

BACKWAV GDD

CODENAME : *BACKWAV*

STYLE GUIDE

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1 . GAME OVERVIEW

Backwav is an FPS game taking place in a small arena with a timer. The player is scored based on the stylishness with which they defeat enemies within the time limit. The game rewards use of the intricate movement system, such as shooting enemies while sliding, airborne, or spinning. Quickly shooting enemies without missing shots increases a combo meter, which is a central part of the UI.

2 . NARRATIVE DESIGN

2 . 1 . CENTRAL THEMES

The dehumanization of mankind by global capitalism.

"The moment you're born, you owe a debt".

Worship of wealth and the essentialization of wealth in regards to moral worth.

2 . 2 . LORE

The story takes place in a near-future dystopian world where people inherit the debts of their parents when they are born. People with debt are classified as "debtors", are stigmatized in society, and are forced to wear "debtor's chains" collars that signify the amount of debt that is owed. After generations of this system, it has reached a point where those who are not debtors are heirs to tremendous fortunes or the rare person who manages to pull themselves out of debt. Most debtors are allowed the freedom to choose how they repay those debts, but those owing a certain amount of debt or who are unemployed are arrested and forced to fight for the people's entertainment in the broadcasted program: Battle of the Debtors. In this arena, debtors are rewarded money to go towards paying off their debt by fighting in the coolest and most entertaining ways. As they earn more money combatants are given debtor's chains of higher social standing, until the collar is removed entirely, marking their graduation from the Battle of the Debtors and their freedom. Anybody that survives long enough to pay off their debt is also given a large cash prize.

2 . 3 . PLOT

The plot begins with the player practicing before their first arena fight (tutorial). It continues through the character's rise through the ranks and eventual graduation from the arena.

2 . 4 . MAIN CHARACTER

The player plays as a person born into so much debt that they were condemned to the arena at birth. They were immediately separated from their mother, who was also sent to the arena after giving birth (the cost of giving birth put her over the line). The player's character was raised in captivity, until adulthood when they could be legally entered into the arena.

2.5. SIDE CHARACTERS

2.5.1. BEST FRIEND

The best friend character was imprisoned, similarly to the main character, and grew up together with them. They are introduced through the tutorial, wherein they talk the main character through a training course on their last day before their first fights. They can give exposition about their hopes of winning the Battle of the Debtors with the main character and escaping to a new life. The best friend will not be present in the player's battles, merely being interactable in-between fights with new dialogue based on the player's progress. The best friend will progress through the ranks at the same rate as the player, and is the final enemy in the game to fight. Upon being defeated, the crowd gives their performance a thumbs down, and the player has to decide whether or not to fire the finishing blow. Regardless of their decision, a gunshot rings out and the credits roll.

2.5.2. ANNOUNCER

The announcer is the sportscaster commenting on the fights. This is the character that would ideally be voice acted in the game. They are present only during battles, but are portrayed in ads that are visible between fights. The announcer will interject during particularly notable plays and play to the crowd. The announcer is extremely cheerful and incredibly excitable. Some of the comments should have a sadistic slant to them as well, given the circumstances of what they're announcing for. A big personality is necessary for this character. I'm thinking along the lines of Takarada from *Kill La Kill*. Images of him really tell you all you need to know about the character.



2.5.3. THE CROWD

While amorphous, I'd like for the crowd to react to big combos and stylish kills. Audio feedback is obvious, big crowd roars and gasps. Boos and jeers when the player is doing poorly. I'd also like the walls separating the crowd display thumbs up and thumbs down in different proportions depending on the crowd's mood.

2.6. ENEMIES

The enemies are other debtor combatants in the *Battle of the Debtors*. They should look surreal, human-like but featureless. Ideally uncanny. The reason for this is to hammer home the theme of dehumanization (oh and also to get around DigiPen's rules around violence towards other humans).

2.7. ENVIRONMENT

The environment should reflect the futurism and dystopia of society. Some nods to state propaganda and the televised aesthetic should also be present (such as cameras placed around the level). It will be set in a sort of futuristic hockey arena,

2.8. REFERENCES

3. UI/UX DESIGN

3.1. UI/UI PILLARS

3.1.1. STYLISH

The entire game is all about style, and the UI needs to reflect that. Cool colors and transitions are extremely important.

3.1.2. FAST

The game is fast, so the UI is fast too. There will be numbers and score multipliers flying across the screen as the player shoots enemies.

3.1.3. FLOW

UI elements should feel “flowy” as in very cleanly animated (like liquid).

3.2. MAIN MENU

3.3. HUD

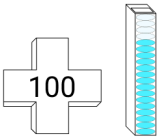
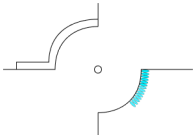
3.3.1. WIREFRAME

Wallrun Headshot
Headshot x3
Slide Kill
Aerial Kill

542 x 9

00004657

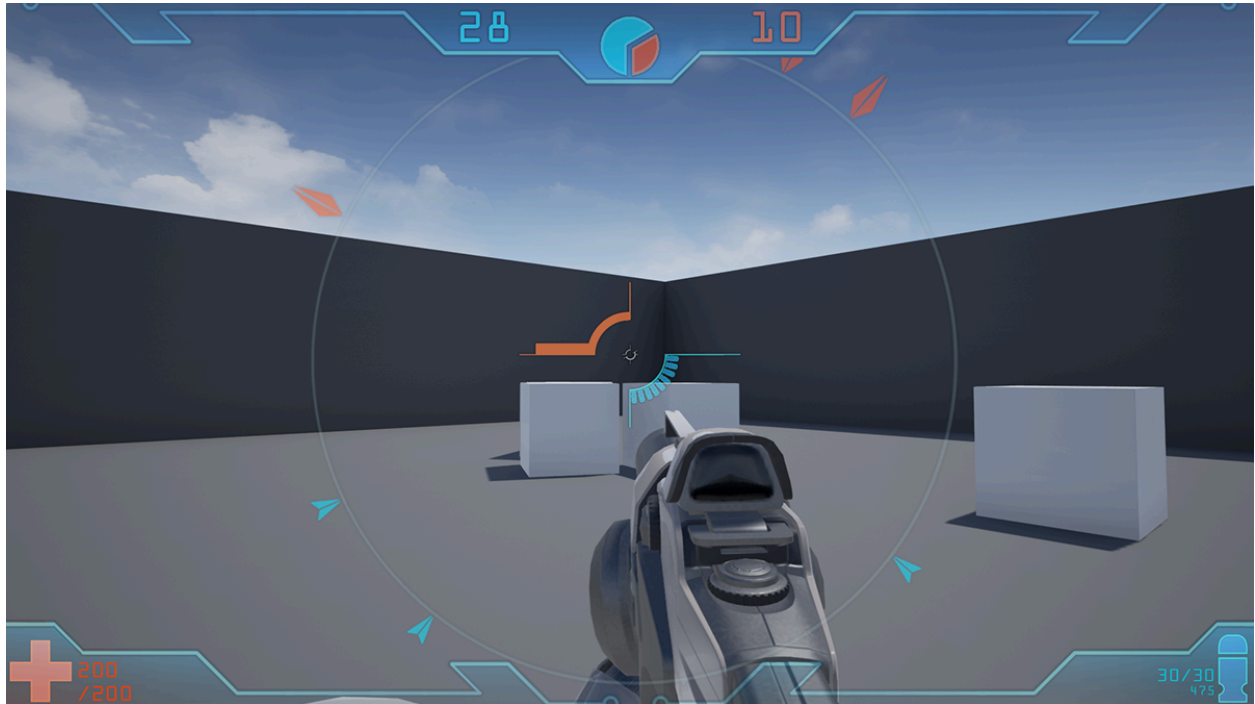
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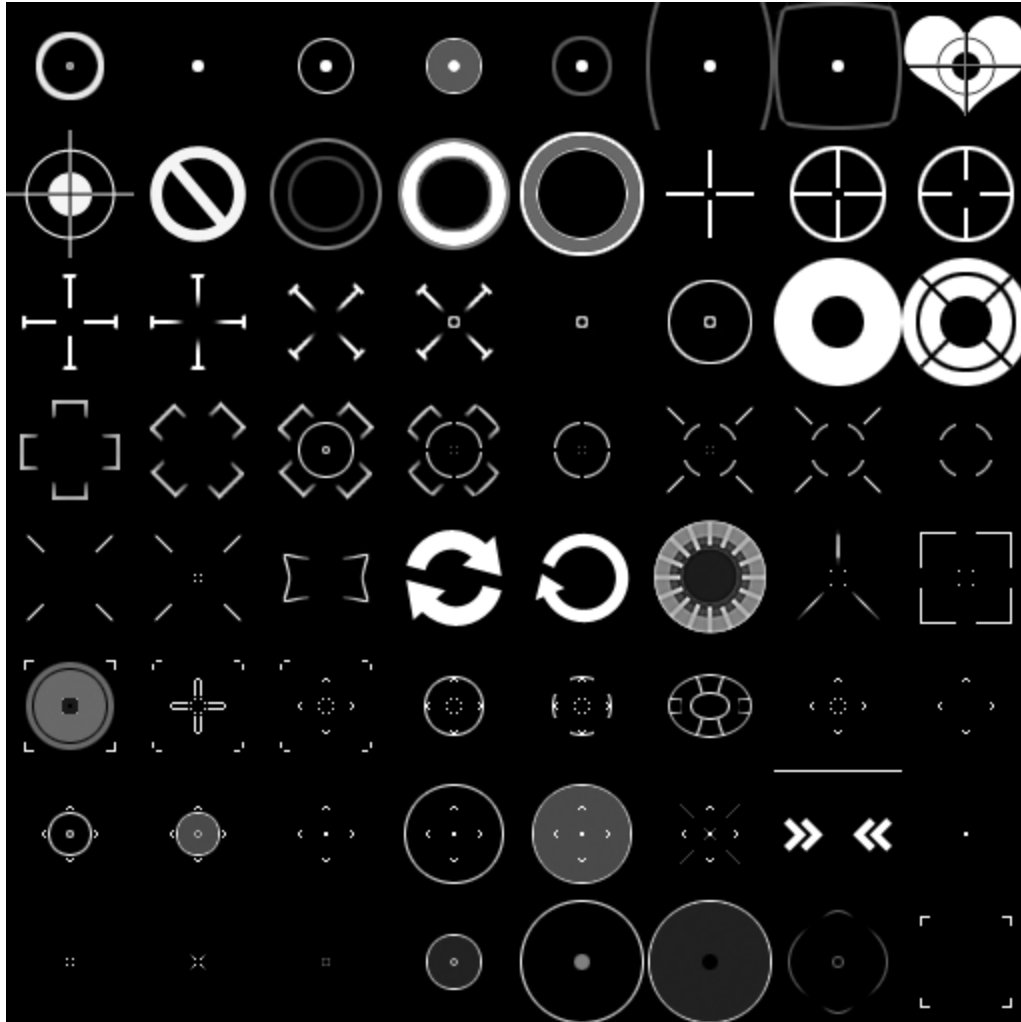


3.3.2.

3.3.3. AIM RETICLE

A good idea for our reticle would be to have it reiterate the player's health, as demonstrated in the image below. The bottom-right part of the reticle includes remaining ammo in the clip.





I'm a fan of:

Row 2 Column 6

Row 3 Column 1

Row 3 Column 2

Row 5 Column 2

Row 6 Column 7

Row 7 Column 1

Row 7 Column 3

Row 7 Column 6

3.3.4. HEALTH BAR

3.3.4.1. NON-DIEGETIC

One option is a non-diegetic HUD, in which the health and ammo is overlaid on the screen. It is important to note that this is not necessarily mutually exclusive with a diegetic HUD since health and ammo should be present in at least two separate locations. I'm looking at Quake (top screenshot) and TF2 (bottom screenshot) for our HUD. I like the bottom center

positioning of the health that is present in Quake and the overall presentation of the health element in TF2. Particularly, in the case of TF2's, how the number is on top of the icon and, the vertical fill, and the symmetry of the element.



3.3.4.2. DIEGETIC

The diegetic option for health and ammo UI would be to have those displayed on the player's weapon itself. I'm somewhat partial to this option (with some caveats) since I believe it would have a better ludonarrative fit. The limiting factors of this implementation is that I'm personally unsure of how that would actually be implemented, since it would be on the model of the weapon itself. A facet of our game that would be ideal for this system is that there is only one weapon for the player, so the weapon model would just need to be designed to fit this. It should be noted, as in the non-diegetic section, that this should be implemented along with diegetic health and ammo elements in another location, most likely on the reticle.



3.3.5. AMMO

Most of the UI design for health is also going to apply for ammo, especially in the case of the diegetic UI element and the attachment to the reticle. I want to note that the current system design holds that the gun reloads clips of limited size from an infinite pool of ammo.

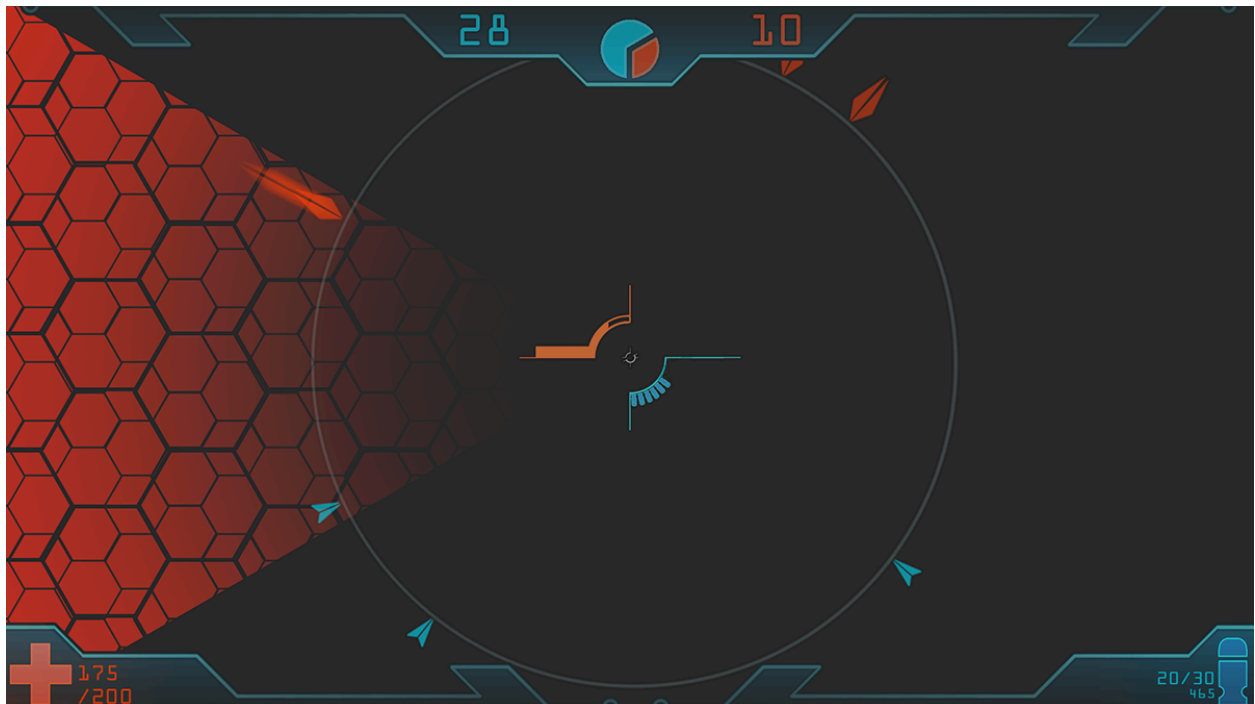
3.3.6. DAMAGE INDICATOR

A 2D arrow indicates direction along the outer edge of an imaginary circle in the center of the screen. I think we should go with the style of the Left 4 Dead (top image) one. There should also be a blurred, red vignette around the edges of the screen, similar to Call of Duty (bottom image).



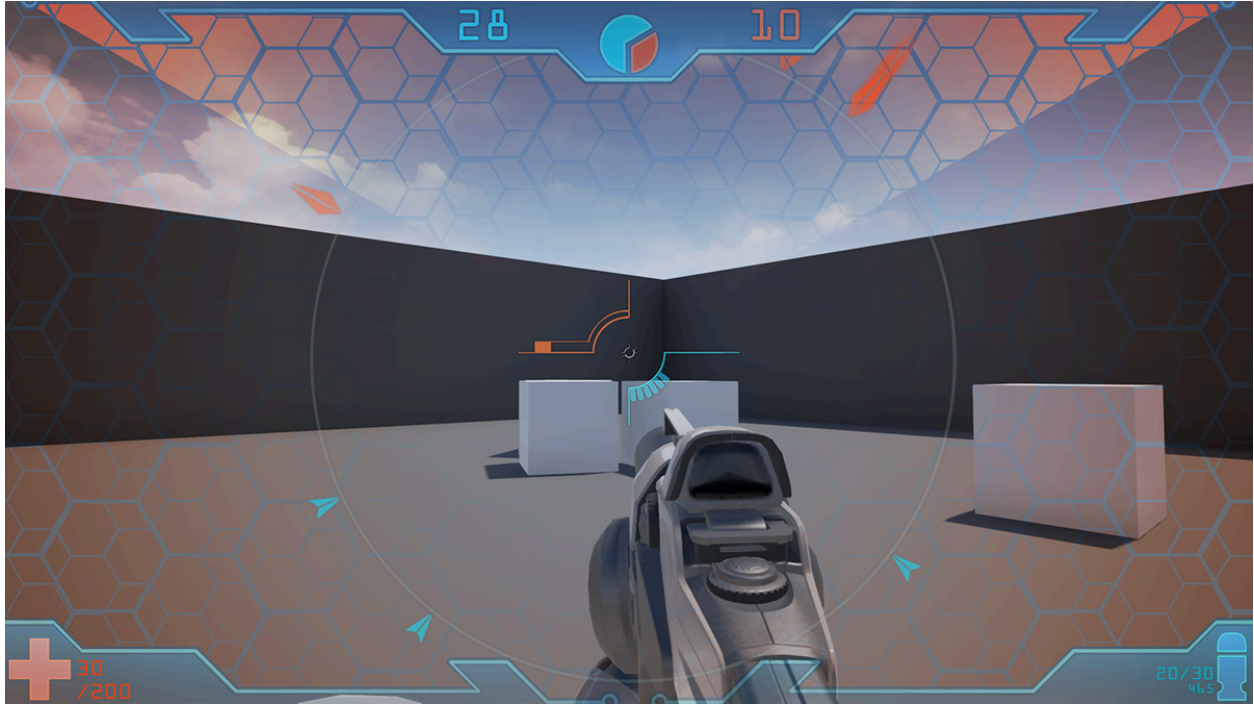


Another idea for hitting the indicator would be for it to originate from the edge of the screen and move towards the center, as demonstrated below. No vignette would be necessary with this implementation.



3.3.7. LOW HEALTH INDICATOR

A heavy, red “pulse” vignette effect on the edge of the screen is necessary for when the player is at low health. The intensity will be tied to how low the player’s health is. Health will regenerate over time,



3.3.8. ENEMY POSITION INDICATORS

For the enemy position indicators, I like taking the idea of a thin circle (compass sorta?), with directional elements for enemies, similar to damage indicators.

3.3.9. SCORE

For the score system UI, I’m looking at *Tony Hawk’s Pro Skater* for how combos look. I like the idea of things that increase your multiplier and have a name that is displayed. However, the bottom screen position is not viable since that’s where the player’s gun is going to be. I think the top right or top left of the screen is where it should go, with the names scrolling vertically with perhaps 3-4 allowed on screen at a time. I am somewhat concerned that it will be too obscure up there, but hopefully playtesting should bear out the correct positioning. The total score number itself should be inspired from *Jet Set Radio*, a big bold number that has completed combos added to it in a satisfying UI animation.

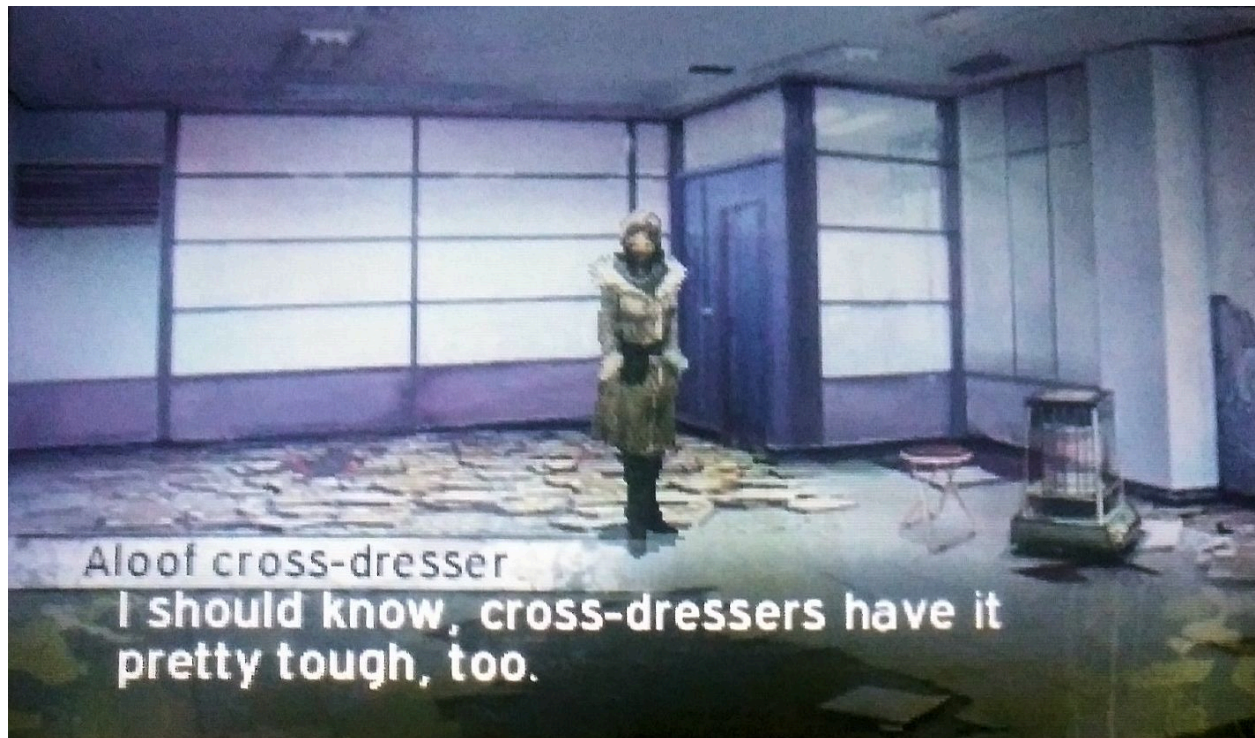


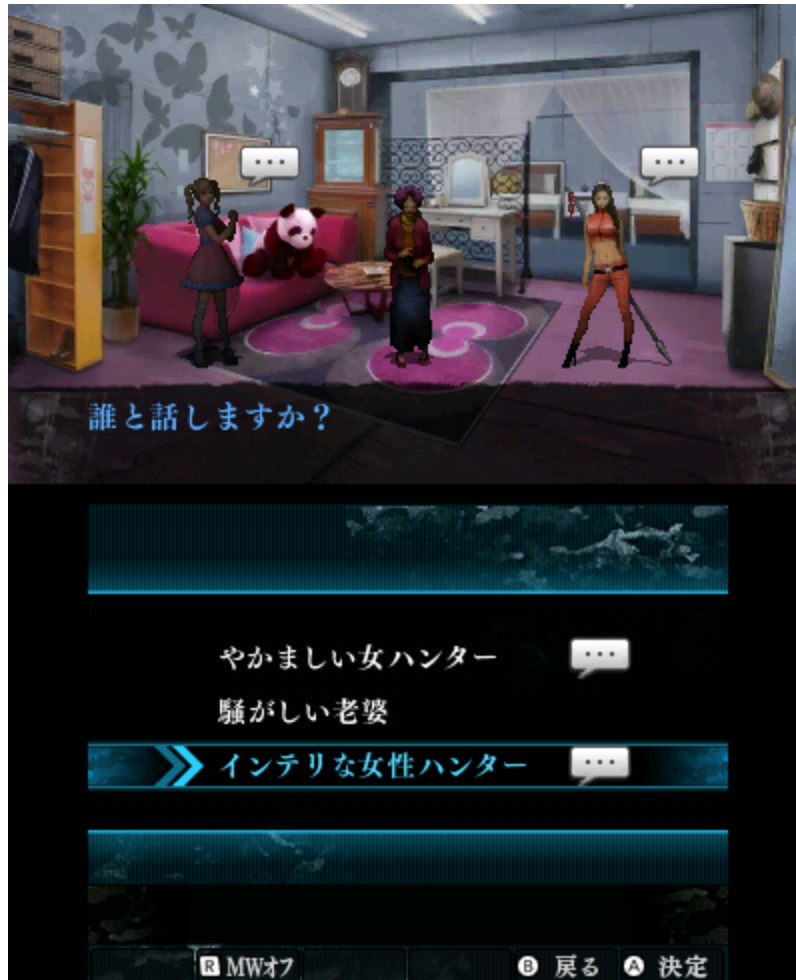
3.4. PAUSE MENU

The pause menu will share assets with the other menus in the game. It will need to feature a resume, options, and exit buttons. These can just be vertical in the center of the screen.

3.5. HOME MENU (WHERE YOU RETURN BETWEEN BATTLES)

Should have a silhouette of the player with their current collar prominent on the right $\frac{1}{3}$ of the screen. On the left $\frac{2}{3}$, there are buttons that allow the player to talk to fellow debtor combatants, take a shower in their quarters (which should be done between battles), and talk to their best friend. This is a necessary down engagement point in the game to refresh the player between high action fights. NPCs are silhouettes (the same ones that are fought in game), and are listed by name in a menu. The difference between the home menu and the bottom reference is that NPCs will be cycled into frame as they are selected.



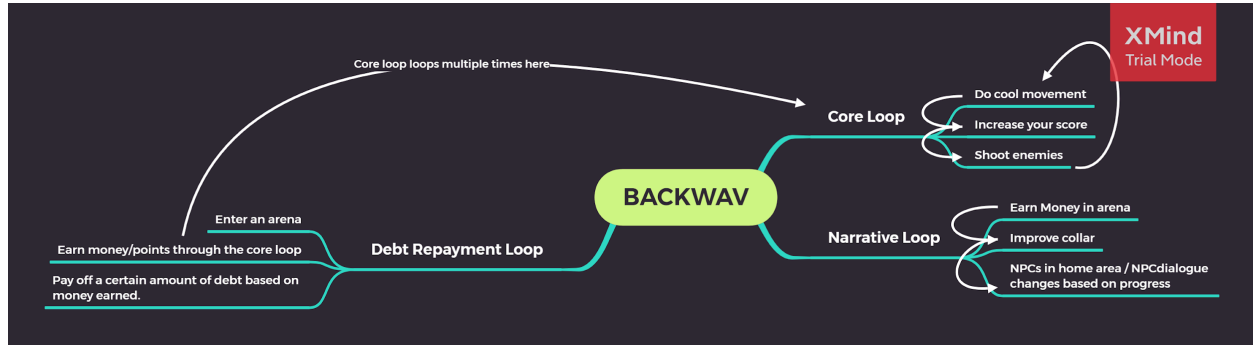


3.6. BATTLE RESULTS SCREEN

The Battle Results Screen appears after a battle and breaks down the player's score, earnings from the battle, resulting medical costs, and shows the player's progression towards finishing the game.

4. SYSTEM DESIGN

4.1. CORE LOOP



4.1.1. BATTLES

The player will enter into a battle, and will fight waves of enemies until the timer reaches zero or they are defeated. Upon the end of the fight, the player will be rewarded based on their score, which is increased based on the stylishness of their kills. This is evaluated based on things like less time between kills, kills while sliding, kills while airborne, kills while wall running, etc.

4.1.2. SCORING

The player is scored on playing as stylishly and flawlessly as possible. Accuracy is rewarded with points, with headshots and chest shots being worth more points than limb shots. There is a combo feature, which increases with headshots and kills and is erased after spending too long without shooting enemies, multiple misses, or upon taking damage. This all feeds into the player's overall score, which rewards the player with monetary progression through which to continue the story.

4.1.3. ENEMIES

Needed Behavior States	Triggered	Adjustable Values
Take Cover (squat)	AI is outside of cover, and there is cover nearby that is	Value of cover in the AI's pathfinding. This is so that AI

	valued higher than attacking the player.	can range from never firing outside of cover to just rushing the player.
Shoot at player	Player is within line of sight and is the most valuable target.	Base Accuracy, fire rate. We should be able to have some AI characters fire more rapidly at the cost of lower accuracy and vice versa.
Evasion	When shot at	Agility determines reaction speed, distance to evade, and whether the AI slides, jumps, or simply runs in a direction.
Staggered	When Hit	Endurance determines the chance of the enemy being staggered. The spot on the enemy hit should also contribute to the chance of the enemy being staggered.
Moving	When moving	Agility determines speed and the propensity for the AI to slide, jump, or wall run. Low agility AI characters should just do a basic run to their movement point, whereas higher agility AI characters should perform evasive maneuvers while moving.

There is one enemy type which uses the same ranged weapon as the player. This enemy represents other combatants in the arena. They will have stats and personalities that can add variety to the combat. Examples of these are aggressiveness (propensity for using cover), agility (propensity for jumping, sliding, and wallrunning), and endurance (chance of being staggered when hit).

4.1.4. PLAYER ABILITIES

4.1.4.1. RUN

Self explanatory. Simple FPS movement.

4.1.4.2. SHOOT

Gun goes pew pew. There will be predictable weapon recoil, along the lines of Counterstrike. The reticle will expand immediately after shots to signify this to the player.

4.1.4.3. SLIDE

The player has the ability to slide at any time, except immediately after sliding in the air. This lowers and tilts the camera, and gives an immediate speed boost in the direction the player is facing. Sliding is affected by the angle of the ground the player is on, and will accelerate (or decelerate slower) on downward slanting surfaces. The effect is opposite when sliding up slopes.

4.1.4.4. WALL RUN

The player can run on any wall by strafing into it while in mid-air. Stopping, turning more than 90 degrees in a direction, or jumping will cancel a wall run. There is no limitation of the amount of wall running a player can do consecutively. Jumping will also give the player velocity in a direction perpendicular to the wall they are running on.

4.1.4.5. WALL CLIMB

The player can run directly up a wall by holding “forward movement” while facing it. The player can climb for a maximum of .8 seconds, which is reset upon touching the ground. Wall climbing is cancelled by overrunning the timer, letting go of “forward movement”, facing away from the wall, or jumping. Jumping will cause the camera to spin 180 degrees (YAW) and -20 degrees (PITCH).

4.1.5. PLAYER WEAPON

The player is equipped with a standard issue less-than-lethal pistol. The player has infinite ammo, however there is still a clip which requires reloading. We are going to use a separate button press for ejecting the clip and then for inserting the new clip, which can tie into scoring since it allows for reloading to be either botched, perfect, or standard. There is a minimum time of **0.12** seconds between weapon shots.

4.2. PROGRESSION LOOP - REPAYMENT PROGRESSION

As the player earns money, they “rise” through the debtor ranks, obtaining different collars which “enhance” (technically unrestricted) the player’s movement. This is an automatic process that happens at certain monetary thresholds between the player’s starting balance and \$0 (or debt free).

4.3. ECONOMY

4.3.1. OVERVIEW

The economy for the game is pretty light. Money serves as a progression meter through the plot as opposed to a tradeable resource. The exception to this rule is medical costs, as some sort of lever for modifying game length outside of score to money ratio is nice to have, and narratively coherent.

4.3.2. MEDICAL COSTS

Medical costs serve as a ludonarrative system lever for limiting progression through the game. Based on the amount of damage that the player takes during a battle (or if they are rendered unconscious) they have to pay an amount of their earnings in medical fees in order to continue. This could be something of a risky mechanic, since players could potentially lose unlimited money (going negative isn't an issue since the player is starting negative and trying to approach zero).

4.4. REFERENCES