

DOOM Deconstruction

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Game Deconstruction

High Concept

DOOM is a first-person shooter game that allows players to engage in high-speed combat against endless demons, experiencing extreme violence and exhilarating shooting.

Skill Progression Chart

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
		Level 1 - UAC		Level 2 - Resource		Level 3 - Foundry		Level 4 - Argent Facility		Level 5 - Argent Energy Tower		Level 6 - KadigitSanctum		Level 7 - Argent Facility	
	JAFANLU-3	1	2	1	2	1	2	1	2	1	2	1	2	1	2
1															
2															
3															
4	Actions														
5	Move	H	H	H	H	H	H	H	H	H	H	H	H	H	H
6	Jump	H	H	H	H	H	H	H	H	H	H	H	H	H	H
7	Glory Kills	E	M	H	H	H	H	H	H	H	H	H	H	H	H
8	Crouch	H	H	H	H	H	H	H	H	H	H	H	H	H	H
9	Interaction	E	M	H	H	H	H	H	H	H	H	H	H	H	H
10	Shoot	H	H	H	H	H	H	H	H	H	H	H	H	H	H
11	Double Jump									E	M	H	H	H	H
12	Weapons														
13	Pistol	E	M	H	H	H	H	H	H	H	H	H	H	H	H
14	Combat Shotgun	E	M	H	H	H	H	H	H	H	H	H	H	H	H
15	Frag Grenade	E	M	H	H	H	H	H	H	H	H	H	H	H	H
16	Chainsaw			E	M	H	H	H	H	H	H	H	H	H	H
17	Heavy Assault Rifle					E	M	H	H	H	H	H	H	H	H
18	Plasma Rifle					E	M	H	H	H	H	H	H	H	H
19	Rocket Launcher					E	M	H	H	H	H	H	H	H	H
20	Super Shotgun							E	M	H	H	H	H	H	H
21	Thruster Boots									E	M	H	H	H	H
22	Hologram Grenade									E	M	H	H	H	H
23	Gauss Canon									E	M	H	H	H	H
24	Changun									E	M	H	H	H	H
25	BFG											E	M	H	H
26	Siphon Grenade														
27	Enemies														
28	Possessed	E	M	H	H	H	H	H	H	H	H			H	H
29	Possessed Soldiers	E	M	H	H	H	H	H	H	H	H			H	H
30	Imps	E	M	H	H	H	H	H	H	H	H	H	H	H	H
31	Core Nest	E	M			H	H	H	H	H	H				H
32	Possessed Security					E	M	H	H	H	H				H
33	Possessed Engineers					E	M	H	H	H	H			H	H
34	Hell Razer					E	M	H	H	H	H	H	H	H	H
35	Hell Knight					E	M	H	H	H	H	H	H	H	H
36	Summoner					E	M	H	H	H	H	H	H	H	H
37	Unwilling									E	M	H	H	H	H
38	Revenant									E	M	H	H	H	H
39	Mancube									E	M	H	H	H	H
40	Lost Soul											E	M	H	H
41	Cacodemon											E	M	H	H
42	Baron of Hell											E	M	H	H
43	Pinky														
44	Cyber Mancubus														
45	Cyber Demon														
46	Spectre														
47	Hell Guard														
48	Spider Mastermind														
49															
50	Props														
51	Suits Upgrade	E	M	H	H	H	H	H	H	H	H	H	H	H	H
52	Field Drone	E	M	H	H	H	H	H	H	H	H	H	H	H	H
53	Key	E	M	H	H	H	H	H	H	H	H	H	H	H	H
54	Supplies	E	M	H	H	H	H	H	H	H	H	H	H	H	H
55	Berserk					E	M	H	H	H	H	H	H	H	H
56	Barnes			E	M	H	H	H	H	H	H	H	H	H	H
57	Argent Cells			E	M	H	H	H	H	H	H	E	M	H	H
58	Quad Damage									E	M	H	H	H	H
59	Haste											E	M		

Figure 1. Screenshot of DOOM (2016), 24 September 2024

	A	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA
		Level 7 - Argent Facility		Level 8 - Advanced Research Complex		Level 9 - Lazarus Labs		Level 10 - Titan's Realm		Level 11 - The Necropolis		Level 12 - VEGA Central Processing		Level 13 - Argent D'Nur	
1	JIAFAN LU ->	1	2	1	2	1	2	1	2	1	2	1	2	1	2
2	Actions														
3	Move	H	H	H	H	H	H	H	H	H	H	H	H	H	H
4	Jump	H	H	H	H	H	H	H	H	H	H	H	H	H	H
5	Glory Kills	H	H	H	H	H	H	H	H	H	H	H	H	H	H
6	Crouch	H	H	H	H	H	H	H	H	H	H	H	H	H	H
7	Interaction	H	H	H	H	H	H	H	H	H	H	H	H	H	H
8	Shoot	H	H	H	H	H	H	H	H	H	H	H	H	H	H
9	Double Jump	H	H	H	H	H	H	H	H	H	H	H	H	H	H
10	Weapons														
11	Pistol	H	H	H	H	H	H	H	H	H	H	H	H	H	H
12	Combat Shotgun	H	H	H	H	H	H	H	H	H	H	H	H	H	H
13	Frag Grenade	H	H	H	H	H	H	H	H	H	H	H	H	H	H
14	Chainaw	H	H	H	H	H	H	H	H	H	H	H	H	H	H
15	Heavy Assault Rifle	H	H	H	H	H	H	H	H	H	H	H	H	H	H
16	Plasma Rifle	H	H	H	H	H	H	H	H	H	H	H	H	H	H
17	Rocket Launcher	H	H	H	H	H	H	H	H	H	H	H	H	H	H
18	Super Shotgun	H	H	H	H	H	H	H	H	H	H	H	H	H	H
19	Thruster Boots	H	H	H	H	H	H	H	H	H	H	H	H	H	H
20	Hologram Grenade	H	H	H	H	H	H	H	H	H	H	H	H	H	H
21	Gauss Cannon	H	H	H	H	H	H	H	H	H	H	H	H	H	H
22	Chaingun	H	H	H	H	H	H	H	H	H	H	H	H	H	H
23	BFG	M	H	H	E	M	H	H	H	H	H	H	H	H	H
24	Siphon Grenade														
25	Enemies														
26	Possessed	H	H	H	H	H	H					H			
27	Possessed Soldiers	H	H	H	H	H	H					H			
28	Imps	H	H	H	H	H	H	H	H	H	H	H		H	H
29	Gore Nest		H			H	H								
30	Possessed Security		H			H	H					H			
31	Possessed Engineers	H	H	H		H	H					H			
32	Hell Razer	H	H	H	H	H	H	H			H	H	H	H	H
33	Hell Knight	H	H	H	H	H	H	H			H	H	H	H	H
34	Summoner	H		H	H				H	H			H		H
35	Unwilling	H						H	H	H	H	H			H
36	Revenant	H	H	H	H	H	H	H	H	H	H	H	H	H	H
37	Mancubus		H	H	H	H	H	H	H	H	H	H	H	H	H
38	Lost Soul			H	H			H			H			H	H
39	Cacodemon	H	H	H	H	H	H	H	H	H	H	H	H	H	H
40	Baron of Hell	H	H	H	H	H	H	H	H	H	H	H	H	H	H
41	Pinky			E	M	H	H	H	H	H	H	H	H	H	H
42	Cyber Mancubus				E	M	H	H	H	H	H	H	H	H	H
43	Cyber Demon						E					H	H		
44	Spectra							H	H			H			H
45	Hell Guard											E			
46	Spider Mastermind														E
47	Props														
48	Suits Upgrade	H	H	H	H	H	H	H	H	H	H	H	H	H	H
49	Field Drone														
50	Key	H	H	H	H	H	H	H	H	H	H	H	H	H	H
51	Supplies	H	H	H	H	H	H	H	H	H	H	H	H	H	H
52	Berzerk	H	H	H	H	H		H	H	H	H	H	H	H	H
53	Barrels	H	H	H	H	H	H	H	H	H	H	H	H	H	H
54	Argent Cells	H	H	H				H	H	H	H	H	H	H	H
55	Quad Damage		H		H		H		H		H			H	H
56	Haste			H		H	H	H		H	H			H	H

Figure 2. Screenshot of DOOM (2016), 24 September 2024

Gameplay Loops

Core (Primary) Gameplay Loop

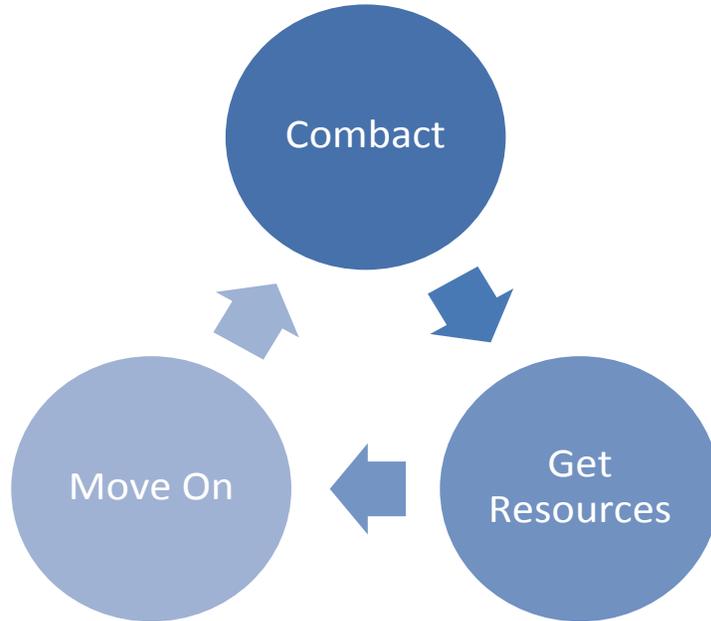


Figure 3: Primary Gameplay Loop

Secondary Gameplay Loop

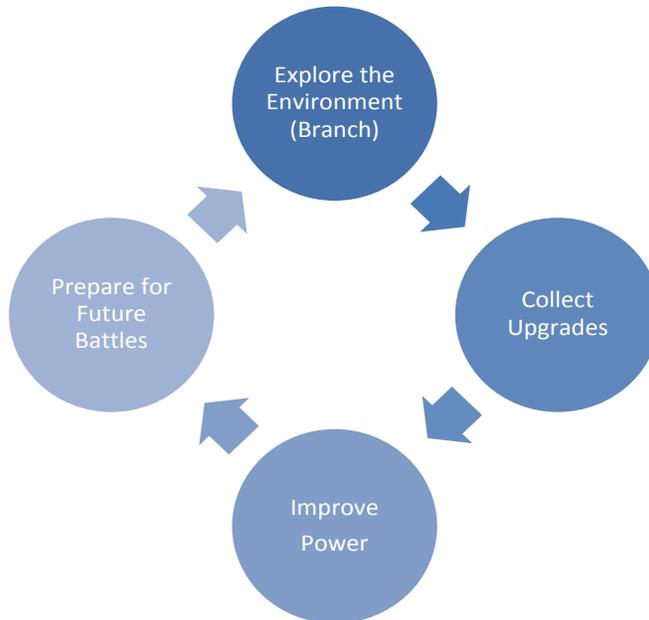


Figure 4: Secondary Gameplay Loop

Tertiary Gameplay Loop



Figure 5: Tertiary Gameplay Loop

Gameplay Styles / Systems

Gameplay Systems

1. The Weapon System:

Overview:

DOOM offers a diverse arsenal, and each weapon possesses unique attributes which are suitable for different combat methods. Weapons can be categorized based on properties such as range, damage, ammunition capacity, and projectile type.

Weapon Categories and Properties:

Category		Range	Damage	Projectile Type	Ammo Capacity
Pistols	Pistols	Short to Medium	Low	Direct Fire	Unlimited
Shotguns	Combat Shotguns	Short	High	Spread Shot	20-60
	Super shotgun	Short	Very High	Spread Shot	20-60
Rifles	Heavy Assault Rifle	Medium	Moderate	Direct Fire	90-210
	Gauss Cannon	Long	Very High	Direct Energy	150-350
Heavy Weapons	Rocket Launcher	Medium to Long	High	Area Damage	10-35
	Chain gun	Medium	High	Direct Fire	60-210
Energy Weapons	Plasma Gun	Medium	Medium to High	Direct Energy	150-350
	BFG9000	Varies	Massive	AOE	3
Melee Weapons	Chainsaw	Melee	Instant Kill	Melee	3-7
	Fists	Melee	High	Melee	1
Equipment	Frag Grenade	Thrown	High	Explosive	1-2
	Siphon Grenade	Thrown	Leech Effect	Energy Field	N/A

General Behaviors/Properties:

Range: The range determines the effective distance for engaging enemies, which encourages the players to switch weapons based on the distance.

Damage: Affects how quickly enemies can be Killed.

Projectile Type: Includes direct fire, spread shots, explosive, AOE and Melee, impacting the player's combat strategy.

Ammo Capacity: Dictates how long a weapon can be used before needing to replenish ammo or change weapons.

2. Enemy System:

Overview:

Enemies in DOOM have unique behaviors and weaknesses, requiring players to adjust tactics. Enemies can be classified based on their threat level, movement speed, attack type, and weakness.

Enemy Categories and Properties:

Category		Threat Level	Movement Speed	Attack Type	Weakness
Small Enemies	Processed	Low	Slow	Melee/Ranged	Any Weapon
	Possessed Soldiers				
	Possessed Engineers				
	Unwilling				
Group Enemies	Imps	Low-Medium	Fast	Fire Ball/Dash	High-rate weapons
	Lost Soul				
Medium Enemies	Hell Razer	Medium-High	Medium to Fast	Melee/Ranged	Heavy Weapon /Accurate Weapon
	Possessed Security				
	Hell Knight				
	Mancubus				
	Cyber Mancubus				
	Revenant				
	Cacodemon				
	Baron of Hell				
	Pinky				
Support Enemies	Summoner	High	Fast	Summon enemies/Ranged	Prioritized Killing
	Gore Nest				
Special Enemies	Pinky	Medium-High	Fast	Special Attack Methods	Specific attack strategy (backside attack)
	Spectre				
	Possessed Security				
Alpha enemy (Boss)	Cyber Demon	Extremely high	Fast	Unique and dynamic attack methods	Attack Strategy
	Hell Guard				
	Spider Mastermind				

General Behaviors/Properties:

Threat Level: Indicates the overall threat level of the enemy.

Movement Speed: Affects how quickly enemies can reach or evade the player.

Attack Type: Determines how enemies deal damage.

Weakness: Certain weapons or tactics are more effective against specific enemies.

3. Abilities and Upgrade System**Overview:**

Players can enhance their abilities through upgrades or picking up props, which will affect their movement, combat, and survivability.

Ability Categories and Effects:

Category	Related Upgrades & Props	Effects
Mobility	Double Jump, Speed Boost, Props (Haste)	Improved maneuverability and speed of evasion
Combat Skills	Weapon Mods, Props (Berserk, Quad Damage)	New attack modes and tactical strategies
Survivability	Health & Armor Upgrades, Props (Health kits, Invulnerability, Armor shards)	Increase the player's survival ability
Resource Management	Ammo Capacity Upgrades	Ability to carry more ammunition

General Behaviors/Properties:

Mobility Enhancements: Allow access to new areas and better positioning in combat.

Weapon Modifications: Provide alternative firing modes, increasing versatility.

Equipment: Items like grenades add tactical depth.

Gameplay Styles

1. Aggressive Combat Style

Description: DOOM Emphasizes some close-range weapons to get some reward.

Encouragement Methods:

Glory Kill Rewards: Health drops incentivize melee combat to gain some props (Health kits, Armor shards).



Figure 6. Screenshot of DOOM (2016), 24 September 2024

Chainsaw Mechanic: Provides ammo replenishment.



Figure 7. Screenshot of DOOM (2016), 24 September 2024

Special Enemies: To effectively kill some special enemies (like the Possessed Security, the game encourages the player to use melee mode of attack)



Figure 8. Screenshot of DOOM (2016), 24 September 2024

2. High Pacing Moving Style

Description: DOOM focuses on constant movement to evade attacks and control the battlefield. The game is faster paced, with sprinting and double jumping being possible (The plot setting is on Mars). The player is faster than almost every enemy in the game, and it is intended that movement is the key to both offense and defense.

Encouragement Methods:

Level Design: Some Arena styled combat areas with verticality and obstacles, which allows the player to climb to evade attacks or attack actively.



Figure 9. Screenshot of DOOM (2016), 24 September 2024

Enemy Behavior: Aggressive enemies require players to keep moving, and some long-range enemies are often located at higher places, encouraging the player to climb and jump to attack them.



Figure 10. Screenshot of DOOM (2016), 24 September 2024

Upgrades: Some mobility enhancements like Double Jump improve the player's maneuverability.

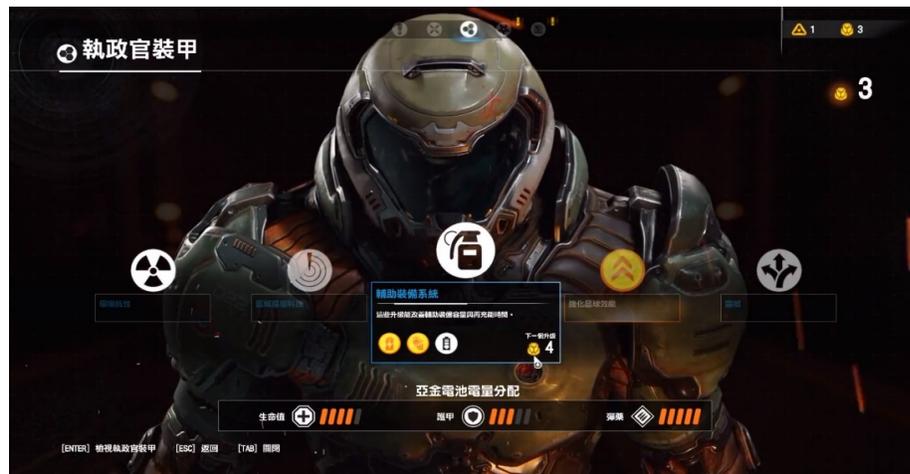


Figure 11. Screenshot of DOOM (2016), 24 September 2024

3. Resource Management Style

Description: The player must manage their health, armor and ammo carefully, as well as use weapons and props strategically.

Encouragement Methods:

Limited Resources: The scarcity of certain ammunition types prompts players to change tactics, for example, by switching weapons and using melee combat.

Weapon Mods: Provide different attack options for various situations.

Conveyances/Affordances

1. Environmental Design:

Lighting and Color Guidance: Using some bright lights, the color contrasts, and dynamic elements to guide the player. Paths leading to objectives often have brighter lighting or noticeable colors.



Figure 12. Screenshot of DOOM (2016), 24 September 2024

Terrain Layout: Level designs include clear roads, stairways, and corridors that naturally lead the player forward.



Figure 13. Screenshot of DOOM (2016), 24 September 2024

2. User Interface (UI):

Objective Prompts: On-screen displays show current missions and secondary objectives, helping players understand what to do next.

Minimap and Navigation: Players can access a detailed map showing their location, objectives, and unexplored areas.

Diegetic UI: N/A

Meta UI: When the player takes damage, a red flash or blur appears at the edge of the screen, indicating that the player needs to pay attention to health. These UI are also used to inform the player when they are using certain props (e.g. Berserk).



Figure 14. Screenshot of DOOM (2016), 24 September 2024

Spatial UI:

1. When an enemy takes enough damage to enter the Glory Kill state, the enemy will flash a blue or orange light, indicating that the player can perform a finisher.



Figure 15 .Screenshot of DOOM (2016), 24 September 2024

2. Pickable items (e.g., ammo, health kits) are displayed in the game world in glowing form for easy identification.



Figure 16 .Screenshot of DOOM (2016), 24 September 2024

Non-diegetic UI:

1. The health, armor, ammunition, and equipment status displayed on the screen help players understand their status in real time.
2. Current tasks and goals are displayed in text on the screen to guide the player through the game.

3. Audio Cues:

Environmental Sounds: Unique sounds in certain areas, like monster growls or mechanical noises, hint at important locations or events nearby.

Feedback

1. Visual Feedback:

Health and Armor Indicators: The HUD clearly displays the player's health and armor values, reflecting the player's survival status in real-time.



Figure 17 .Screenshot of DOOM (2016), 24 September 2024

Damage Effects: When the player takes damage, red flashes will appear on the screen edges, which indicates the severity of attacks.



Figure 18 .Screenshot of DOOM (2016), 24 September 2024

Glory Kill: Enemies that can be executed with a Glory Kill flash with specific colors (blue or orange), signaling the opportunity for a melee finisher.

Enemy Reactions: Enemies show noticeable animations when hit or killed, such as staggering or exploding.

2. Success Rewards:

Resource Drops: Enemies drop health, ammo, or armor upon defeat, serving as immediate rewards for success and enables the player to move forward with abundant health and ammo.



Figure 19 .Screenshot of DOOM (2016), 24 September 2024

Upgrade Progression: Completing challenges or killing a certain number of enemies grants upgrade points to enhance player abilities.



Figure 20 .Screenshot of DOOM (2016), 24 September 2024

References

- [1] Lu, Jiafan. Screenshot of DOOM (2016), 24 September 2024