth..

You are coming with me.

Player:

...

Voron:

You can still redeem your family name.

After your wounds are healed,

you are to return to the front.

Main Map

Checkpoint One: Farmland

Voron:

Rise and shine, comrades.

Welcome to the Oder River.

The guns of the Soviet Army are busy softening up our enemies across the bank.

Our task is simple, we will cross the river and engage anything we see.

Intel shows that the enemy is weak in this sector, expect some armour and infantry.

With our new tank, we will drive fear into the enemy and recapture Berlin.

Player:

Are we expecting reinforcements, comrade commander?

Voron:

We are the main spearhead unit;

We advance after the artillery finishes.

Player:

....

Voron:

High command expects highly of us. (

We will push these western dogs back into the sea!

You were there at Berlin;

you took out many Amerikan tanks easily.

This will be a cake walk, comrade.

Voron:

You went down fighting is what you did.

I put you back here in the gunner seat,

because I want you to demonstrate your skills once again.

The Motherland needs you.

[Artillery ceases]

Voron:

Barrage completed! Alexei, advance!

[Enemy tanks stucked in the mud]

Voron:

Alexei, halt here

Haha, they are stuck in the mud, amateurs!

Comrade, finish them off.

Checkpoint Two: Crossroad

Voron:

Alexei, halt here.

The map here shows two roads.

On the left, intel shows a possible enemy ambush.

On the right, mines.

Looks like the enemy wants to test us.

Their puny mines won't be strong enough to damage us; we're going down the right path.

4. (a) Mine Route

Voron:

Alexei, move us out.

Alexei:

But comrade commander, what if we got disabled by the mines?

Voron:

Then you get out there and repair us or do you have no faith in the tank that would protect us?

Do you want to get arrested for disobedience too?

Alexei:

No. Comrade commander, I-

Voron:

Enough! Get us going.

(One mines gets set off)

Voron:

Hahah! See, our beast of steel can take it.

(4th one disables a track)

Voron:

Chyot blyat, that was a bad one.

Alexei, get out there and repair it.

Alexei:

But the enemy might ambush us, comrade commander, I-

Voron:

Get out there and fix the threads before I shoot you myself!

(Alexei pops out and repair)

(a trio of M47 appears in front)

(after destroying the tanks)

Alexei:

(Jumps back in the tank)

(pants, pants)

Voron:

You're lucky that we have a competent gunner, Alexei.

Player:

That was a bad idea, comrade commander.

The tank is still vulnerable to mines.

Voron:

Bad idea?

You two were fumbling around instead of watching the path.

You lack discipline, you die.

You lived through this mistake this time.

Do not mistake luck with skill, Alexei.

If either of you mess up again, there won't be a next chance.

4. (b) Ambush Route

Player:

Comrade commander, mines are far more dangerous than an enemy ambush. I'll take my chances with the left route.

Voron:

Daring, are we, comrade?

Alexei:

Are you insane, comrade?

Player:

Our armour is superior to theirs; even if they fire first, they won't damage us.

Besides, with night vision sight we can spot them first.

Voron:

Good thinking, comrade.

See, Alexei. Steel does not flinch, nor does our comrade here.

Now, get us moving.

(Alexei starts driving)

Eyes sharp, comrades, and make every shot count!

(After ambush combat)

Voron:

Excellent gunnery, comrade.

You only survive because you did not hesitate.

You best remember that.

Alexei:

I'm glad to have you on our side, comrade.

Player:

...

It's either us or them..

Checkpoint Three: Autobahn

Voron:

Alright, Alexei. Get us down the Autobahn.

Expect enemy contact all along the highway.

Checkpoint Four: Seelow

Voron:

Get us up that slope, Alexei!

Alexei:

That slope looks too steep, Comrade Major!

I don't think our tank can-

Voron:

Do not disobey my order, damn you!

Get us up there!

Muddy slope path

Player:

....

(Tank goes up the slope and gets stuck)

Voron:

Get us going, Alexei!

Alexei:

The mud is too thick, Comrade Major.

We're not getting any traction.

(Tank gets flank by three M48)

Alexei:

Fuck!

(After tanks are destroyed)

Voron:

Damn you, Alexei!

You could've got us killed.

Alexei:

I tried to.. I-

Voron:

I will have you shot for this!

Player:

Comrade commander, get a hold of yourself!
Any tank will be stuck in a muddy slope like that.
Alexei would know that.

Voron:
I designed the tank, damn you!

Player:
And we still got stuck.
Don't blame Alexei for this.

Voron:
Enough, both of you!
Any of you two mouths off again, I will have you shot by the time we reach
Berlin!
Is that understood?!

Player:
.....
You must calm down, Comrade Commander.
We're still needed for this mission.

Voron:
....
(takes deep breath)
No more mistakes.
Not again.

Longer path (+1 Good Ending)

Player:
Comrade Commander, Alexei may be right.

That slope is way too steep and muddy.

Voron:

I'm giving the order, damn you!

Alexei, move us out!

Player:

Comrade commander, there is a second route on the right.

If we go up the slope, we risk getting stuck and flanked from behind.

Voron:

....

Alexei:

The other path seems to have firmer ground, Comrade Major.

We should have no problem traversing that.

Voron:

...

Driver, take us right.

Alexei:

Yes, Comrade Major.

Voron:

If this wastes my time, comrade

You will answer for it.

Player:

Understood, comrade commander.

Checkpoint Five: City

(Radio crackles:

Soviet artillery are within range of Berlin..... Civilians are to seek shelter.....

NATO troops are retreating....)

Voron:

They're on the run..

Cowards...

Player:

Guess they don't have much fight in them.

Voron:

Yet they still hold out.

It's a fighting retreat.

Ahead of us is a small urban sector.

There will be close quarter combat.

Watch the buildings.

They'll be hiding inside.

Voron:

Gunner, reload the carousel.

Expect more armour and infantry..

(reload carousel)

Player:

Shells are up and loaded, Comrade Commander.

Voron:

Good.

...

This place was in ruins the last time we came through.

They dare to stand in our way again.

We will show no mercy.

Alexei:

This place is in ruins already...

Voron:

Our artillery played their part.

Make a right turn here, Alexei.

Gunner, be ready for anything.

Flush them out from the buildings like rats.

(Artillery strikes among the player at the Consulate)

Voron:

Alexei, get us out of here!

(Exiting the consulate while being bombarded by artillery)

(Enemy tanks & infantry in alleyway, if cant kill them the artillery will)

(Radio crackling:

*Retreat! I repeat! Pull back! Pull Ba-..... Stand your ground-.....Cease all
actio-.....Incoming-..)*

Voron:

What the hell is going on?

Command, respond!

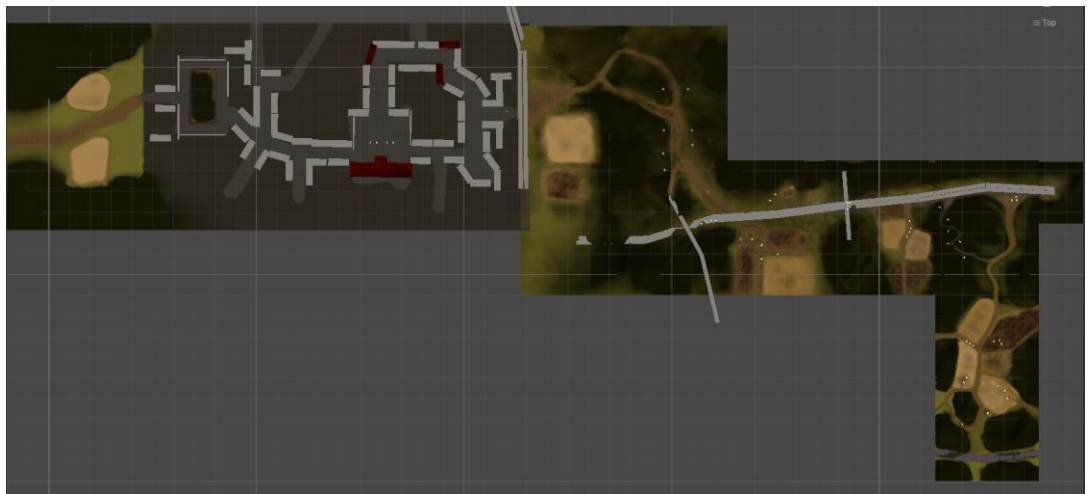
(Nuke dropped)

(Shockwave & smoke crash into the tank)

(fade to white)

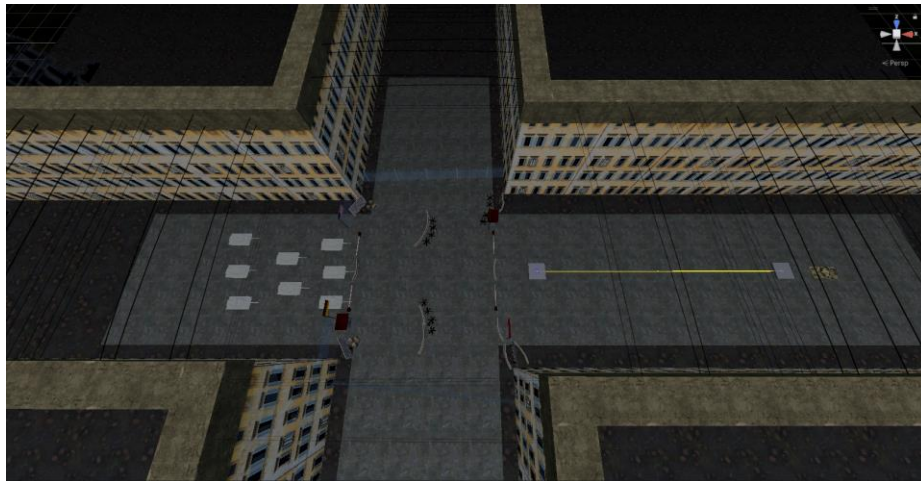
1.9 Level Design

The level design is split into three acts, which is described as “Tutorial Berlin”, “Main Map” and “Nuclear Wasteland”, each act having their own corresponding checkpoints. Taking inspiration from real-world locations in East Germany, real battlefield tactics and games such as Gunner, HEAT, PC!, the designs of the level would be steep with varied terrains, locales and dynamic enemy engagements. Enemies may be camouflage, in defilades, and out of line of sight to simulate realistic tank maneuvers and tactics.



[Figure 1.7: Full map layout in game]

1.9.1 Tutorial Berlin



[Figure 1.8: Top down view of Tutorial Berlin scene]

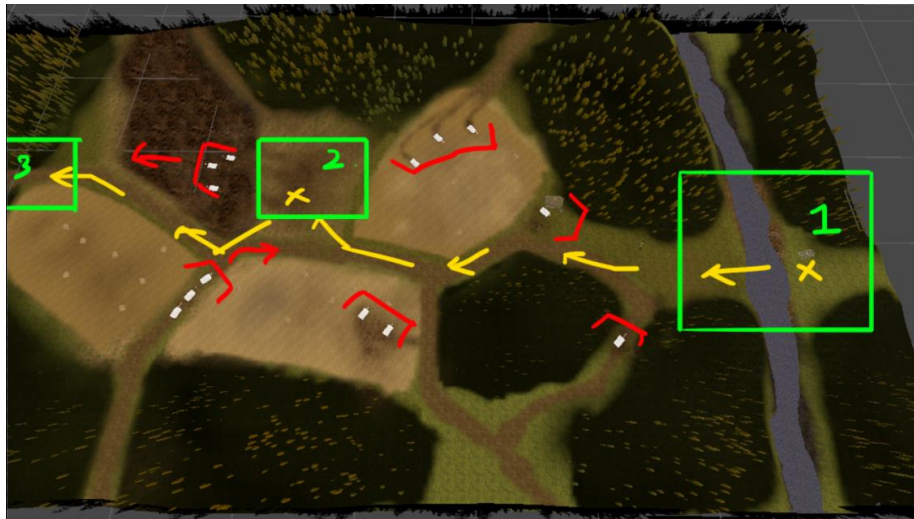
The tutorial will teach the basics of the weapons system and controls of the tank

cannon. Taking place at the real border crossing checkpoint of “Checkpoint Charlie”, October 1961, where a real crisis took place. In our game, this crisis escalated to full blown warfare.

Players will be in the shoes of an intense standoff against swarms of enemy tanks until they themselves are taken out. The narrative then plays out, showing the player surviving but will return to the frontline as all-out war has been declared.

1.9.2 Main Map

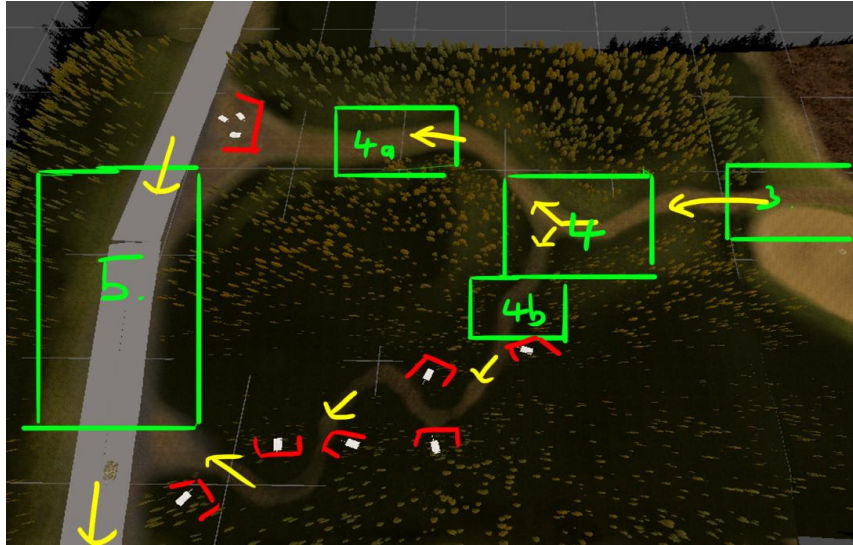
Checkpoint One: Farmland



[Figure 1.9: Top down view of Farmland section]

Crossing the Oder River on the German-Polish border, players now face enemy tanks in open combat, in flat grasslands, farmsteads, wheatfields and lush green forests. The confrontation will slowly escalate as more tanks are ahead to stop you.

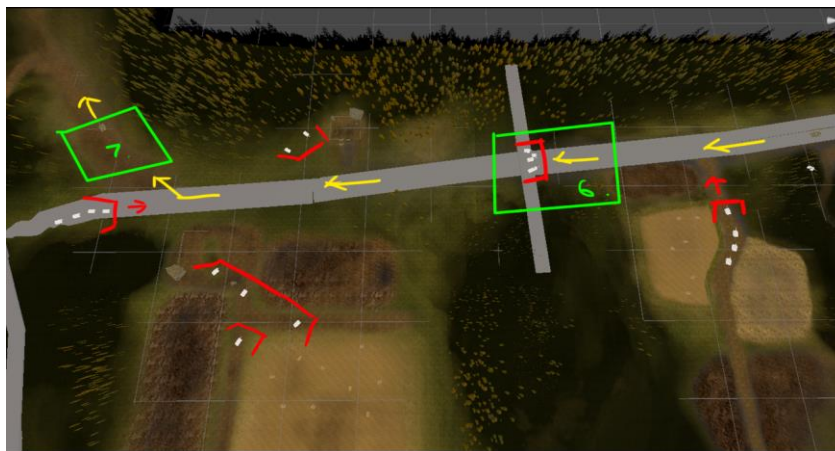
Checkpoint Two: Crossroad



[Figure 1.10: Top down view of Crossroad Section]

A fork in the road sits in a dense forest. On the left path is an ambush, on the right is mined. Both routes will influence the ending of the game. This is to let the players evaluate the dangers and its payoff.

Checkpoint Three: The Autobahn

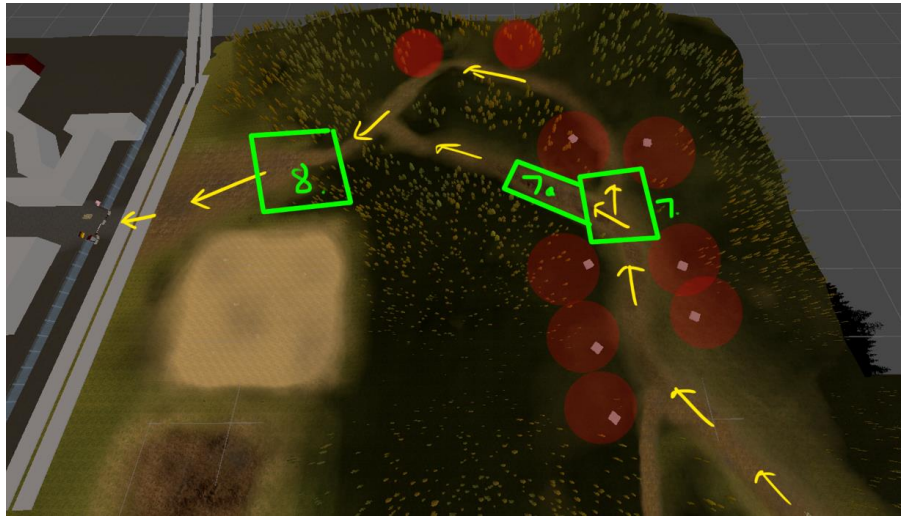


[Figure 1.11: Top down view of Autobahn Section]

The German highway where speed limits don't apply, until they are reinforced by tanks, tank traps and defences. Here the player will engage enemies along the highway while moving.

After the player destroys the defences at an overpass bridge, an animation of a wounded soldier will be seen crawling on the road. A QTE will happen for the player to decide whether to avoid or run him over. Player's reaction and judgment will be tested here

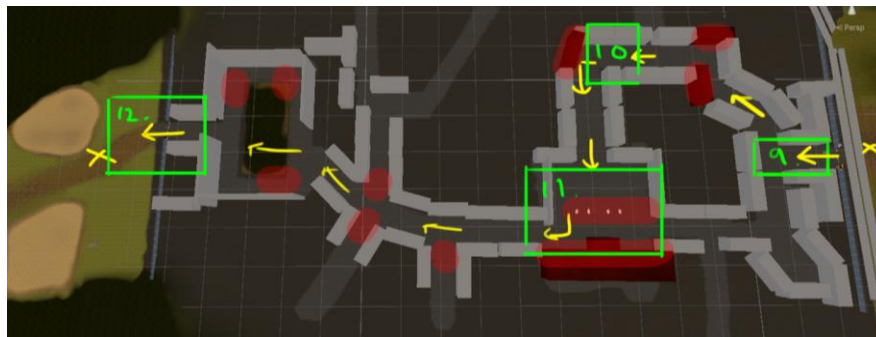
Checkpoint Four: Seelow Heights



[Figure 1.12: Top down view of Seelow Heights Section]

An increase in difficulty for this section as players must utilize their skills and reaction time. A second path choosing decision will again happen here, where the player chooses between a muddy slide or going a longer route. The narrative here will showcase the deteriorating morale and mental state of the characters.

Checkpoint Five: City



[Figure 1.13: Top down view of City Section]

Urban warfare is where tank combat is at its weakest, where anti-tank weapons are the most efficient at close quarter and blind spots to maneuver around tanks to hit weak points. The enemy will utilize buildings and debris to their advantage. Another horrific aspect of urban combat is civilian casualties. There will be civilians in the city that failed to evacuate and caught in the crossfire. The player will have no choice but to witness it happen. As the situation gets desperate, enemies

surrender en masse after failing to stop the player. The player will then have a choice, to obey the command of not taking prisoners, or refuse and risk being reprimanded. Either choice will have a harrowing consequence.

1.9.3 Nuclear Wasteland

Checkpoint Six: Fallout

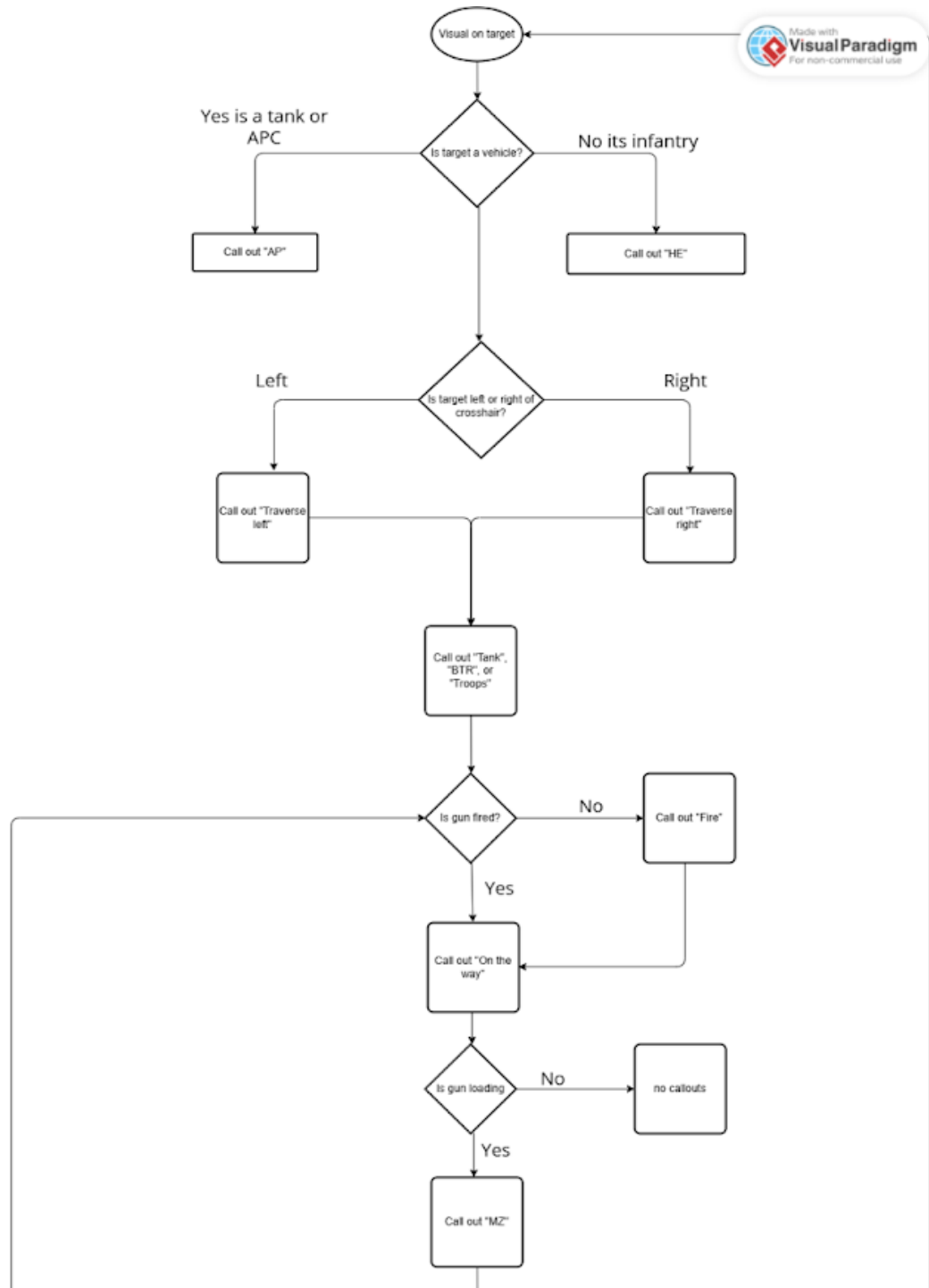


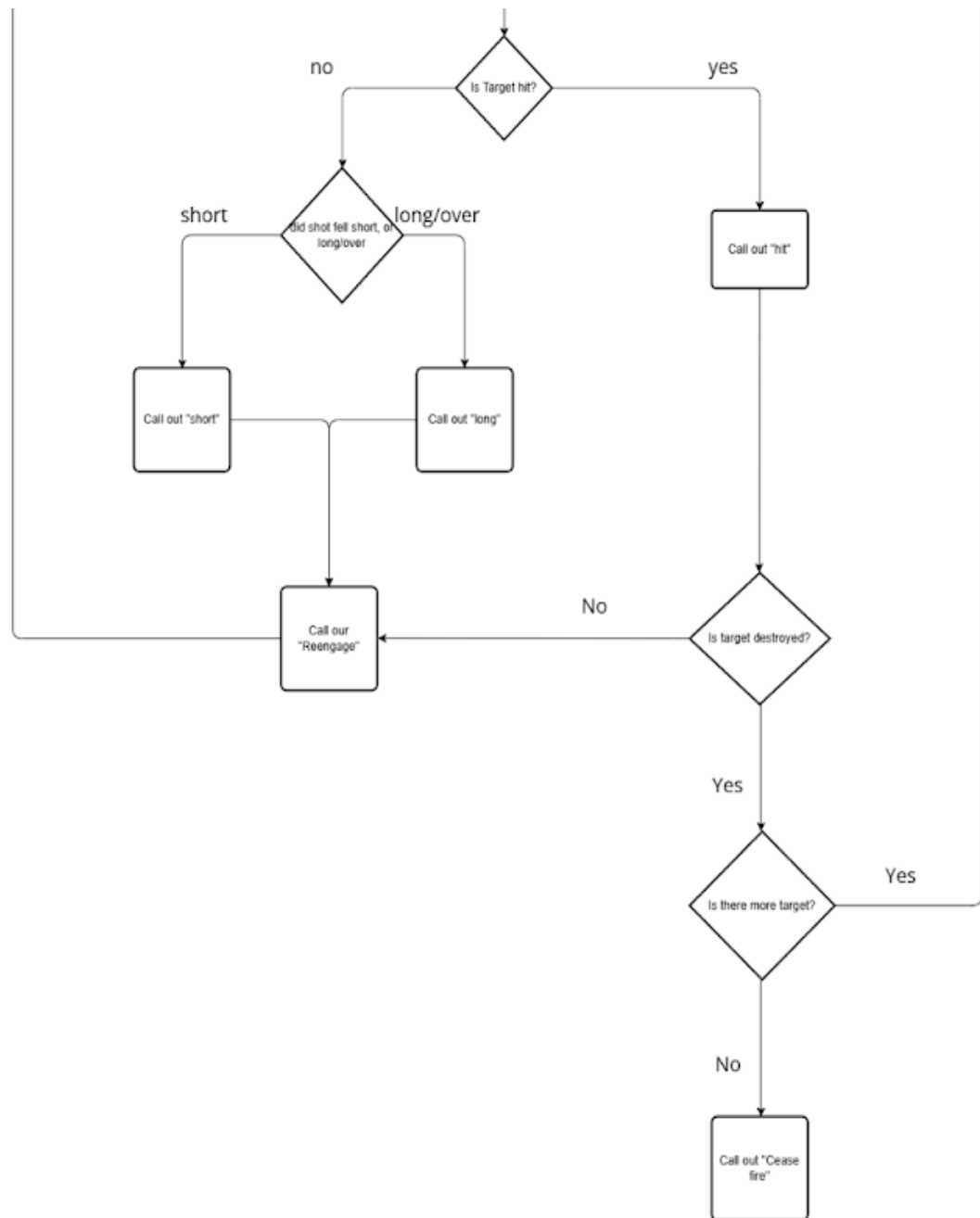
[Figure 1.14: Cinematic view of Nuclear Wasteland Section]

A nuclear bomb is dropped some distance away. The city players were in is caused by the blast zone, everything got flattened and destroyed. Previously chosen decisions will decide which ending the player would get.

1.10 Game Flow Chart

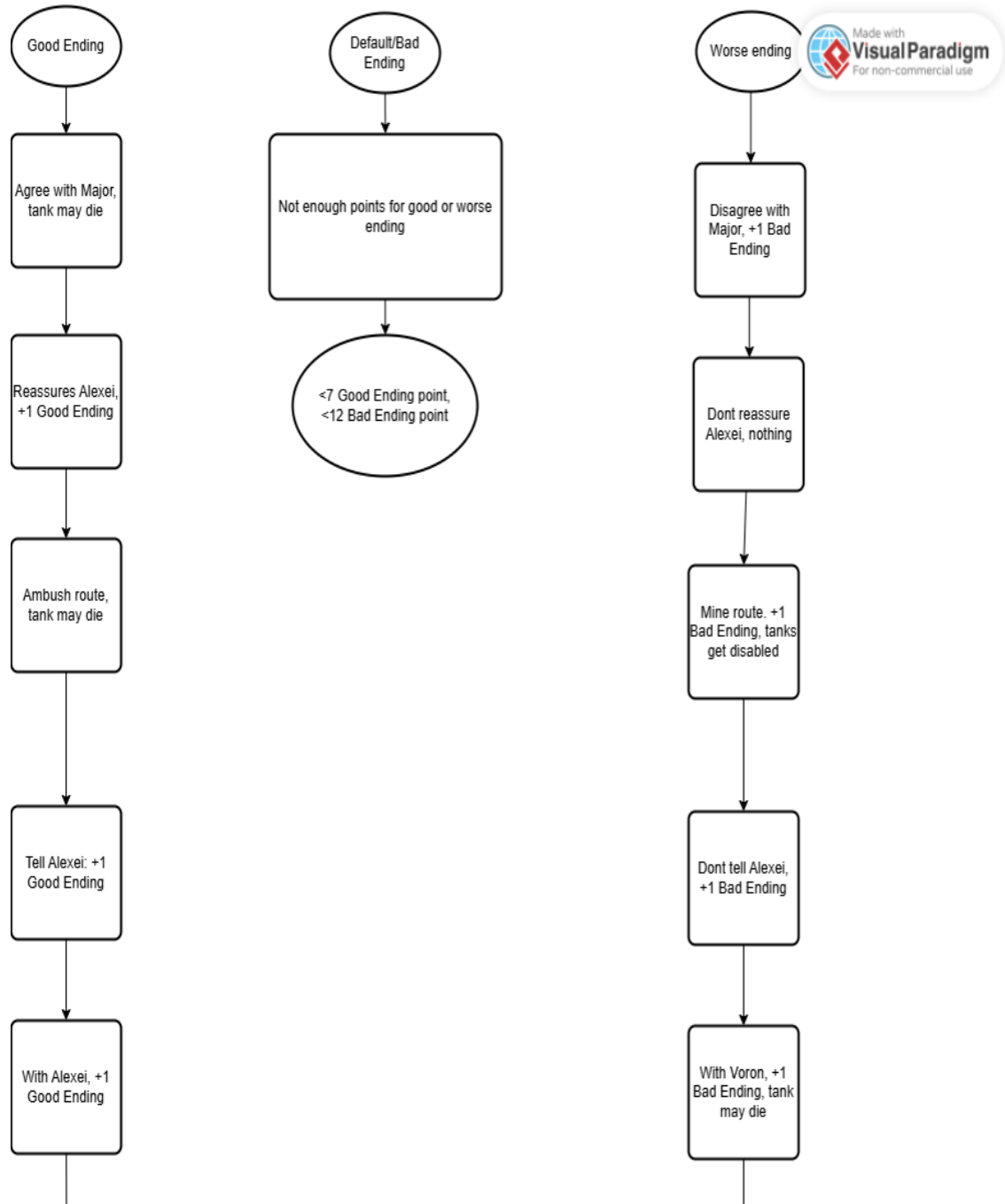
1.10.1 Combat Gameplay & Callout Flow

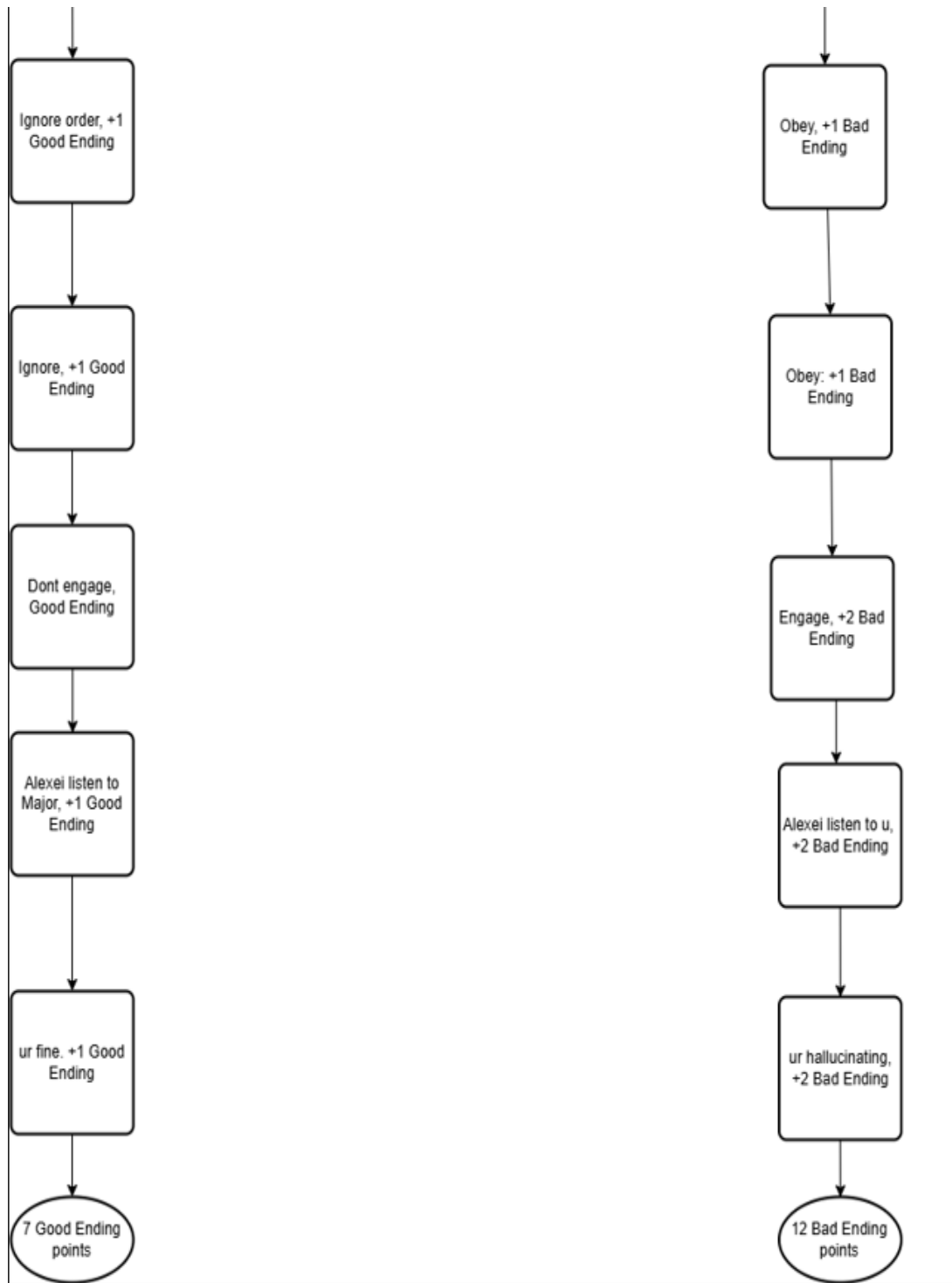




[Figure 1.15: Combat & Command Callout flowchart]

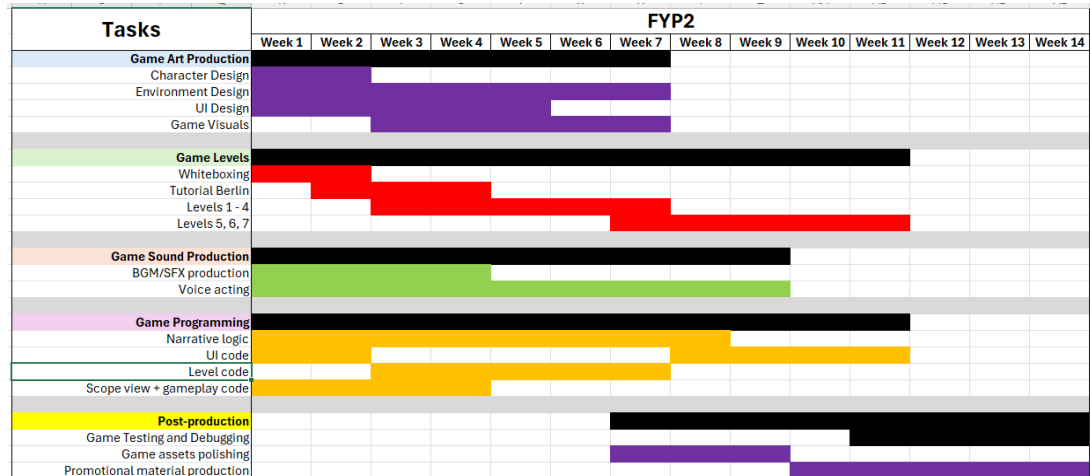
1.10.2 Dialogue choices & Ending flow





[Figure 1.16: Ending flowchart]

1.11 Gantt Chart



[Figure 1.17: Gantt Chart]

1.12 Research Introduction

The aim of the research is to examine the potential for video games to be a medium for representing psychological impacts of war. Unlike traditional media like films, news articles and documentary, video games has interactive experiences that allows players to actively engage with virtualized conflicts, decision-making and consequences. By merging aspect of a tank simulation, risk and reward mechanics of eliminating the enemy to progress, and psychological horror aspect of war, this project serves to investigate how game design can create an immersive experience that mirrors the strain, moral ambiguity, unpredictability and emotional weight of war.

1.13 Research Objective

This research explores how the themes of nuclear war, PTSD and mental strain of combat can be translated into an interactive horror experience. Hullbound presents a setting of an unique platform for psychological horror, as the game deliberately enforces limited visibility, restricted driving controls, confined spaces, and feeling of tension & fear through environmental design & enemy encounters, without the use of jumpscare. By placing players in this sort of environment, players must endure morally dubious choices, and coerced into making decisions under pressure, mirroring the ethical complexities of war.

Set during an alternate Cold War scenario, where conventional war between East and West broke out, and use of nuclear weapons are imminent, the development of “Hullbound” aims to present how video games can convey emotional, moral & psychological cost of war through game mechanics and storytelling. As the game progress, the mental state of the player as a tank gunner would continue to deteriorate, morale of the crew shatters, uncertainty increases, all would be reflected by the gameplay & narrative.

1.14 Research Question

1. How can video games portray historical trauma & war and be immersive & emotionally impactful
2. Why the confined space of a tank can enhance the aspects of psychological horror & wartime stress

1.15 Research Hypotheses

1. Interactive media can replicate the emotional intensity of war films & documentary
2. Player agency enhances the impact of moral dilemmas
3. Confined environments amplify psychological horror
4. Inescapability increases tension and emotional distress
5. Audio-visual design contributes to psychological immersion
6. Social dynamics within the crew affect player perception

Chapter 2 Background & Literature Review

2.0 Background

War has long been a controversial topic to tackle, in both historical studies and creative interpretations. Films, documentaries, and many forms of media often expose the brutality of human conflict and its consequences, while some still grasp it as some sort of necessity, as depictions of warfare are sometimes generalized and glorified for an audience.

In countries where authoritarian system reigns, individuals are stripped of

rights, freedoms restrict and agencies limited, with propaganda rotting away critical thinking and the truths hidden away, and forced into obedience under threat of punishment, deportation & imprisonment. Such oppressive environment foster psychological strains such as fear, paranoia, isolation and moral compromise

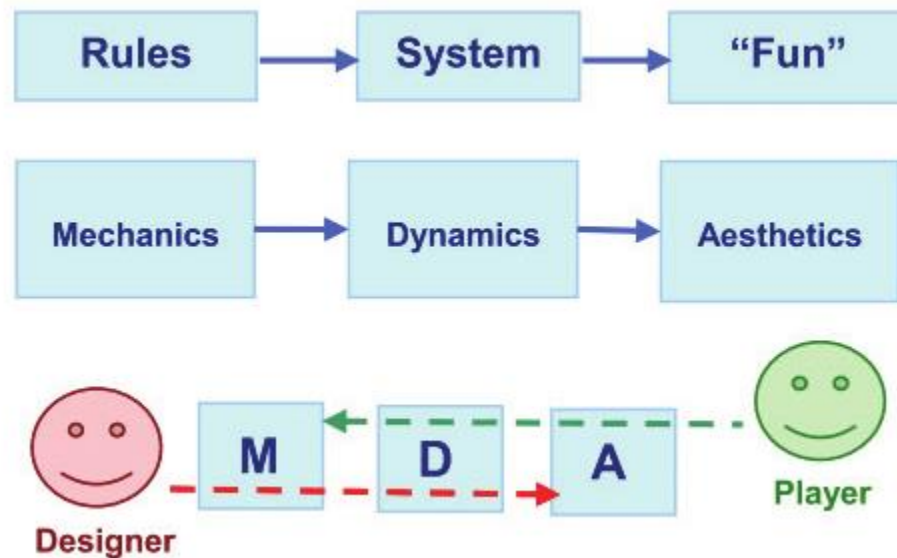
During the Cold War, the ever-looming threat of all out nuclear war between East and West amplified such conditions. Nations of both pacts further heightened tensions and strained relations by having proxy-wars in foreign nations, providing aid and firearms for countries that are split by civil war. Soldiers who fought and came home struggled with Shell Shock, or what's currently known as post-traumatic stress disorder (PTSD). Such emotional and psychological effects would affect their civilian lives for years to come. War not only threatens the health of a physical person, but also a mental one.

In the context of digital media, like video games for example, it would allow players to actively engage in a virtualized environment of war, much popularized during the early 2000s till the mid 2010s, during the height of the War on Terror. Players are participating in digitalized combat situations where their objective is to take out enemies like an actual armed combatant. This interactivity allows player for a deeper engagement, but many of the shooter games of the era focused more on the heroism, politics and power fantasy of an one man army, rather than the moral dilemmas, atrocities and consequences that war often brings.

For the case of Hullbound, bringing psychological horror into the mix would fit perfectly for this interactivity of war as it focuses on the tensions, brutality and uncertainty of a warzone. These aspect are in lines with the reality of war, where fear, paranoia, disorder, and chaos are a constant factor. The theme of taking the role a tank gunner, would be notably effective in exploring said psychological tension and moral dilemmas.

2.1 Theoretical Framework

2.1.1 MDA Framework



[Figure 2.0: MDA Framework]

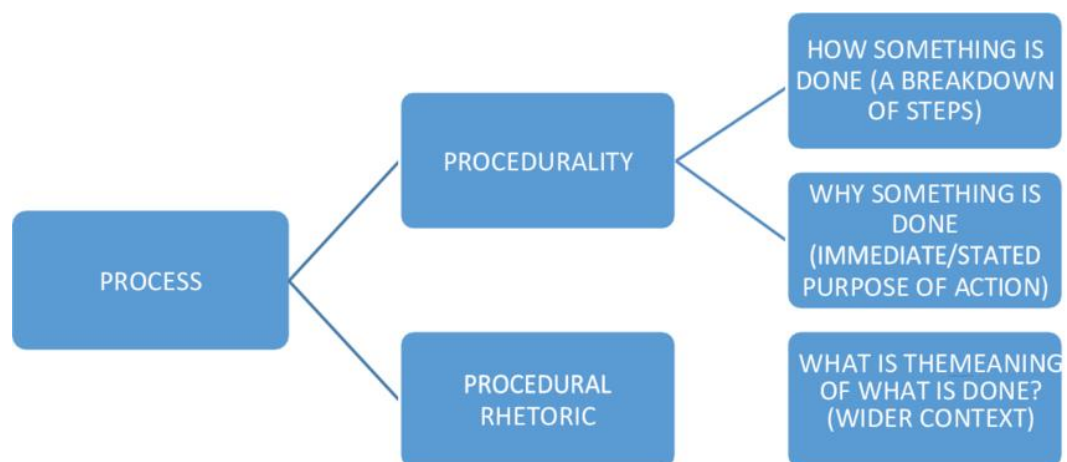
MDA stands for Mechanics, Dynamics & Aesthetics. Hunickle, LeBlanc & Zubek describes it as a game design tool that lets game designers examine and analyze games in a scientific, quantifiable way. The tool is specifically meant to let game designers, players, and researchers all share a conversation together in an effective and analytical way. Mechanics refer to the formal rules and systems of the game, dynamics describe how these systems interact with player input during gameplay, and aesthetics represent the emotional responses evoked in the player. The framework is particularly useful in analysing how specific design choices translate into intended experiential outcomes.

This framework is applied in Hullbound, by having the designed mechanics to be deliberately limited, i.e the only view to the outside environment is through the gunner sight, limited ammunition & management, crew interaction & audio. The dynamics of the game would be how the mechanics are translated to player behaviour. In real life, tanks can only fire one shot at a time, much like in our game, the player will have to reload a new shell after every shot. During the reload time, the player may feel vulnerable during those few seconds while being under fire by

the enemy. The audio and voice acting adds to the tense mood as the shell ricochet hits the tank, and the commander yelling reinforces the stress of combat. All the while the player cannot act independently, i.e cannot drive the tank as the player acts as the gunner, not driver, the movement of the tank is linearly scripted so the player could and must engage every enemy they see in order to progress. Aesthetic wise, the goal of Hullbound is to create tension, helplessness and claustrophobia for the players. The player could only engage enemy targets, load new shells, & conduct dubious moral choices under pressure, Hullbound would not have the typical war-game aesthetics that delivers power fantasy, heroism & dominance.

The aforementioned game mechanics would provide a gameplay dynamic that forces the player to conduct decision making under pressure, whether it is orders from the tank commander, or during combat engagements. The aesthetic as designed is to convey stress, impotence, claustrophobia and moral discomfort, rather than enablement of strength. By applying the MDA framework, this study shows how game design can deliberately transform conventional combat mechanics into a system that would communicate the psychological strain and ethical ambiguity of war, supporting its anti-war sentiment.

2.1.2 Procedural Rhetoric



[Figure 2.1: Procedural Rhetoric flow chart]

Devised by Ian Bogost, Procedural Rhetoric defines that interactive media like

video games can communicate ideas, arguments and debates through a rule-based system and player interaction. Conventional media like books or films that are not interactable and require passive viewing, primarily relies on visual representations or storytelling through dialogues, scenery and sound. Whereas video games possess all of it and interaction within the in-game world, in which, the viewers would become players that are actively participating within the media that encompasses a certain theme or narrative.

In *Hullbound*, war is told not just through the dialogues, but the environment, level design, gameplay, mechanics and moral dilemmas all show that war isn't just stressful, it is how to operate as a soldier within that stress. The typical action games that depict war often empowers the player as a hero, and rewards them if done well during gameplay. While in *Hullbound*, the controls for the player are restricted to just controls of the tank cannon & its mechanics. Driving of the tank is linearly scripted like in a rail-shooter. The limited visibility from just the tank sight means the player must rely on the tank commander's callout. The tank commander will call out target directions, identification and ammo type used to engage said target. Failure to adhere to the command callouts may impede progress or game over.

Furthermore, the procedural rhetoric can also reinforce the psychological horror aspect of the game & war theme. The limitations of control, military hierarchy, immersive auditory design, grim atmosphere, narrative & moral dilemmas require players to operate under pressure, with incomplete information, thereby reflecting the constrained and stressful conditions of armoured combat. With it, this design would communicate the depiction of war as traumatic and terrifying rather than entertainment. The player is not a passive observer of war, or as an one-man army like most shooter games, but merely a cog in the war machine.

While procedural rhetoric has been critiqued for overlooking player interpretation, *Hullbound* would integrate narrative, atmospheric and mechanics to ensure the true meaning of war is reinforced across multiple layers of designs. As

such, the gameplay of Hullbound would present war through the narrowing lens of a tank, in a psychologically oppressive and morally complex confinement rather than empowerment.

2.1.3 Immersion, Presence & Agency

Immersion and presence are key factors in creating and comprehending player experience in a game. Immersion is defined as an individual being fully involved, engaged and concentrated during an interactivity, losing awareness of their physical surroundings & time. Agency refers to the player's autonomy or control in the game, their capability in executing certain actions within the game world bring an effect to outcomes. Conceived by Cains, Cox & Nordin, these concepts defines how game design can sculpt not only player engagement, but also emotional fervor and psychological effects.

In Hullbound, immersion is delivered through the buildup to combat. It starts from a calm state of moving to the staging area where enemies are expected. Anticipation is brought up when voice lines alert the player of tanks in the area. Finally combat begins when players or the enemy open fire. During combat, the player must use the gun sight to view and engage the enemy. The constant tasks of targeting, aiming, firing and reloading allows little downtime for the player. The combination of being under fire, authentic & dynamic audio design reinforce the tension and immersion. Until all enemy targets are eliminated and confirmed by the tank commander, the player may enjoy a quick break from the tension.

The presence that player may feel is the claustrophobic feeling of being trapped in the tank. With only a first-person gunner perspective that only views into the gun compartment & driver compartment, and a narrow viewing angle through the gun sight with no other external camera view, it gives the player the feeling of confinement rather than control.

Finally, the player agency in Hullbound would be controlled, as per design to create psychological horror and authentic war scenes without relying on

jumpscare or overdoing on power fantasy. While the player is given the responsibility to destroy enemy targets, they are not fully in control. In game, they are of the lower rank in the militaristic hierarchy, dependent on the commander's instructions & unable to pilot the tank's movement. This synthesis of high presence with controlled agency would formulate feelings of tension, vulnerability and impotence, even as controlling the guns of a tank. In which, aligns with the precepts of psychological horror design. Therefore, Hullbound shifts the perspective of a tank being a symbol of offensive power into a perilous role that encompasses claustrophobic spaces and being physically distressing, endorsing the theme of portraying war as mentally and subjectively oppressive and horrific.

2.2 Review of Key Studies

War is a controversial and complex topic that is difficult to portray precisely in any forms of media. Through popular media, war is often presented through combat engagement through the perspectives of frontline soldiers, while many films had done so with the utmost respect to history, the figures represented and the violence of man, war also comprises an amount of factors. Such as humanitarian crisis, suffering of civilians, psychological trauma, ethical uncertainty, long term cultural & environmental detriments. Due to the amount of complexities, portrayal of warfare are often selective, highlighting certain aspects and experience while overlooking others. In video games however, this issue is more conspicuous, as player would directly engage in a virtual space of combat engagement, particularly focused on violence and gunplay, while lacking the aforementioned feeling and elements of war. As such, examining how war is represented in games is essential for understanding how these experiences are shaped, interpreted, and communicated.

Recent research that highlights video games as a form of historical representation & education by Camarda (2024), and Pötzsch & Hammond (2016), discussed about how video games can operate as an experiential system for engaging with history & past conflict, and accurately constructing said representation of history can be

correctly understood.

2.2.1 Game as Historical & Trauma Experience

Camarda argues that players become active participants in the event depiction in game, rather than passive spectators. This would allow players to experience historical events through interaction rather than observation. By combining game mechanics & narrative into “ludonarratives”, games can facilitate transformative learning and emotional engagement, offering a multi-perspective understanding of the past. This perspective is relevant to the present study, as the tank game situates the player within a confined military role, requiring them to engage with the operational and ethical dimensions of war firsthand rather than through detached representation.

Games can function as a “heuristic tools” for doing history, as it allows players to engage in the perspective that people from the past had faced, their trauma & story can be told in an interactive way and its meaning can be delivered through ludonarratives. It can be an effective tool to not just show history through pages of books, but let the player experience and interpret it in their own way. In the case for *Hullbound*, the game is set in an alternate Cold War scenario where World War III happens and the player plays as the gunner of the tank that actively participates in frontline combat, decision making and witnessing destruction that is heavily inspired by real historical events & description of veterans.

Building on these perspectives, the present study adopts a design approach that both leverages and acknowledges the limitations of game-based historical representation. By placing the player as the role of a tank gunner, being confined to quarters and no option to exit the tank, the game offers an immersive and force participation of tank warfare. However, the experience is deliberately designed to be restricted through constrained visibility, limited agency, and reliance on the tank commander callouts for better battlefield awareness. These design choices are made to reflect the nature of real combat experience, that it is chaotic, controlled by instincts and barely time to think. As such, understanding history of war &

experiences by people who live through those events is crucial in shaping those perspectives that would be represented in video games.

2.2.2 War, Militarism & Representation

Pötzsch and Hammond argue that many shooter games and war games constructs selective version of history, that prioritise familiar imagery & tone, and simplified narratives while omitting the complexity of real conflict. This highlights the interpretive nature of game design, where historical meaning is constructed by gameplay & game mechanics that would become the perspective presented to the player. In many cases, mainstream shooter games that depicts modern and historical periods of war emphasizes on combat spectacles and player empowerment, as players are the protagonist in their story and victory is assured. This narrows down the real complexity of warfare in order to deliver a game that focuses on action by super soldiers rather than the struggles that many experience in conflicts. In contrast, the present study adopts a different representational approach by focusing on restricted perception, dependency, and ethical tension, thereby offering an alternative perspective on war that foregrounds psychological and moral experience.

Hullbound shows a different representation of war that focuses on the restriction, confusion and moral pressure of a tank crew, rather than the heroic spectacles, power fantasy and simplification of war. Understanding of how a tank works, how tank crew communicated, the atmosphere of armoured combat and history of the Cold War is heavily researched in order to depict Hullbound as a representation of a “Cold War gone hot” scenario as plausible as possible.

Furthermore, this study argues that limitation, rather than completeness, may offer a more effective approach to representing war in games. For instance, war games attempt to simulate a wide battlefield awareness and player control, players are told their locations, number of enemies, ammunition count & intel that does not represent the true uncertain nature of real combat. By contrast, restricting player control, visibility, and information could accurately reflect the real lived experience

of individual in warzones, thereby enhancing both immersion & thematic authenticity.

2.2.3 Conclusion

Both these studies suggest that video games can function as a tool for living through history and as a framework to represent how the past is understood. While many games do put forth an interactive and immersive historical setting, but also put in place design choices and mechanics that would be selectively framed. This dual nature of game design highlights the importance of critically examining how war & history should be represented in games. A game that is built upon historical research would aimed to move beyond conventional representation of war as heroic and empowering, and instead present itself as a very real and ethical struggle.

2.3 Research Gaps

Much research has been done on horror game mechanics and war representation separately, but there is limited work on integrating these two perspectives into a single game design framework. Existing war games often emphasize on player empowerment and simplified narratives, overlooking the psychological and ethical complexities of war, while horror games focus on the vulnerability and lack of control the player possesses, relying on jump-scares to maximize the fear factor. The distinctive gap of both these genres can be explored upon their similarity of constrained agency, immersive design and moral conflict to represent war as the perfect psychological horror experience.

The design of Hullbound would address these gaps, a tank-based gameplay experience that emphasizes confinement, restrictions, tensions and moral conflicts, offering an alternative framework for representing war and psychological horror.

2.3.1 War as a Playable Spectacle



[Figure 2.2: Cosmetic option in Battlefield 2042]

Many contemporary & conventional action games that depict war prioritise combat as a form of entertainment, emphasising player mastery on gunplay, fast-paced movement, competitiveness and enticing engagement through action-oriented mechanics. While such approaches enhance playability, they often simplify the complexities of warfare by selectively focusing on spectacle control rather than psychological strain and ethical conflict.

Although more and more games are providing more immersive and realistic gunplay mechanics, such as *Escape from Tarkov*, *ARMA* and *Ready or Not*, the focus is still very much on gun mechanics rather than the psychological aspect of combat. This creates an illusion that mastery of combat represents the nature of real combat experience, which is just not the case. The inherent chaotic, uncertainty and ethically fraught nature of war would be obscured by mechanics as such.



[Figure 2.3: Screenshot of This War of Mine]

Backed by Pötzsch & Hammond study regarding the relations between war & games, video games can function as selective representations of history shaped by design and gameplay conventions. Their research shows that many games emphasize familiar and recognizable symbols of warfare usually seen from news or movies, namely combat scenarios, while omitting the destabilizing and dehumanizing aspect of real conflict. By framing war through systems that reward efficiency, control, and success, these games contribute to an experience that prioritises engagement over authenticity.

Hullbound removes those empowerments by adding limitation, dependency and horror that challenges the dominant design trend of most action war games that prioritise entertainment over psychological realism. It addresses the limitation by re-framing combat not as a source of empowerment, but as a constrained and psychologically demanding experience.

2.3.2 Confinements in Horror Games



[Figure 2.3: Screenshot of Phasmaphobia]

Most horror games have spatial design that is tight, confined and limits perception & mobility, but most of their environments focus on buildings and open environments. Rarely had a horror game based its confined environments on vehicles, let alone a tank.

Tanks are unique as it is an enclosed & cramped space with highly flammable, explosive & hazardous items are stored. The crew will have to be on station for hours, or even days without sleep or relief. The crew must operate each and every system & mechanics the tank possesses, and perception is restricted through the views of periscopes, gun sights & commander cupola. Being one of the larger targets on a battlefield, tanks are highly exposed to external threats, from gunfire, to anti-tank fire, artillery fire and currently, kamikaze drones. When tanks were first created, it served as an armoured shield for infantry to advance, a tool to break the stalemate of the frontlines. However, as a weapon of war, the interior of a tank provides little comfort.



[Figure 2.4: Interior view of a T-72 tank]

The form of a tank as a physical enclosure but with continuous movement and external threats creates a unique form of tension that differs from conventional horror settings. Hullbound highlights this form as an underexplored area in which spatial confinement and system-based interaction can be used to intensify psychological discomfort, transforming the tank as a symbol of power into a site of vulnerability & psychological tension.

2.3.3 War Psychology in Game Design

War psychology stretches beyond physical combat & survival on the frontlines while dealing with authority, camaraderie, responsibility & moral judgement. One key factor is moral injury, defined as an individual partakes or witness actions that disputes with their personal and ethical beliefs, leading to feelings of guilt, shame and psychological distress. In military terms, this is often linked to configurations of obedience and authoritarianism, where individuals perform under a hierarchical command system that limits personal autonomy.

Therefore, responsibility of actions on the field becomes equivocal, as the individual is necessitated to follow orders while bearing the consequences for said orders & actions taken. This rather adverse dynamics produces a form of internal

conflict within the individual which they would seek out restoration or reconciliation that reflects their once believed moral and human values. This often happened in historical context, where individual soldiers, commanders and collaborators are tried and punished for crimes against humanity, while pleading for blind obedience or subservience. However in game design, to represent this interaction would entail much more than just narrative depiction, as it would also involve creating a game mechanic or system in which players would be both responsible for their actions while compelled by a hierarchical authority. Thus, permitting psychological tension to emerge from the gameplay.



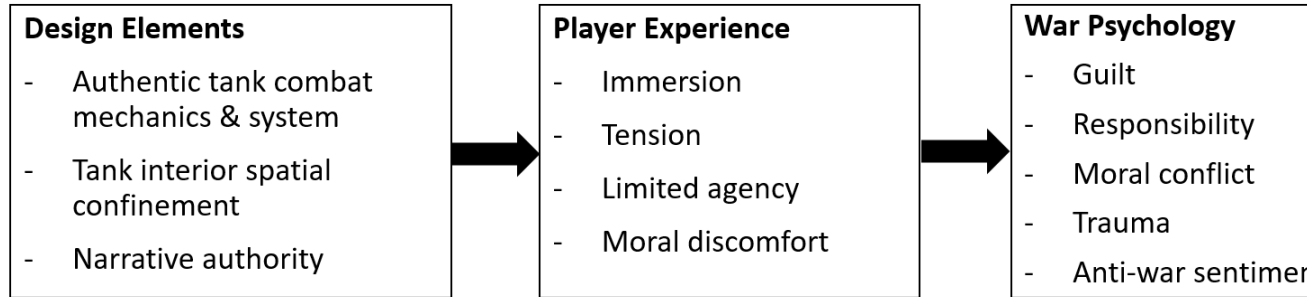
[Figure 2.5: Cutscene from Spec Ops: The Line]

Some existing examples of portraying war psychology in video games, tend to lean on narrative-driven experiences or environmental & atmospheric designs. For instance, in Spec Ops:The Line conveys psychological impact through scripted narrative events that coerce players to perform actions that they would otherwise be reluctant to do. This intriguingly caused the game to face backlash and criticism by players, stating the games ludonarrative dissonance, lack of player agency and pretentious tone insinuate that the player is the villain in the story, in a market where many action shooters have the player as the protagonist or hero in the story.

Hullbound highlights the need for a more integrated approach that combines mechanical systems, spatial restriction, and ethical tension to represent war as a sustained psychological experience. The present study addresses this by designing

a tank-based gameplay system in which confinement, limited agency, and operational responsibility interact continuously, producing ongoing tension rather than isolated moments of impact.

2.4 Conceptual Framework



[Figure 2.6: Conceptual Framework of the study]

The conceptual framework of this study outlines the relationship between game design elements, player experience, and the representation of war psychology. It illustrates how design choices can be used to convey complex psychological and ethical aspects of warfare through interactive gameplay.

2.4.1 Design Elements

Game design elements represent the foundational input of the study, encompassing the mechanics, spatial configuration, and narrative structures that define player interaction.

The main mechanic of Hullbound is the tank combat system that mimics real life operation procedure. Namely, the shooting, reloading, ammo selection and limited visibility would regulate player actions and decision-making under pressure. Acting as the gunner, the player's responsibility is to engage and destroy enemy targets, in other words, they will have to kill in order to progress.

Tanks aren't known to be spacious or comfortable to be in. Inside the tank is hazardous and cramped, with explosives, flammable & hard objects all around. The only view to the outside world is through the gun sight. This restricted

movement & limited perception enforces claustrophobia for the player while reducing external awareness.

Tank gunners possess a lower rank than of the commander, being around the rank of sergeant or lieutenant. As such, the player would have to follow the orders of the tank commander, that being Major Voron. The militaristic hierarchy would be conveyed through verbal commands and dialogues from the Major. The story context provides a plausible reason for why the player is in the situation and how this ties to authoritarianism, propaganda and moral framing. Other than engaging enemy targets, scripted events will happen throughout the gameplay, some of which would be moral decisions that revolve around obedience towards authority or morally justifiable actions. The scripted events portray atrocities and civilian casualties that often happen in war.

2.4.2 Player Experience

Player experience functions as the mediating component within the conceptual framework, linking design elements to psychological interpretation. These experiential states are not incidental, but are deliberately shaped by design choices, enabling the player to engage with the game on a psychological and emotional level.

With interaction in the interior of the tank, its system & environment, players experience immersion, tension and a strong presence within the confined space of the tank. There is no option to exit the tank or see the outside world freely, with the only external perception being restricted to the gun sight.

The combination of continuous operational demands and restricted control generates stress and limited agency. Voice acting would shift in tone based on gameplay conditions. Dynamic audio cues such as verbal orders from the commander would go from calm to panic during combat, portraying the intensity of combat and fear of death, amplifies the player's sense of stress, immersion, and situational pressure while escalating tension and the psychological state of the crew.

Narrative context introduces moral discomfort and ethical uncertainty, as previously mentioned, scripted events portraying war crimes and civilian deaths that often happens in war but rarely is the main spectacle for the media. The focus on these harrowing events is to bring about the uncertainty, ethical unease and responsibility that the player would feel during those events.

2.4.3 War Psychology

War psychology represents the outcome of the framework, reflecting the player's interpretation of warfare as shaped by their experience. Through sustained exposure to constrained interaction, moral uncertainty, and hierarchical pressure, players may develop an understanding of war characterised by guilt, responsibility, and ethical conflict. The player must perform said actions so that the consequences may feel more personal, therefore, taking responsibility and manifesting guilt over their actions.

Rather than reinforcing notions of control or empowerment, the game presents war as a psychologically oppressive and morally ambiguous experience. Killing the enemy will happen during combat as it is the duty of a soldier, and as a tank gunner. For the average individual that never experiences warfare, it may seem as a clear black & white decision, killing is bad. But in reality, combat and war often bring about ethical ambiguity. As a result, the overwhelming stress of psychological trauma, restrictiveness and oppression sets in, aligning with the research objective of investigating how video games can convey the heavy tone and ethical complexities of war.

Chapter 3: Research Methodology

3.0 Research Design

The study was done via a mixed-method research design, by combining both quantitative and qualitative approaches to investigate player perceptions on psychological horror, historical trauma, immersion and war representation in video games. The objective of the study is to understand how player immersion and

experience can be affected by game mechanics, narrative, psychological impact, moral ambiguity portrayed by war-themed video games.

3.1 Data Analysis Method

Quantitative data was done via Google Form questionnaire, by using structured Likert-scale and multiple-choices questions to identify response patterns. While qualitative data was collected through open-ended questions to obtain deeper insights into player opinion and understanding.

The combination of both qualitative and quantitative methods allowed the study to examine both objective and subjective experiences that the participants face during playing video games.

3.2 Sampling Technique

The majority of the participants are active gamers that frequently play video games on a daily or weekly basis. By targeting individuals with gaming experiences and interest, the study aimed to obtain responses that are informed in regarding player agency, immersion, player experience, psychological tension, emotional impact and historical representations in video games.

3.3 Ethical Considerations

Ethical considerations and measures were taken during the research process, where the survey is a voluntary process, and participants were informed that the study is done solely for academic purposes. No personal information was collected and all responses remain confidential.

Chapter 4: Data Analysis and Results

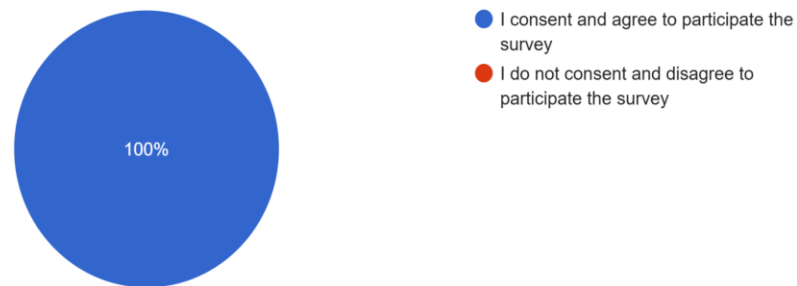
4.0 Questionnaire

The quantitative method was done via Google Form questionnaire, as it is convenient and simple to use. The questionnaire was distributed via Discord, Whatsapp and Instagram. Questions presented in the questionnaire provided

significant information to take note of the participant's demographics and responses. Our method of collection uses a five-point Likert-scale and multiple choice answers that displayed a range of responses to accurately convey the feeling and the thoughts of the surveyee. Many of the data collected is represented by a pie chart, while a few would be in a bar chart.

A total of 24 participants consented and agree to participate in the survey on the study for this project titled "Horrors of War: Historical Trauma in Game Design"

I have read and understood the information provided. I voluntarily agree to participate in this survey, and I understand that my responses will remain anonymous.
24 responses



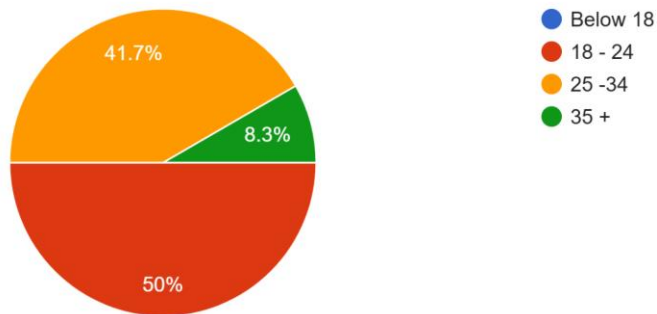
[Figure 3.0: Consent response to the survey]

4.0.1 Demographics

The first section of the questionnaire is about collecting needed data of participants' background that would be critical for the study. Questions mainly about their experience in playing video games and knowledge in historical events or conflict being featured in video games.

1. Age Group

24 responses

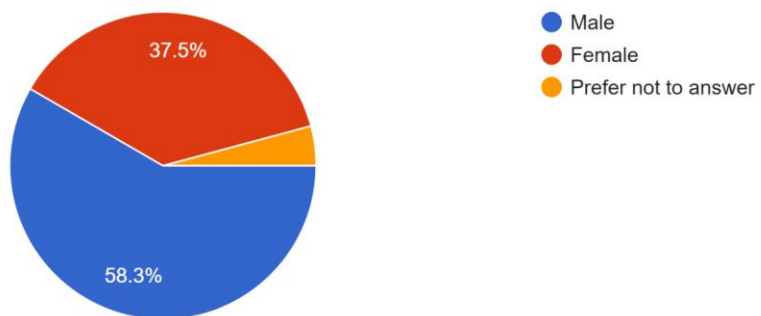


[Figure 4.0: Age group of participants]

For the age group of the participants, half of the participants are in the age group of 18-14 years old, standing at 52.2% or 12 individuals, while 39.1% or 9 of the participants are in the age group of 25-34 years old, and a small minority of 2 people are in the age of 35+ stands at 8.7%

2. Gender

24 responses

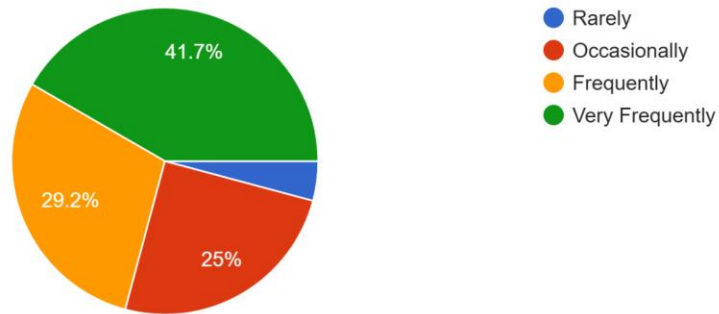


[Figure 4.1: Gender group of participants]

For the gender demographic of the respondents, a vast majority of the participants are male, standing at 60.9% or 14 male participants, while 34.8% are female, standing at 9 participants, while a single participant preferred not to state their gender.

3. How often do you play video games?

24 responses

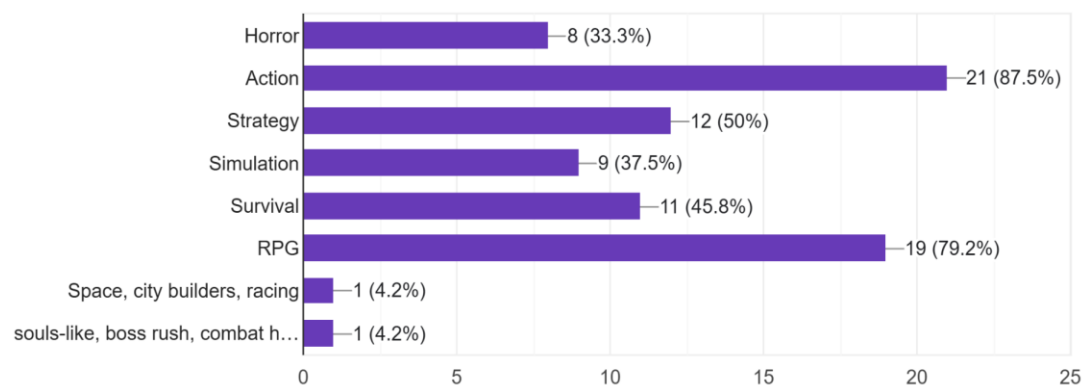


[Figure 4.2: Gaming frequency of participants]

With 10 participants or 41.7% play video games very frequently, most likely for hours everyday. 7 participants or 29.2 % frequently play video games, while 6 participants occasionally play video games, and 1 participant rarely plays video games. Based on the figures stated, a good majority of the participants are active gamers and would provide critical feedbacks and evaluation for the following questionnaires.

4. Which genre do you commonly play?

24 responses



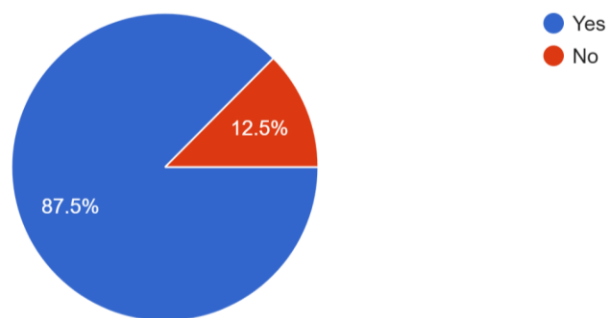
[Figure 4.3: Commonly played genres of participants]

The following question is a multiple choice question that asks the commonly

played video game genre that participant plays. Out of the 24 participants, 21 of them play action games, standing at 87.5% on the bar chart. The second highest genre to be commonly played is RPG, 19 of the participants enjoy the RPG genre, standing at 79.2% on the bar chart. The third highest genre commonly played by the participants is strategy games, standing at 50% on the bar chart with 12 participants enjoying the genre. The lowest percentage for commonly played genre that is stated in the questionnaire is horror genre, with 8 participants or 33.3% play the genre. Participants that answered in the “other” option, one stated that they enjoy space, city builders and racing, while the other enjoy souls-like, boss rush and combat heavy genres.

5. Have you played games based on historical conflicts or wars?

24 responses



[Figure 4.4: Games based on historical conflicts played by participants]

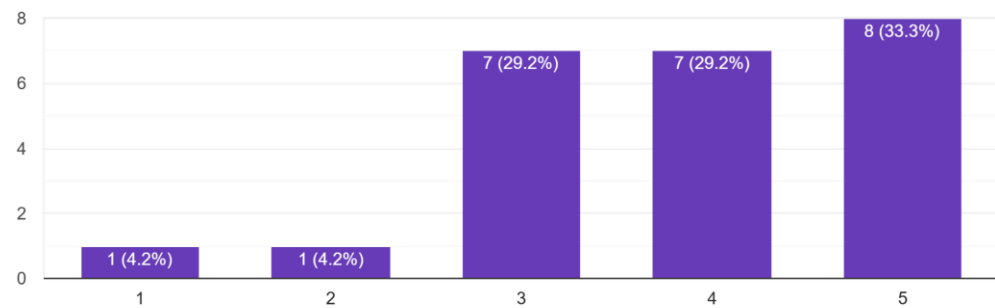
The final question regarding demographics asked the participants on their experience in games based on historical conflicts or wars. A vast majority answered yes, with 87.5% or 21 of them having played video games that featured historical events or conflicts, while the latter 3 or 12.5% had yet to experience games with historical conflicts. Regardless, the response indicates that they are players that are familiar or have knowledge of historical events being portrayed in video games.

4.0.2 Historical Conflict & War Representation

The second section of the questionnaires would be about the participant’s knowledge about portrayal of historical events and conflict in video games and their emotional, moral and ethical impact.

1. Do you believe that video games can effectively portray the psychological impact of war?

24 responses

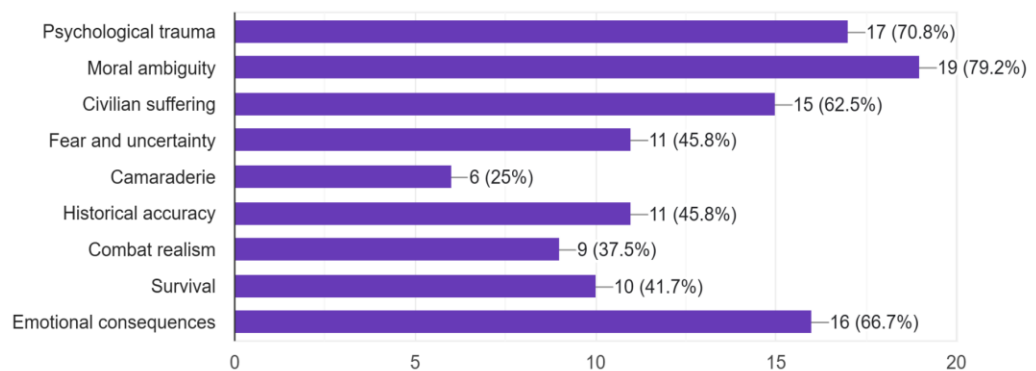


[Figure 4.5: Effectiveness of video game to portray psychological impact of war]

The question asked about the opinion of the participants regarding video games being able to effectively portray the psychological impact of war. The answers use the Likert-scale, with 1 being strongly disagree, 3 being neutral, and 5 being strongly agreeing. Majority of the participants lean to 3 and above, with 7 participants neutral to the opinion, 7 participants agree and 8 participants strongly agree that video games can effectively portray the psychological impact of war. In summary, 15 of the participants agree that video games can act as an interactive medium to convey the psychological impact of warfare.

2. Which aspect of war are most important to represent in games?

24 responses



[Figure 4.6: Most important aspect of war to be represented in games]

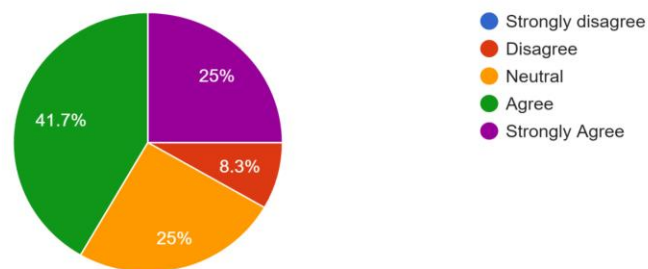
Participants are asked of the most important aspects of war to be represented in video games. The data is collected via multiple choice answers. A majority of which agree that moral ambiguity is the most important to be portrayed in games,

standing at 19 participants or 79.2% in the chart. The second highest aspect that the participants agree is psychological trauma, standing at 70.8% or 17 participants. The third highest being emotional consequences, standing at 16 participants agreeing or 66.7% in the chart. The lowest percentage is camaraderie, standing only at 6 participants or 25%.

Overall, the participants seemingly agree that some of the most important aspects of war to be represented in the game are not action oriented, but rather the rarely shown perspectives of civilians, humanitarian crises and the traumatic impact that follows, hence the highest answers being moral ambiguity, psychological trauma and emotional consequences.

3. Do you agree that most war games focus too heavily on combat spectacles rather than the traumatic consequences of war?

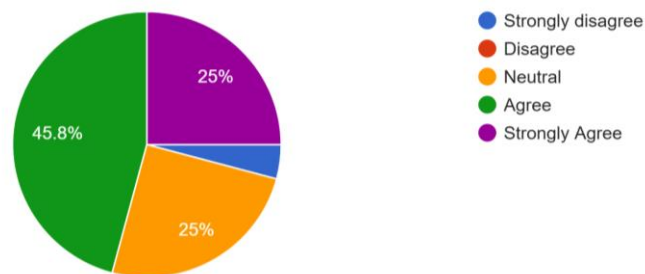
24 responses



[Figure 4.7: War games focused heavily on combat spectacles rather than traumatic consequences of war]

Participants were asked if war-themed video games today are too focused on combat spectacles rather than the traumatic consequences of war. 25% or 6 participants strongly agree, 41.7% or 10 participants agree that many war games were focusing heavily on combat spectacles. Another 6 participants or 25 % are neutral, while 2 participants or 8.3% disagree with the statement. Overall, 16 participants agreed that most war games are action-oriented that portrays war as solely a one-man army combat fantasy, while war is more complicated than it seems.

4. Do you agree that having historical authenticity in creating immersion is important in war-themed video games?
24 responses



[Figure 4.8: Historical authenticity adds immersion to war games]

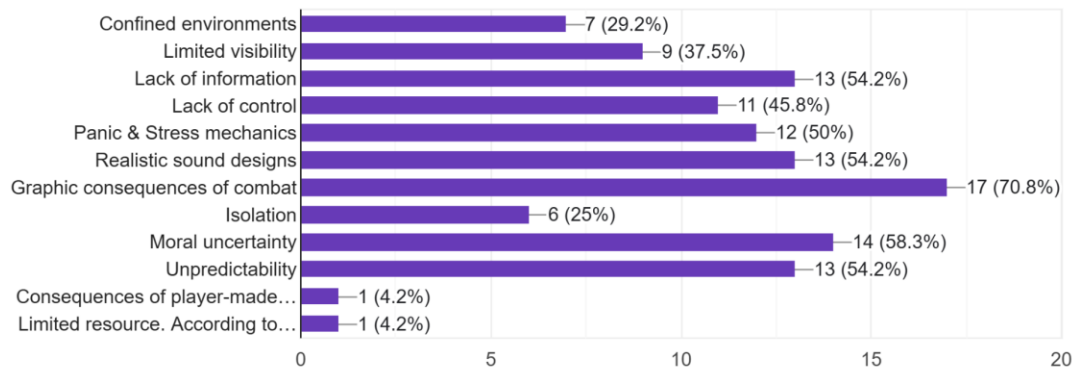
The question is asked of the participant regarding having historical authenticity is needed in creating immersion in war-themed video games. 6 participants or 25% of them strongly agree, 11 people or 45.8% of the participants agree that having historical authenticity is important for immersion. Another 6 participants or 25% are neutral to the statement while 1 participant strongly disagrees. In summary, a total of 17 participants agree that portraying conflict and historical events as authentically and accurately as possible is important to be immersive in war-themed video games.

4.0.3 Psychological Horror & Immersion

The third section of the questionnaire is about psychological horror and immersion in video games. In connection to the study and our game “Hullbound”, this section is critical to the game project as it would directly affect player experience and produce valuable feedback.

1. Which elements do you think contributes most to psychological tension in war games?

24 responses



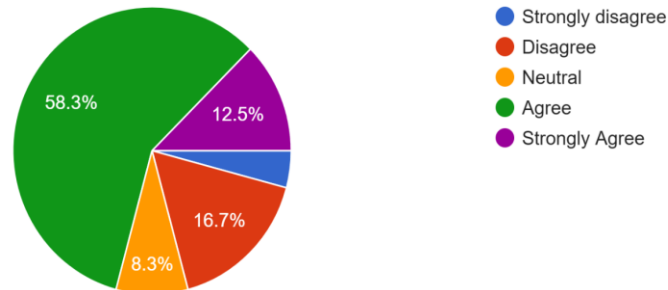
[Figure 4.9: Elements of psychological tension in war games]

The first question asked in this section is which elements would contribute the most to psychological tension in war games. The question is presented as a multiple-choice answer. The top response was portrayal of graphic consequences of combat in video games, being at 70.8% on the chart, with 17 participants agreed upon. The second highest response is moral uncertainty, with 14 responses or 58.3% on the chart. The third highest response is at 13 participants or 54.2%, with three different answers at the same percentages, those being lack of information, realistic sound design and unpredictability. Two single responses from the “other” option states that other elements would include “consequences of player-made actions in the game”, and “limited resources, according to genre, stealth kill, trapping and in general unseen preferable. If it’s massive numbers vs massive numbers, then consequences of losing too many troops”.

In summary, elements that would convey psychological tensions the most in war games would be graphical consequences of combat. Viscera and brutality of combat had been portrayed more accurately and violently in most modern war games, with the better graphic settings and engine to display gory scenes and particles in detailed manner.

2. Do you think that limiting player controls/agency would increase feeling of helplessness or tension?

24 responses



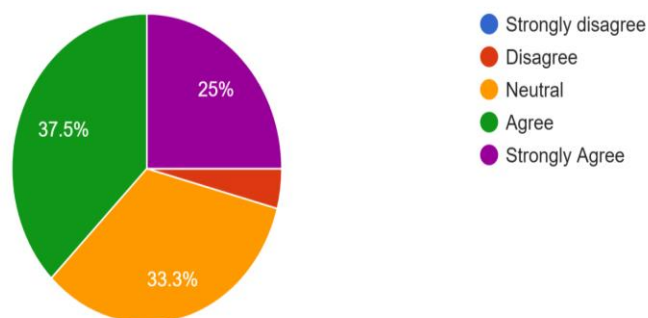
[Figure 4.10: Controlled player agency in war games]

Participants are asked if limiting player controls or agency would increase feelings of helplessness or tensions, in which many horror games tend to do. 14 participants or 58.3% agree that it would increase helplessness or tension, 3 participants or 12.5% strongly agree, while 4 participants or 16.7% disagree, and 1 participant strongly disagrees. The 2 remaining participants are neutral on the statement.

While the majority of participants would agree that a controlled player agency could enhance feelings of helplessness and tension in games, it is interesting to note that 5 people disagree and would rather keep the player agency in tense situation in order to become less frustrated by the game mechanics.

3. How immersive do you find graphic consequences of combat (injury, amputation, internal damages) when being portrayed in war-themed video games?

24 responses



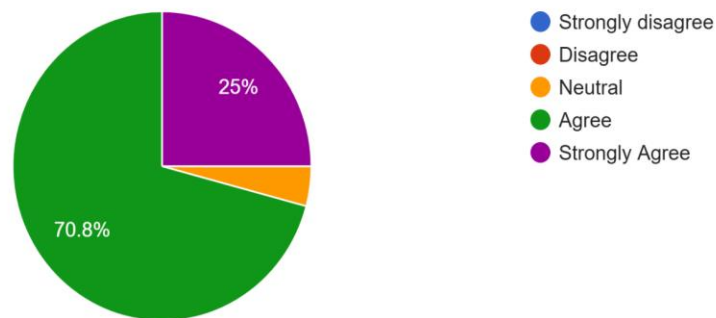
[Figure 4.10: Graphical consequences of combat in war games]

In relation to the first question, this question asked would portrayal of graphic consequences of combat, being injuries, amputation and internal damages, be immersive in war-themed video games. 9 participants or 37.5% agree, 6 participants or 25% strongly agree with the statement, while 33.3% of participants or 8 individuals are neutral to the statement, with one participant responding disagree.

This surmises that the majority of participants agree that video games should portray accurate and realistic graphic consequences of war in order to enhance immersions in video games. As stated before, with modern graphics in most video games nowadays displayment of detailed gore and graphical viscera is doable.

4. Would visualizing civilian/non-combatant perspective in war-themed games enhance psychological & emotional impact?

24 responses



[Figure 4.11: Civilian/non-combatants perspective in war games enhanced emotional impact]

The last question in the sections ask the participants to visualize civilian/non-combatants perspective in war games enhanced psychological & emotional impact. A vast majority of participants responded with agreement, with 70.8% or 17 of them agreeing, and another 25% or 6 participants strongly agreed.

Overall, the participants would want another war-themed video game that does not take the perspective of soldiers in combat, but rather another angle that is rarely portrayed in war-themed media, of civilians or non-combatants. Other

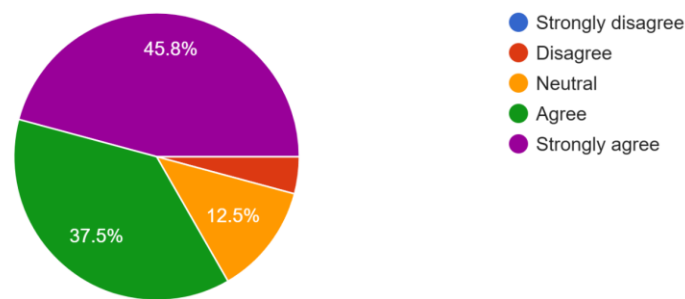
services that are active during wartime that are not active combatants are medics, security, logistics, communications, mailing, search & rescue, and many, many more.

4.0.4 Ethics & Emotional Impact

This section focuses on the ethics and emotional impact and a war-themed video game should convey. The data collected would be critical for the study and project in order to convey what is rarely portrayed or not as effectively portrayed in many war-themed media.

1. Should war games portray the horrors and trauma of conflict rather than only action and herosim?

24 responses



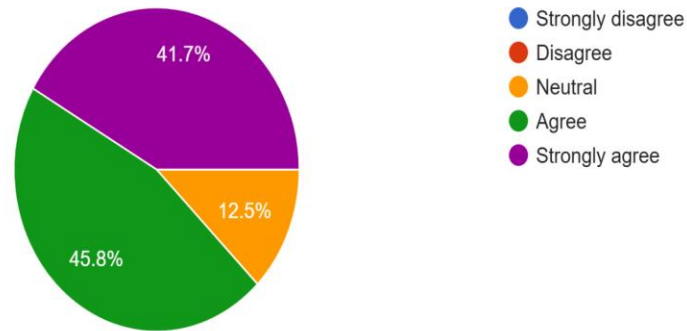
[Figure 4.12: Portrayal of horrors of war rather than action & heroism]

The first question asked should war games portray the horrors and trauma of war rather than only action and heroism. A vast majority of participants answered in agreement, with 45.8% or 11 participants strongly agree, and another 37.5% or 9 participants agreeing. While 3 participants or 12.5% are neutral to the statement and 1 participant disagreeing.

This heavily implies that more video games should be portraying war games with anti-war sentiment, with accurate representation of horrific events in war and the traumatic consequences that follow rather than the single-player one-man army power fantasy that many action shooter games adopt.

2. Can discomfort or emotional distress enhance immersion in narrative-driven games?

24 responses



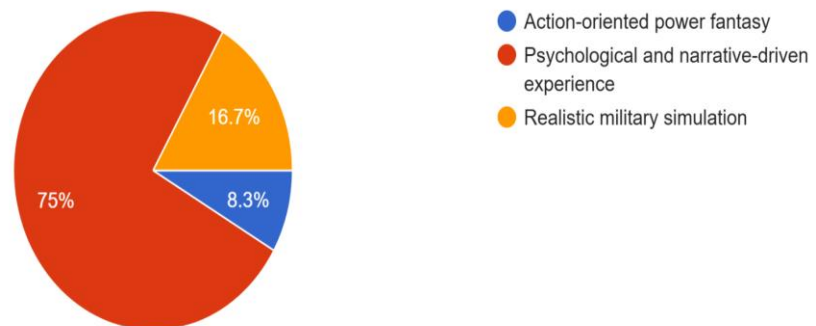
[Figure 4.12: Discomfort or emotional distress enhance immersion in narrative-driven games]

The second question asked in regards to narrative-driven games, would having it be discomfoting or emotionally distress enhance immersion. A vast majority of participants responded in agreement, with 45.8% or 11 participants agreeing, while another 10 participants or 41,7% strongly agreed. The remaining 3 participants are in neutral of the statement.

This further reinforces the assumption that more war-themed video games should portray war as discomfoting or emotionally distress, rather than dopamine engaging and violence glorifying.

3. Which approach to war-themed games do you find more impactful

24 responses



[Figure 4.13: Approach to more impactfulness in war games]

The final question in the section asked the participants which approach to war-themed games would they find to be more impactful. A majority of them chose psychological and narrative-driven experience, with 18 participants or 75% choosing this option. 4 participants or 16.7% chose realistic military simulation, while the latter 2 participants or 8.3% chose action-oriented power fantasy.

In summary, the majority of the participants would prefer a story-based video game that portrays war in a psychological and emotional way.

4.1 Open-ended Questions

The qualitative responses are collected from open-ended questions on the Google Form questionnaires to analyse the respondent's opinion and experience on historical trauma, war representation in video games, emotional impact and immersion. The respondents are given paragraph length answers so deeper insights can be interpreted. As the section is not compulsory to answer, a total of 22 responses were recorded.

The following two questions are the open-ended questions that participants had answered.

1.

How should video games approach historical trauma and warfare without reducing it to entertainment?

22 responses

More focus on characters, their decision, impact, reason. Combat comes after, in war, soldiers do most is waiting and training, but for civilian is survival, not many games focuses on those perspective.

Explore the consequences of conditions such as PTSD, the consequences of human actions and how they impact innocent lives, and avoiding the glorifying of human death.

War games almost always end when the treaty is signed or the final bomb drops. A more profound approach is to focus entirely on the post war landscape exploring the long term psychological, cultural, and environmental scars left behind

By balancing out, in modern days people often would prefer entertainment in all platforms due to media portrayal.

This made the events lost the meaning behind it on why it happened in the first place. However, the info might be limited/lost during that event so that's why people can make up anything in the movie except for the important history event

Shift the focus of the game from the "Action Hero" to the "Witness".

Entertainment is still a core piece, but take the movie "grave of the fireflies" for example. It's a great movie, extremely impactful, but many swear to never watch it again. If you want a message to stick with the player in a videogame, it must be entertaining enough, with long lasting consequences in each action the player takes, instead of prompting a re-try. And even a "morally correct choice" must involve unavoidable negative consequences.

I feel an ideal video game should ultimately remain an "entertainment" product, in the sense that it engages the player and makes them keen on progressing through the content. However, the portrayal of trauma (the consequences of war) should be done well and in a believable manner within the product, instead of only displaying scenes of glory and triumph.

With careful consideration, research, and empathy

they should show what war is like. Doesn't have to be realistically accurate but it should give certain feedback like a person from war can be like, "Yeah. That's like what I went through." It will give people who never been to war, an idea or gist of the reality of war.

Bad things happening to important/beloved characters (doesn't have to be death)

Make the trauma itself the gameplay, a war game without killing or weapons, story driven trying to escape war rather than to fight in it
Recognize and portray the trauma in a realistic manner
Don't make war look like fun time
Through historical accuracy and showing the perspectives of civilians and their experiences including physical, mental and emotional impact of war.
Maybe narrate the story from a bystander/close friend/ acquaintancr's POV of the character that died. Like a mom saying her son is very naughty while taking back the ragged clothes of her son instead of a whole body. Or let the consequences of player's action be so brutal that the player needs time to think and reflect on what has happened.
Often, would prefer to see the consequences of said actions in war, A Plague Tale did this brilliantly with plague and famine after a conflict has occurred in the game
The player should have moments to reflect on the events occurring and how they could have been avoided to prevent the mass loss of life and destruction.
Include the ramifications of different actions
Have you play as someone on the opposing side. For instance, set a game during WW2 and have you play as an SS soldier to show and force an experience of the actions taken during this time.
Based it on real events and include some real war footage.
As the theme suggested "historical trauma and warfare". It should focus on the trauma of the MC and people along side the MC.
Then to show the effect the war has towards surrounding and civilians.
If it's trying to be a historically accurate, one could choose a non-existent low rank soldier that's trying to survive mixed with 95% historically accurate war story
providing real image of the history

[Figure 4.14: Responses of first open-ended question]

2

In your opinion, what would make a war game be emotionally impactful or immersive?

22 responses

Realistic dialogues, inspiration from real events, characters, figures, locations etc. Action could be secondary if the characters are well written & believable.

Loss of relationships established in a narrative would be more emotionally impactful.

To make a war game impactful, developers can intentionally create ludo narrative dissonance to make the player feel complicit

By how is portrayed, how is narrated, how is convey

Humanizing the enemy would make it more emotionally impactful in my opinion.

Each choice you make should have lasting consequences throughout the rest of the playthrough, and often provides no morally correct choices. Also, give players desperation choices outside of combat. War-time trauma is also about the lack of choice you have in every day life.

I feel it ultimately comes down to the quality of writing and the believability of the portrayal, so the player may accept the portrayal as a consequence of war and conflict in reality rather than something that had been shoe-horned in and forced upon the player.

Portrayal of characters' reaction, response, and development of war

There is a lot that can be done to make a war game reach such standard but the most common would be a story. It would be a story that has happened in history like the books that have told stories of another person. There is a very interesting one. It took place in WWII. It was about a Jew woman who managed to pass as a German throughout the war.

Build around the atmosphere and setting rather than gameplay

More perspective from civilian side rather than of soldiers, set in real historical events, regardless of sides, political alliances, British during The Blitz, Germans at Dresden, Japanese at Tokyo. In war all people are victims

Sticking to one / small group of characters to grow attachments
Showing reaction, soldiers (allies/enemies alike) and civilians PoV
Both emotionally impactful and immersive. I believe they would create an outstanding game that's both memorable and engaging.
Build up friendship/relationship with characters, know their background, then kill them off in a matter that the player can't change, or in such unexpected way player can't have time to react, then throw player into action again, while having headache/blurry effect Or, have player go back to dorm and see their friends hung themselves up like Sayori from DDLC, or like Reiner in AOT putting a gun in his mouth and contemplating the option of possible death
The horror of chemical warfare, and its effects on the characters involved
Historical accuracy and proper representations on real world events and human thought processes are needed to proper paint a picture with impact.
Strong narrative, accuracy to the source material and engaging gameplay
Force the player to make morally ambiguous decisions during a quicktime event you can't pause to drive home the sometimes split second decisions that have to be made in high tense situations
Make the player feel powerless in the game. Because that's the reality of war.
Depends on the story line, whether it's trending up (heroic story, start from below and raise to the top) or stay on the bottom (it started in dire situation, and just wanting to escape). For the latter, losing the closest comrades one by one, until only the player left to escape, and (perhaps) avenging the fallen comrades. Also to carry the emotional burden of being alive to convey the dog tag of the fallen one. There's not really a HAPPY happy ending. it's all dark For the first one, then to struggle to raise to the top, whether losing a few comrades Or showing the antagonist evil-ness, then for the protagonist to somehow manage to beat the whatever evil idea the antagonist has.
graphic

[Figure 4.14: Responses of second open-ended question]

Chapter 5: Discussion and Interpretation

5.0 Interpretation of Results

After analyzing the results of the questionnaires, the finding shows that the majority of the participants generally agree that having psychological horror that brought emotional impacts and portrayal of historically authentic events would be an effective element in creating immersion and better player experience in a war-themed video game. Elements such as moral ambiguity, psychological trauma, graphical & visceral consequences, historical authenticity, limited agency, non-combatant/civilian perspectives during war and a focus on narrative would bring about a better immersive experience and psychological tension. Participants also addressed that conventional action war games are too heavily focused on combat spectacles and action-oriented gameplay, while placing less emphasis on emotional & psychological elements.

For the case in *Hullbound*, said elements are balanced with both tank combat action, psychological threats and combat stress that a tank crewman may face during engagements and the narrative presented with dialogues with fellow tank crews.. A representation of war that goes beyond a power fantasy and turns into a discomforting, claustrophobic experience that deliberately limits player agency with limited visibility, information and maneuverability, and portrays an alternate Cold War scenario that in our own history, nearly happened. The focus of emotional and psychological impact war that had been displayed in *Hullbound* communicates the theme of anti-war sentiment, traumatic strain, military obedience, authoritarianism and paranoia, rather than combat efficiency or entertainment.

5.1 Theoretical Contribution

As with the aforementioned theories such as MDA framework, procedural rhetoric, immersion, presence and agency, the study can contribute to those theories as it relates to the game design, immersion and historical representation in *Hullbound*. Both the psychological horrors of war and traumatic consequences would be communicated through both gameplay and narrative.

The game mechanics of Hullbound would present a gameplay dynamic where the player is under combat stress, often relying on information passed down from command callouts, all the while operating with limited visibility and awareness. By applying the MDA framework, this study shows how game design can deliberately transform conventional combat mechanics into a system that would communicate the psychological strain and ethical ambiguity of war, supporting its anti-war sentiment while distancing from military empowerment or mastery in conducting violence.

The limitations of control, military hierarchy, immersive auditory design, grim atmosphere, narrative & moral dilemmas require players to operate under pressure, with incomplete information, thereby reflecting the constrained and stressful conditions of armoured combat. With it, this design would communicate the depiction of war as traumatic and terrifying rather than entertainment. The gameplay of Hullbound would present war through the narrowing lens of a tank, in a psychologically oppressive and morally complex confinement rather than empowerment.

5.2 Practical Implications



[Figure 5.0: Gameplay screenshot of Hullbound from gun sight POV]

As per the MDA framework, the image above is one of the views that the

player sees when looking through the gunner sight. The night-vision sights are blurry, visibility is low and its complete darkness. The mechanics being that the player need to aim, fire, reload, while being under tank fire themselves, the dynamics would have to sit still while being shot at, wait for the reload to finish then open fire again, the aesthetic would be the end result of creating tension, helplessness and claustrophobia, all the while the dynamic voice command given by the tank commander enhance the combat stress one would experience under fire.

VA > Direction		VA > Fire Command		VA > Enemy Type	
Name	#	Name	#	Name	#
Front_Calm_1	1	Cease_Fire_Calm_1	1	Bunker_Calm_1	1
Front_Calm_2	2	Cease_Fire_Calm_2	2	Bunker_Panic_1	2
Front_Panic_1	1	Fire_Calm_1	3	Tank_Calm_1	3
Front_Panic_2	2	Fire_Calm_2	4	Tank_Calm_2	4
Left_Calm_1	3	Fire_Panic_1	5	Tank_Calm_3	5
Left_Calm_2	4	Fire_Panic_2	6	Tank_Panic_1	6
Left_Panic_1	3	Fire_Panic_3	7	Tank_Panic_2	7
Left_Panic_2	4	Next_Target_Calm_1	8	Tank_Panic_3	8
Right_Calm_1	5	Next_Target_Calm_2	9	Troops_Calm_1	9
Right_Calm_2	6	Next_Target_Panic_1	10	Troops_Calm_2	10
Right_Panic_1	5	Next_Target_Panic_2	11	Troops_Panic_1	11
Right_Panic_2	6	Reengage_Calm_1	12	Troops_Panic_2	12
		Reengage_Calm_2	13		
		Reengage_Panic_1	14		
		Reengage_Panic_2	15		
		Reengage_Panic_3	16		
		Shoot_Panic_1	17		
		Shoot_Panic_2	18		

[Figure 5.1: Screenshot of voice acting files of Hullbound]

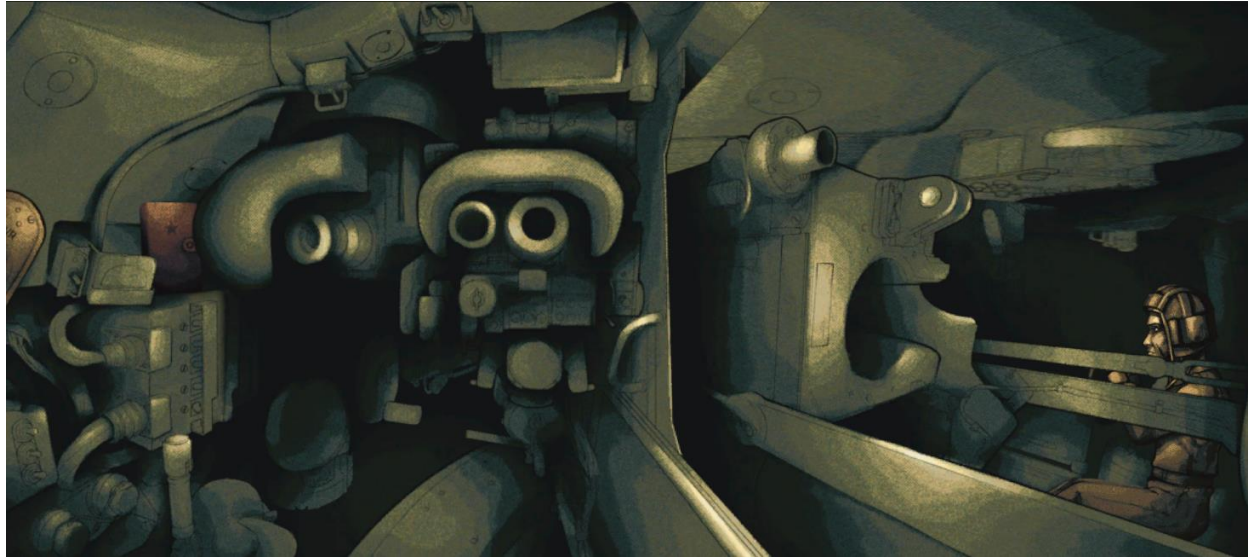
The images above show the range of voice acting for combat commands that would be issued during an engagement. Multiple takes of the same lines to avoid repetitiveness, and calm & panic lines to dynamically change depending on the situation. As per inspiration from real world Soviet tank firing commands, the voicelines in Hullbound would be simplified and some words be translated to English, while others retained in native Russian. This is to deliver immersiveness for the players and this would be as close to how firing commands would be issued in the real world. The tank commander would have his voice sound physically strained to shout the commands to the player, further enhancing immersion and presence of the player being the tank gunner. As addressed by the participants in the questionnaire, having some historical authenticity would heavily contribute to the immersions and player experience. Using real world firing commands in a tank game that portrays a Soviet armoured unit would address that statement.



[Figure 5.2: Cinematic screenshot of Nuclear Wasteland scene]

The study also contributes to Procedural Rhetoric theory. The endings of the game features the battlefield being nuked, the Default/Bad ending features the player's tank driving towards the distant mushroom cloud, while the Worse ending has the player's tank destroyed. Both endings hint at harrowing ends for the crew. If they survived the blast, their mission goes on, at least in the mind of the fanatic tank commander. Through the overwhelming destruction of the land, continuous escalation of tension, shattering crew morales, and the increasing sense of inevitability, this scene conveys the absolute existential fear associated with nuclear conflict, a real fear that many endured during the heights of the Cold War.

The endings argue that regardless of the player's action, the ending remains fairly similar in tone. In war, everyone is a victim, turning normal men into murderers, turning normal lives into a distant memory, death and brutality becomes routine. With the detonation of a nuclear bomb, it becomes the ultimate means of destruction, turning everything the player had done futile, reinforcing the theme of fatalism, obedience and loss of humanity within a global conflict.



[Figure 5.3: Interior tank screenshot of Hullbound]

The contribution of immersion, presence and agency can be presented through the design decision of the player possessing the perspective of the tank gunner. Within the confined space of the gun compartment, hazardous mechanical systems, and the only view to the outside world is through the access of the gun sight. Unlike many conventional military games that provides a wide situational awareness and extensive player agency, in Hullbound, this proposed design to intentionally limit player visibility through the cramped interior space of a tank, narrowing gun optics, restricted visibility and having to rely on crew voice line for navigation, situational and combat information.

Players would be switching between gun sight and interior view of the tank, depending on the situation. Combat would demand the player to use the gun sight to engage enemy targets, while interior view would allow the player to interact with the crew, ammo carousel and player logbook. The player does not have the control to maneuver the tank in any way, as it would break the immersion of the player being solely the gunner. The driving of the tank would be done by the driver and scripted linear pathing. This creates a form of controlled agency where the player would not possess complete control of the tank but have limited decision-making, i.e: choosing the paths to take, morally ambiguous choices etc.

5.3 Study Limitations

Several limitations did affect the outcome of this study. Firstly with the questionnaire, given the limited time and participant numbers, with only 24 individuals participating in the survey, with varying gaming experiences and backgrounds, the findings may not represent the broader player demographics that is familiar with military, war, historical or narrative-driven games. Regardless, their feedback is still critical in making this research possible.

Secondly, would the game project itself, Hullbound. The development of the game faced plenty of challenges.. Such challenges would cause some game design limitations. For instance, limited sprite animations, simplified tank systems, 2.5D aesthetic due to technical challenges in 3D modelling and animating.

5.3.1 Game Design Critiques

As per the study limitations is directly related to the game design of Hullbound, the following section would describe the shortcomings of Hullbound that would impact the psychological and emotional impact of the game.

5.3.2 Tank System Limitation



[Figure 5.4: Tank system HUD in Hullbound]

The original thought of Hullbound was to be a tank simulator, or as close to

one as possible. But with time constraints and technical limitations, the tank system had to be rectified and simplified. If it were to be a full tank simulation, this would not only require a full 3D model of the tanks, this would also require the interior of the tank being fully modelled, alongside the crew, detailed interior and modules such as the gun breech, ammunition rack, gun sight, engine, carousel, ammunition hoist, and the list goes on.

Additionally, a modern main battle tank features many advanced systems, electronics and mechanics. Such as target computing system, laser rangefinding, stabilizer, target leading, analogue gun scope, smoke screen generator, smoke grenade launcher, fuel management, engine, weapon and ammunition maintenance and many, many more. In the end, Hullbound would acquire a simplified tank system, with the main gun system, ammo & power management, crew interaction and night vision.

5.3.3 Linear Tank Driving Mechanic



[Figure 5.5: Dialogue choices in Hullbound]

As the player acts solely as the gunner, they do not have the controls to pilot the tank itself. Rather, the intended designs for tank movement are scripted, linear pathing following according to the narrative and combat engagement. This restriction reduces player control over navigation, reinforcing the sense of

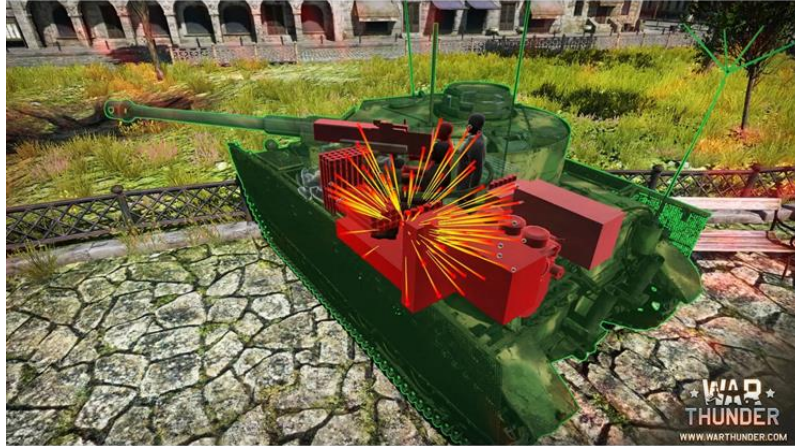
helplessness and dependency on the other tank crewman. The limited player agency may lead to a more passive game experience, where the player does not possess the ability to maneuver the tank during combat encounters, and is forced to be stationary while being shot at. This could result in decreased variation in gameplay outcomes, where engagement with enemy units would unfold in a predetermined manner. Thus, reducing replayability, increased predictability and hampering game flow.

5.3.4 Lack of Destruction System



[Figure 5.6: Dialogue scene with crewmates in Hullbound]

One interesting mechanic where tank simulations feature is a visualization of real world damage, penetration effects and destruction of a tank that includes interior compartmental damages, crew injury & death, and operational failure. Hullbound lacks this feature as it would be heavily taxing to create due to the lack of expertise in 3D modelling and programming. The destruction of enemy tanks would only be represented with 2D sprites being exchanged from normal operating sprites to destroyed sprites.



[Figure 5.7: X-ray kill cam from War Thunder]



[Figure 5.8: X-ray kill cam from Gunner, HEAT, PC!]

Other tank centric video games such as War Thunder and Gunner, HEAT, PC!, were heavily influential in the development of Hullbound. The visualization of tank destruction and interior damages shows detailed simulations of penetration, spalling distribution, damaged modules and crew, would convey the feeling of tanks being a symbol of armour and strength into vulnerability and horrific failure that results in catastrophic and visceral consequences. With this interaction, the player may experience a shift in perception, where armour does not represent protection, but rather a source of entrapment that transforms the interior of a tank to become a hazardous and deadly environment, with little time to react or escape in an event of penetration.

Chapter 6: Conclusion and Recommendations

6.0 Summary of Findings

The results from the survey help immensely in understanding the futility of war, historical trauma and how it should be portrayed. Deep research in regards to tank, tank warfare & doctrine, Cold War history, war veterans interviews, inspiration and references from existing tank sims and video games help tremendously in the development of Hullbound.

Many of the participants responded in the open-ended questions displays that many of the youth of today are aware of war and the horrific consequences that would bring. And to raise that awareness and anti-war sentiment, video games would pivot from the gunplay action-entertainment, and present the human suffering & cost, the long term psychological, cultural and environmental scars that war would leave behind.

6.1 Limitations & Challenges

We faced many challenges during production. Namely, time constraints from other assignments and courses, constant meetings and consultations hampering development time, poor coordination and communication, teammates facing personal issues causing delays, and most notably over-ambitionness in regards of game scope and mechanical complexity.

During pre-production discussion, we had taken notes about our technical capabilities. Our group possess talented individuals that are competent, strongly adaptable and are specialized in their roles. We discussed what we are good at, and those became our roles for the rest of the project, until we hit obstacles that needed the attention of others members to relieve some burden of others.

Due to time constraints and mental fatigue, we were not able to exploit our skills fully during development. The complex details of a tank interior art asset had taken up much of the time for our 2D artist, and with mental fatigue and personal issues in the picture, this caused further delays. The delay cost further art assets and

animation sprites to be simplified, and other members needing to step in and take up responsibility, in order to ease the burden of the artist. The end result was the animation sprites having limited animation frames, and enemy sprites to only have front and back rendering.

Moreover, the complexity of the tank mechanics forced us to simplify it while keeping the gist of a tank action game. The aforementioned tank system that would define the game as a tank simulation, a majority of them were discarded during pre-production. During the latter half of FYP 2, where everyone was in full swing dealing with other assignments and game projects, the mechanics of the carousel autoloader was being implemented, and faced major issues. This is where Lee Kang, who was originally the 3D modeller and composer of the game, now had to pivot and help our lead programmer in implementing the carousel mechanics. Said mechanics would also be simplified from a QtE-esque minigame to a simple click and drag to reload.

Additionally, was the lack of 3D modelled tanks and animations. It was discussed during pre-production, our skill levels in regards to 3D modelling would not be up to task when modelling a tank, its interior modules, crew and destroyed models. As a result we pivot to having a 2.5D aesthetic, in which, many indie games also chose similar art styles due to technical limitations.

Finally, it would be the novice usage of GitHub and the Unity Engine. While many of us are familiar with Unity Engine, the use of GitHub I was not familiar with. The main issue in using GitHub was merging conflicts, which our programmer had to fix due to my missteps. Later when the level design was completed, it was noted that GitHub would not allow file sizes over 100mb to be pushed into the repository, resulting in the level needing to be redesigned, assets needing to be remodeled to a smaller size, then the level scene could be pushed.

6.2 Solutions & Recommendations

As Hullbound was a brainchild of my own design, I was responsible for the narrative design, level design, mechanics design and SFX design and the development process, production pipeline and leadership ultimately fell onto my responsibility as well. While this multifaceted duty offered me a comprehensive view of the project, it also resulted in a substantial amount of workload, difficulties, resource, manpower and time management.

Miscommunication and poor coordination certainly occurred. The delay in producing certain assets and mechanics in accordance to deadlines set in the gantt chart lead to some frustrations. As a result, I would arrange a meeting where we all would attend and discuss the possibility of compromise, adaptation or reallocation of job scopes in order to reduce workload and burden.

As the game narrative is broad and complex, encompassing three different characters in an alternative historical conflict scenario, I had to write two separate narratives, one is a simplified version and the other is the full version. This is done so our programmer could have an easier understanding of the game narrative and ease of implementation of dialogues and scripted events in game.

Having to be the unintended de facto leader of the group, I had to be considerate and be empathetic when dealing with issues that my teammates faced. Facing mental fatigue and poor sleep schedules dampened my emotional state, but it is not an excuse to be angry towards my fellow teammates, as they faced the same situation. I am glad we did not face any major arguments that would tarnish the group dynamic and friendship. It was a good experience in managing my temper, tolerance, communication and empathy when working as a team while also strengthening my technical skills in using Unity, writing and designing.

6.3 Conclusions

The end result of Hullbound is it captures the perspective many feared would happen during the heights of the Cold War. The Berlin Wall crisis at Checkpoint Charlie was chosen as the introduction since it where tensions in Europe between Soviet and NATO bloc came close to all out warfare, in which, Hullbound explored the possibility of said war occurring, and the fear of nuclear war, paranoia, psychological tension, moral and emotional impact & consequences that follows when an all out global war occurs.

I am grateful to have great teammates that are understanding, competent, reliable and trustworthy. Being able to adapt, compromise and forgive mistakes is what makes groupwork function effectively. Hullbound would not be able to happen if not with their time and effort.

Chapter 7: Reference & Appendices

7.0 Reference

1. American Veteran Center (April 7, 2026) Youtube| *Armored Combat: WWII Tankers Describe Fight Against the Nazis* | Walter Stutt & Harry Miller
<https://www.youtube.com/watch?v=Mjgdq-2pezo>
2. Czechmate (Jan 1, 2026) Youtube| *What Tank Combat Looks Like* | An Analysis and Review of ‘Gunner, HEAT, PC!’
https://www.youtube.com/watch?v=KNwLpto_y14
3. Game Maker’s Toolkit on Substack (February 2, 2024) *Why Spec Ops: The Line Mattered.* GMTK.substack
<https://gmtk.substack.com/p/why-spec-ops-the-line-mattered>
4. Holger Pötzsch, Philip Hammond (December 2016) *Special Issue - War/Game: Studying Relations Between Violent Conflict, Games, and Play.* Game Studies
<https://gamestudies.org/1602/articles/potzschhammond>
5. HTF Market Intelligence Consulting Private Limited. (2025, September 19). *Military simulation games market is booming worldwide | major giants Dovetail Games, Ubisoft, Konami.* openPR.com
<https://www.openpr.com/news/4189719/military-simulation-games-market-is-booming-worldwide-major>
6. Hunicke,R, LeBlanc,M & Zubeck,R. (2004). PDF | *MDA: A Formal Approach to Game Design and Game Research*
<https://users.cs.northwestern.edu/~hunicke/MDA.pdf>

7. Ian Bogost (2007). PDF | *The Rhetoric of Video Games*
<https://se4n.org/papers/bogost-rhetoric.pdf>
8. Iremember.ru (September 21, 2010) *Tankers* | Dmitry Loza.
<https://iremember.ru/en/memoirs/tankers/dmitriy-loza/>
9. Mr Hewes (December 12, 2023) Youtube | *A Detailed Look Inside a T-72*
<https://www.youtube.com/watch?v=NPuVMGRXq7k&t=2047s>
10. Paul Cairns, Anna Cox, A Nordin. (2000). PDF | *Immersion in Digital Games: a Review of Gaming Experience Research*
https://www-users.york.ac.uk/paul.cairns/pubs/Cairns_Handbook_Draft.pdf
11. Sandra Camarda (2024) *Trauma, Resonance and Transformation: Gaming as Heuristic Mode of Doing History*. Research gate
https://www.researchgate.net/publication/388800965_Trauma_Resonances_and_Transformations_Gaming_as_Heuristic_Mode_for_Doing_History
12. Scribd (2026) *Soviet Tank Crew Firing Command*
<https://www.scribd.com/document/715971451/Soviet-Tank-Crew-Firing-Commands-v3>
13. Zukaloud (October 2, 2023) *14 Reason why every indie game developer should make at least one horror game*. How To Market A Game
<https://howtomarketagame.com/2023/10/02/every-indie-game-developer-should-make-a-horror-game>

7.1 Appendix

7.1.1 Logbook FYP 1

Project Paper Consultation Logbook	
Project Title	Hullbound
Student Name	LAI WEI JAY
Student ID	2306701
Year/Semester	Y3S1
Supervisor	MR. SIMON ANG YEW KOK

WEEK 01	
Comments: Formed group, named Spaghetti Code Members: Lai Wei Jay, Lee Kay, Yap Mei Ying, Tan Yee Han • Drafted Proposal of games • Title: Hullbound • Genre: Tank Simulator, Psychological horror Visual Novel	Supervisor signature:  TS. DR. ANG KOK YEW Deputy Dean Student Development & Industrial Training Faculty of Creative Industries Universiti Tunku Abdul Rahman
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date:
WEEK 02	
Comments: Started proposal ppt slides, narrative, USP, flow chart, characters, sketches 11 Nov 2025 - narrative, characters, ending, events in game 13 Nov 2025 - updated names, location, explain WW3 legend 14 Nov 2025 - Detailed gameplay location, terms, environment 15 Nov 2025 - Detailed & reason why fighting happened, reasons & multiple ending - Art reference of enemy design - Flowchart of character & ending	Supervisor signature:  TS. DR. ANG KOK YEW Deputy Dean Student Development & Industrial Training Faculty of Creative Industries Universiti Tunku Abdul Rahman
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date:

WEEK 03	
Comments: 17 Nov 2025 - Done narrative - Planned and characterise narrative - Plot further elaborated 18 Nov 2025 - Proposed slide updated	Supervisor signature:  Ts. DR. ANG KOK YEW Deputy Dean Student Development & Industrial Training Faculty of Creative Industries Universiti Tunku Abdul Rahman
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date:
WEEK 04	
Comments: 24 Nov 2025 - Review title: Horrors of War - Historical Trauma in Game Design - Protoged termn whistbony in Unity. 29 Nov 2025 - OTE nigen during downtime combat - Clarified map layout - Flomhart of voice command	Supervisor signature:  Ts. DR. ANG KOK YEW Deputy Dean Student Development & Industrial Training Faculty of Creative Industries Universiti Tunku Abdul Rahman
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date:
WEEK 05	
Comments: 2 Dec 2025 - Begin prototype of 1st map - Full map sketch - Trees, farmhouse & enemy placement	Supervisor signature:  Ts. DR. ANG KOK YEW Deputy Dean Student Development & Industrial Training Faculty of Creative Industries Universiti Tunku Abdul Rahman
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date:

WEEK 06	
Comments: 8 Dec 2025 • Update Farahad • Dismissed & improve on choosing ending of flow chart • Made Grithudo finally working	Supervisor signature:  Ts. DR. ANG KOK YEW Deputy Dean Student Development & Industrial Training Faculty of Creative Industries Universiti Tunku Abdul Rahman
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date:
WEEK 07	
Comments: 12 Dec 2025 • Start thesis • Level old fog, smoke, fire, crater, skybox • update size & terrain • movement & control basic machine done	Supervisor signature:  Ts. DR. ANG KOK YEW Deputy Dean Student Development & Industrial Training Faculty of Creative Industries Universiti Tunku Abdul Rahman
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date:

7.1.2 Logbook FYP 2

Project Paper Consultation Logbook	
Project Title	HULLBOUND
Student Name	LAI WEI JAY
Student ID	2305701
Year/Semester	Y3S2
Supervisor	Mr. SIMON ANG KOK YEW

WEEK 01	
Comments: - Finished main map, - Starting with Farmland, Crossroad, Autobahn, Seelow Heights and City	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 7/2/2026

WEEK 02	
Comments: - Further improve on enemy placement - Began nuke EFX test	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 14/2/2026

WEEK 03	
Comments: - Chinese New Year break, not much was done - Rewrote dialogue pieces for Farmland and Crossroad	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 21/2/2026
WEEK 04	
Comments: - Further develop Nuke EFX - Better smoke dispersion of Nuke - Tested nuke explosion SFX sync, not implemented in game yet - Replaced some placeholder to actual 3D assets	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 28/2/2026
WEEK 05	
Comments: - Added more fog particles, explosion/artillery efx implemented not finish - Replaced placeholders for some city buildings - Added pillboxes, hulldown dirt positions & other defences	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 7/3/2026

WEEK 06	
Comments: • New SFX for tank, autoloader & turret • Voice acting for command callouts • Carousel reloading QtE placeholder assets	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 14/3/2026
WEEK 07	
Comments: • New SFX for tank hit, ricochet, & shell whistling by • Added Preview SFX • Rebalanced all audio decibel • Finished writing dialogues on Crossroad & Autobahn • Reorganized dialogues on Farmland	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 21/3/2026
WEEK 08	
Comments: • Created images for Red Book • Created instructions, backstories & writing for Red Book • Sorted out GitHub merge errors	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 28/3/2026

WEEK 09	
Comments: • Redone burning house & fire VFX • Distant_Artillery and Distant_Tank_hit is added • Discussed music composing with Lee Kang • Discussed Power Management Mechanics with group (Bar draining or Battery block draining, Bar draining was chosen) • Colour coded parts of Scoped scene & Interior scene for dialogues • Added emotions next to dialogues (for Interior scene of Tank Commander)	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 4/4/2026
WEEK 10	
Comments: • rename Arty & Explosion to Artillery & War ambience • Rename Enemy weapons to Enemy SFX • added two new ricochet sfx in player tank sound • added distant artillery in artillery & war • added distant tank explode, enemy tank fire close & enemy tank fire far in Enemy SFX • added close tank explode in Enemy SFX • added Muffled Radio Voice lines for NPCs • Finished dialogues for Nuclear Wasteland • Finished dialogues for Endings	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 11/4/2026

WEEK 11	
Comments: • Added Ambience for Farmland, Crossroad, Autobahn, Seelow & City • Ambience will differ from area, with increasing explosion & gun fire • Added Tank Repair SFX • Added Artillery Close Hit SFX • Added Tutorial Berlin SFX (Including new tank SFX, sniper fire, voicelines) • Storyboarding Intro Hospital Cutscene New scene of Nuclear Wasteland	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date:18/4/2026
WEEK 12	
Comments: • Created new Tank Damage VFX (mud & shrapnel on the screen) • Finalized Intro Hospital Cutscene • Merge Github branches • Sketching Enemy Tank Sprites side and rear profiles • Created new Scene for City • Added 8 new buildings, barricades, walls, pavement & lamppost for City Scene • Thesis writing until Chapter 2	Supervisor signature: 
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date:25/4/26

WEEK 13

Comments: - Finished M47, M48 tanks sprite (front, back & destroyed) - Further refinement in Farmland, Autobahn & City (added more environmental details)	Supervisor signature: 
--	---

Progress (please circle the feedback) 12345 PoorSatisfactoryGood	Date: 1/5/26
---	---------------------

WEEK 14

Comments: - Created Crawling Soldier, Civilian Running & Mass surrender placeholder animation sprites - Refining Nuclear Wasteland scene - Added distortion wavy heat EFX to Nuclear Wasteland Scene	Supervisor signature: 
---	--

Progress (please circle the feedback) 12345 PoorSatisfactoryGood	Date: 8/5/26
---	---------------------

WEEK 15

Comments: Finished infantry, infantry w/ bazooka & infantry shot sprites - Made teaser trailer - Added nuclear blast SFX & Nuclear Wasteland Ambience - Fixed mushroom cloud, animation & sound sync in City scene - Two ending scenes, Bad Ending Nuclear Wasteland & Worse Ending Nuclear Wasteland - Finished writing thesis	Supervisor signature: 
--	---

Progress (please circle the feedback) 12345 PoorSatisfactoryGood	Date: 15/5/26
---	----------------------

7.1.3 Survey Questionnaire

Horrors of War: Historical Trauma in Game Design

This survey is conducted as part of a Final Year Project by Lai Wei Jay, a Bachelor of Arts (Hons) Game Design student at Universiti Tunku Abdul Rahman, Faculty of Creative Industries (FCI), Department of Game Studies. The project explores the representation of historical conflict, war trauma and psychological horrors in video game design. The purpose of this study is to examine how players perceive immersion, emotional tension, moral ambiguity and historical representation in war-themed games.

Responses are anonymous and will be used strictly for academic purposes only.

* Indicates required question

I have read and understood the information provided. I voluntarily agree to participate in this survey, and I understand that my responses will remain anonymous, confidential, and used solely for academic purposes as part of the Final Year Project thesis titled "**Horrors of War: Historical Trauma in Game Design.**" *

- ☐ I consent and agree to participate the survey
- ☐ I do not consent and disagree to participate the survey

Next

Clear form

Horrors of War: Historical Trauma in Game Design

* Indicates required question

Section 1 - Demographic

1. Age Group *

- ☐ Below 18
- ☐ 18 - 24
- ☐ 25 - 34
- ☐ 35 +

2. Gender *

- ☐ Male
- ☐ Female
- ☐ Prefer not to answer

3. How often do you play video games? *

- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Very Frequently

4. Which genre do you commonly play? *

☐ Horror

☐ Action

☐ Strategy

☐ Simulation

☐ Survival

☐ RPG

☐ Other: _____

5. Have you played games based on historical conflicts or wars? *

☐ Yes

☐ No

[Back](#)

[Next](#)

[Clear form](#)

Section 2 - Historical Conflict & War Representation

1. Do you believe that video games can effectively portray the psychological impact of war? *

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly agree

2. Which aspect of war are most important to represent in games? *

- ☐ Psychological trauma
- ☐ Moral ambiguity
- ☐ Civilian suffering
- ☐ Fear and uncertainty
- ☐ Camaraderie
- ☐ Historical accuracy
- ☐ Combat realism
- ☐ Survival
- ☐ Emotional consequences
- ☐ Other: _____

3. Do you agree that most war games focus too heavily on combat spectacles rather than the traumatic consequences of war? *

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

4. Do you agree that having historical authenticity in creating immersion is important in war-themed video games? *

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

Back

Next

Clear form

Section 3 - Psychological Horror & Immersion

1. Which elements do you think contributes most to psychological tension in war games? *

- ☐ Confined environments
- ☐ Limited visibility
- ☐ Lack of information
- ☐ Lack of control
- ☐ Panic & Stress mechanics
- ☐ Realistic sound designs
- ☐ Graphic consequences of combat
- ☐ Isolation
- ☐ Moral uncertainty
- ☐ Unpredictability
- ☐ Other: _____

2. Do you think that limiting player controls/agency would increase feeling of helplessness or tension? *

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

3. How immersive do you find graphic consequences of combat (injury, amputation, internal damages) when being portrayed in war-themed video games?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

4. Would visualizing civilian/non-combatant perspective in war-themed games enhance psychological & emotional impact? *

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

[Back](#)

[Next](#)

[Clear form](#)

Section 4 - Ethics & Emotional Impact

1. Should war games portray the horrors and trauma of conflict rather than only action and herosim? *

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly agree

2. Can discomfort or emotional distress enhance immersion in narrative-driven games? *

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly agree

3. Which approach to war-themed games do you find more impactful? *

- ☐ Action-oriented power fantasy
- ☐ Psychological and narrative-driven experience
- ☐ Realistic military simulation
- ☐ Other: _____

[Back](#)

[Next](#)

[Clear form](#)

Section 5 - Open Ended Questions

How should video games approach historical trauma and warfare without reducing it to entertainment?

Your answer

In your opinion, what would make a war game be emotionally impactful or immersive?

Your answer

Back

Next

Clear form

7.1.4 Final Project Title Form

Fill in the information below as detailed as you can after confirming project title.

Project Type:

✓ Product Based Project

Research Based Project

(tick the appropriate box)

Student ID	Student Name	Email & Contact no
2305701	Lai Wei Jay	jaylai@1utar.my 0169863986
2204332	Lee Kang	fourstringedguitar@1utar.my 0103650220
2204775	Yap Mei Ying	alistair@1utar.my 0182816733
2205069	Thee Yee Hen	zasper@1utar.my 0183830883

Supervisor: Ts Dr Ang Kok Yew, Ms Chow Mee Mooi, Pn Nik Noraizira Binti

Abdul Aziz

Project Title: Hullbound

Project description:

A psychological horror tank simulator, story-driven game. Hullbound attempts to blend the action gameplay of tank combat and narrative heavy gameplay. The core theme of the narrative focuses on the conflict between duty and morality, deterministic cycle of war, and manipulation of truth through propaganda. Our aim of the game is to instill the feeling of hopelessness, dread and despair brought on by the horrors of war through an immersive visual auditory design. Whereby many video games and popular media tend to romanticize, generalize or glorify war, our game instead will not be downplaying the sheer brutality that soldiers and civilians may face during war.

Student name	Individual Project Scope
Lai Wei Jay	Lead Narrative & UX Designer • Designed the narrative, dialogues, scripted events, • Designed the level, enemy placements, asset & environmental placements & details • Designed the SFX, voice acting & VFX
Lee Kang	Technical Artist & Programmer • Created 3D assets and props • Designed and programmed UI menus • Assisted lead programmer with dialogue implementations
Yap Mei Ying	Lead 2D Artist • Designed main menu, UI, characters, enemy sprites & promotional materials
Thee Yee Hen	Lead Programmer • Programmed enemy AI behaviour • Programmed tank mechanics, movement & combat • Implemented scripted events & game logic

7.1.5 Permission Sheet

FACULTY OF CREATIVE INDUSTRIES
UNIVERSITI TUNKU ABDUL RAHMAN

Date: 20 May 2026

PERMISSION SHEET

It is hereby certified that Lai Wei Jay (ID No: 2305701) has completed this final year project and thesis entitled “Horrors of War: Historical Trauma in Game Design” under the supervision of Ts Dr Ang Kok Yew (Supervisor) from the Department of Game Studies, Faculty of Creative and Industries, and Ms Chow Mee Mooi (Co-Supervisor) from the Department of Game Design, Faculty of Creative and Industries.

I hereby give permission to the University to upload softcopy of my final year project and thesis in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

Yours truly,

A handwritten signature in dark ink, appearing to read 'Lai Wei Jay', with a stylized, flowing script.

(Lai Wei Jay)