

Heart of Steel

DESIGN DOCUMENT

Introduction	2
Game Summary	2
Player Experience	3
Platform	3
Development Software	3
Genre	3
Target Audience	3
Concept	4
Gameplay overview	4
Theme Interpretation (You are the weapon)	5
Primary Mechanics	6
Secondary Mechanics	8
Art	9
HUD Layout	9
Visual Style	9
Enemies and Weapon Design	9
Player Character	10
NPCs	10
Audio	11
Music	11
Sound Effects	11
Game Experience	11
UI	11

Controls

12

Development Timeline

12



Introduction

This document outlines the design for *Heart of Steel*.

Game Summary Pitch

Heart of Steel is a 2D arcade shooter where players control a sentient mech, Knight Alpha 01, which must navigate the unstable emotions of its pilot while defending the city from waves of enemies. Players balance combat efficiency with emotional management to succeed.

Player Experience

- High-adrenaline combat against waves of enemies.
- Strategic decision-making for weapon selection and time management.
- Immersive narrative through interaction with the pilot's emotions.

Platform

- Desktop (Windows, macOS, Linux).
- Mobile
- Web Browser

Development Software

- **Engine:** Godot 4.3 (2D)
- **Art:** Clip studio paint/ Photoshop
- **Audio:** Audacity and Bfxr for sound effects
- **Collaboration:** GitHub for version control

Genre

- 2D Arcade Shooter with Narrative Elements.

Target Audience

- Fans of fast-paced shooters and narrative-driven games, aged 13+

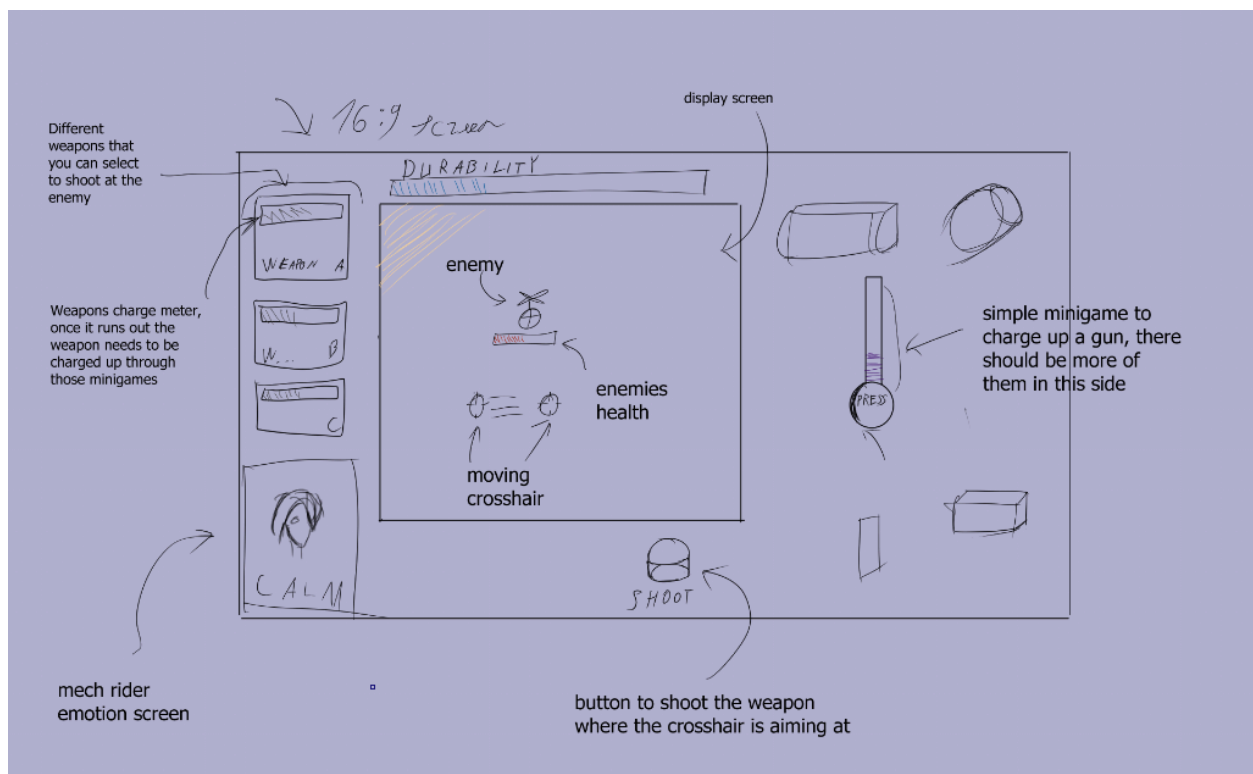
Concept

Gameplay overview

Each level begins with a dialogue between the Pilot and the Commander, leaving the Pilot feeling dejected or unsure. Based on the Player's choices

as Knight Alpha 01, the Pilot's emotional state (Sad, Angry, or Happy) alters the gameplay. These emotional states impact the Pilot's aim, introducing buffs or debuffs. Since the Player controls weapon selection, firing, and reloading, the Pilot's aim significantly affects gameplay.

Players must fend off waves of enemies advancing toward the city of Omega. Strategic weapon selection and precision in reloading are essential, as the longer the Player takes to complete a level the more damage they will take. The Player's health is represented by a Durability bar, which persists across levels, emphasizing efficiency and skill.



Theme Interpretation: "You are the weapon"

Knight Alpha 01 and its Pilot operate as a single weapon. Success hinges on the Player's ability to balance combat precision with emotional stability. By making the Player the mech instead of the Pilot, the game. By taking the agency of aim away from the Player, they are only in charge of firing and

reloading the weapons. Because the success of the Player in combat depends on their choice for the Pilot's emotional dialogue, it really feels like the Player and the Pilot are linked. Furthermore, the Player's agency is also limited in how they communicate with the Pilot. This adds to the feeling of being a mute weapon, forced to use alternative means to establish a real connection. In the end, the sacrifice they make is something they choose to do together. Despite only being seen as a weapon at first, they end the game as a team.

Primary Mechanics

Mechanic
<p><u>HUD(general gameplay explanation)</u></p>
<p>Displays enemies, moving crosshair (controlled by the Pilot), weapon selection (left), reload controls (right), Durability bar (bottom), and the Pilot's emotional state.</p>
<p><u>Crosshair aiming</u></p>
<p>The crosshair's movement is influenced by the Pilot's emotions, requiring the Player to adapt to unpredictable aiming patterns.</p>
<p><u>Weapon types and enemies</u></p>
<p>There are multiple different enemies called Devils, that are either more organic or more metallic in nature. If the player wants to destroy them, they need to select the weapon that would deal the most damage to them and then shoot.</p>
<p><u>Weapon selection</u></p>
<p>The Player can use the same weapon multiple times, by just clicking the shoot button. The Player will have multiple weapons and will be able to switch between them freely, but after a certain amount of shots depending on the weapon, the Player must reload. Once that happens the Player will have to re-activate it by a quick minigame.</p>

Mechanic

Weapon reload minigames

Quick precision-based minigames allow Players to reload weapons, ensuring engagement during combat downtime.

Mech Durability

Represents health and decreases as enemies remain on-screen. Durability does not regenerate between levels.

Secondary Mechanics

Mechanic

Story driven game

Dialogue sequences deepen the narrative. Knight Alpha communicates with the Pilot using audio clips from its previous Pilot, revealing backstory and building emotional connections. This returns to the theme of the jam 'You are the weapon' where the Player feels all the limitations, just as a weapon or tool would, and must use someone else's voice to communicate as they lack their own.

There is also use of the theme of Alpha and Omega, endings and beginnings. As the Player (Knight Alpha) and the Pilot's relationship begins, the clips Knight Alpha plays are from the end of his time with the original pilot Jason. Then, right at the end of the game, the Player must choose the clip showing Knight Alpha and Jason meeting for the first time.

Mech riders emotions

Before combat begins, the Player will be presented with three choices to communicate with the Player. In the game, this represents Knight Alpha using audio clips of their previous Pilot (Jason) to try and encourage the current Pilot. Each choice results in a different emotion.

Sad - Slower and more random crosshair movement.

Angry - Faster and erratic crosshair movement, rewarding skilled Players.

Happy - Steady and predictable crosshair movement.

Art & Design

HUD Layout

- Bottom-left: Pilot's portrait, showing real-time emotional expressions.
- Center: Combat display for enemies and crosshair.
- Top-left: Weapon selection panel.
- Top-Right: Mini Games for Weapon Reload
- Bottom-Right: Weapon launch/shoot button

Visual Style

- Cyberpunk aesthetics featuring vibrant neon and metallic tones.
- Mech dialogue utilizes a distinct font to signify internal monologue.

Enemy and Weapon Design

- Enemies include metallic and organic devil-like creatures, escalating in difficulty across levels.
- Weapons vary in effectiveness depending on the enemy type and feature distinct audio cues and reload mechanics:
 - *Level 1*: Smaller organic creatures; burst weapon most effective.
 - *Level 2*: Metallic constructs; laser shotgun most effective.
 - *Level 3*: Atlas-class monsters; precision rocket launcher most effective.
- Reload mechanics vary:
 - Machine gun: Low reload frequency.
 - Laser shotgun: Medium reload frequency, occasional jamming.
 - Rocket launcher: High reload frequency, single-shot reloads.

Player Character

- *Knight Alpha 01*: A sentient mech equipped with diverse weapons, originally created to defend the city of Omega. Dormant for years, it is now reactivated to face a renewed threat.

NPCS

- *Pilot Circe*: The second pilot capable of commanding Knight Alpha. Nervous and sensitive, they struggle under the harsh criticism of Commander Cloake.
- *Commander Cloake*: The stern leader of Omega HQ, focused on defending the city at any cost. Views Circe and Knight Alpha as tools to achieve this goal.

Audio

Music

- Cyberpunk-inspired tracks to match the game's aesthetic and intensify combat sequences.

Sound Effects

- Distinct weapon audio cues and atmospheric effects to enhance immersion.

Game Experience

UI

- Minimalistic yet informative HUD with color-coded indicators for weapon readiness and Durability.

Controls

- Mouse/Touch: Weapon selection, dialogue choices, reload minigames, and shooting.

- Keyboard/Controller: Hotkeys for streamlined gameplay on larger screens.

Development Roles

User	Role
outisim	Coder
Yami	Coder
moonshews	Writer/narrative designer
Dyana	Artist
WobbleBlast	Music, SFX

Development Timeline

MINIMUM VIABLE PRODUCT

#	Assignment	Type	Status	Finish By	Notes
1	Design Document	Other	Finished	Jan 31, 2025	
2	<ul style="list-style-type: none"> • Implement basic HUD and combat display. • Add one weapon and one enemy type. 	Coding	Finished	Jan 20, 2025	

#	Assignment	Type	Status	Finish By	Notes
3	<ul style="list-style-type: none"> Integrate weapon switching and minigame mechanic Create placeholder assets for visuals. 	Coding	Finished	Jan 20, 2025	
4	<ul style="list-style-type: none"> Add basic emotional state effects on the crosshair. Dialogue selection system prototype. 	Coding	Finished	Jan 22, 2025	
5.	<ul style="list-style-type: none"> Implement mech durability and health. Initial playtesting and balancing. 	Coding	Finished	23 Jan 2025	
6.	Mecha HUD, Player Character Emotes Demo	Art	Finished	Jan 21, 2025	
7.	Enemy Types and Weapons Demo	Art	Finished	22 Jan 2025	
8.	Writing Lore, Dialogues, and Emotion System Design	Other	Finished	24 Jan 2025	
9.	UI and Score	Coding	Not started	Jan 23,	

#	Assignment	Type	Status	Finish By	Notes
	Implementation DEMO			2025	
10	Playtesting and Balancing	Other	Finished	Jan 29, 2025	
11	Submission	Coding	In progress	Jan 31, 2025	

BEYOND (if ahead of schedule / extra time)

Extra levels	Other	Finished	
Settings Menu	Coding	Finished	Volume slider, fullscreen toggle