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## **OVERVIEW**

## 1.1 Storyline

In the early 1980s, the SCOUT (Secure Computer Operations Universal Tool) antivirus system, designed to protect crucial computer networks, faced its greatest challenge. A sophisticated virus named MALICE (Malicious Automated Logic and Integrated Cyber Entity) has infiltrated the system.

As SCOUT, you aim to defend the system from MALICE's relentless attacks. Deploy conquest nodes to gain territory and push out the malice, evolve your capabilities to combat the virus, and survive against MALICE as long as possible.

#### 1.2 Genre

Protocol Corruption is a 3D isometric tower defense game. It draws inspiration from old 1980s vector graphic computer games and strategic games like Kingdom Rush and Paradox Vector.

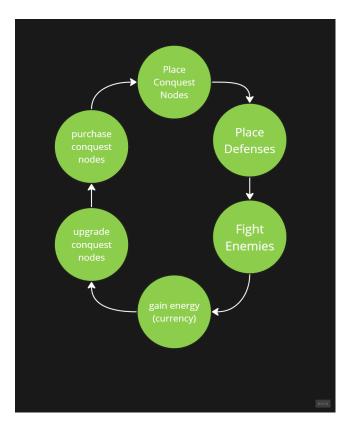
## 1.3 Target Demographic

Protocol Corruption is designed to captivate players who appreciate strategic depth and tactical decision-making. It offers a classic tower defense strategy and upgrade paths that will satisfy fans of the genre. It also introduces a unique conquest node mechanic to attract new players with its territorial acquisition gameplay.

# Game Mechanics:

## 2.1 Gameplay Loop

The player places conquest nodes to acquire territory places defenses.



## 2.2 Detailed Gameplay

A trailer video showing some elements of the game engine and interface can be seen here: <a href="https://youtu.be/2kmP10BNg">https://youtu.be/2kmP10BNg</a> 0

## **2.2.1 Player**

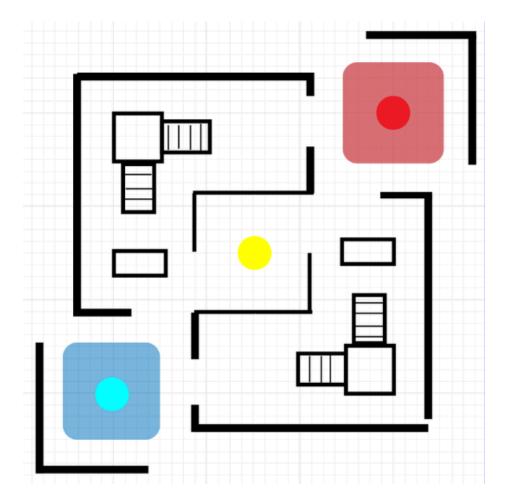
The player controls the character in real-time, with waved-based combat sections in which the player defends its conquest nodes from an onslaught of enemies. Defeated enemies drop energy, which can be used to purchase new conquest nodes or upgrade the influence of existing nodes.

#### 2.2.1.a Controls

- A / D keys (keyboard) / Left joystick (controller):
  Rotate the camera around the map.
- Mouse click (keyboard) / Right trigger (controller):
   Select and place towers or units in real-time.
- Mouse hover (keyboard) / right joystick (controller): hovers over tiles to see if you can place units on that tile.
- M key (keyboard) / Down on Directional Pad (controller):
   Open the map to see territory control and enemy positions.
- E key (keyboard) / View button (controller): Open the skill tree screen
- F Key (keyboard) / Right Trigger (controller): Use special abilities from the skill tree
- ESC Key (keyboard) / Menu button (controller): Pauses the gameplay

#### 2.2.2 Map

The maps in Protocol: Corruption are designed to balance strategic territory control and tactical movement. Each map contains starting areas for both the player and the enemies. Players build towers, defend their territory, and engage in battles with enemies in these zones. As players gain energy, they can upgrade their conquest nodes' influence to gain more territory in the immediate vicinity or spend more energy with a new conquest node that allows the player to take over a new part of the map.



## 2.2.2.a Conquest Nodes

#### Overview:

Conquest nodes are strategic points players place to expand their territory within the game. These nodes are critical for gaining control over territory zones, affecting gameplay dynamics, resource management, and player strategies.

#### Placement Mechanics:

- **Player Control:** Players can place conquest nodes anywhere on the map.
- **Cost:** Deploying a conquest node requires a certain amount of energy (currency) that players earn through capturing territory and defeating enemy units.

• **Visibility:** Once placed, conquest nodes become visible to all players, marking controlled areas on the map.

#### Functionality:

- Territory Expansion: Each conquest node acts as a catalyst for expanding a player's influence in the surrounding territory zones. Nodes can be connected to create larger controlled areas, which increases resource generation. Towers can only be placed in the influence range of the conquest node.
- **Defensive Measures:** Players must defend their conquest nodes against enemy AI troops attempting to destroy them. Defending a node contributes to resource accumulation and enhances the player's control over adjacent zones.
- Corruption Mechanic: If an enemy AI manages to infiltrate a player's territory and destroy a conquest node, it can corrupt that node. Corrupted nodes will become active for the enemy and begin spreading their influence until recaptured by the player. It will also turn the player's units who are under the influence of that node against the player.

#### Strategic Importance:

- **Resource Generation:** Conquest nodes generate energy over time, which is vital for deploying troops and placing defenses. The more nodes a player controls, the more resources they can gather.
- Tactical Decisions: Players must strategically decide where to place nodes to optimize territory control and defense while managing their resources effectively. The placement of nodes can also create choke points or advantageous positions against enemy advances.
- **Dynamic Gameplay:** The presence and control of conquest nodes create an evolving battlefield, as players must constantly adapt their strategies based on the shifting control of these nodes.

#### Visual Representation:

 Conquest nodes will be visually distinct, utilizing the game's neon aesthetic to indicate ownership and status (active, corrupted, or inactive). This will help players quickly assess the map and make strategic decisions.

## 2.2.2.b Map Parameters

Each map follows a general structure that incorporates the following elements:

#### • Territory Zones:

The map is divided into different colored zones representing control points. In the provided example, there are **three main colored zones**:

- Red Zone: Representing a control point of the enemy team.
- Blue Zone: Representing a control point controlled by the player.
- Yellow Zone: A central, neutral zone that acts as a contested area for the player and the enemy. This zone typically provides access to key resources or strategic advantages (such as higher energy regeneration or better positioning for towers).

## **Buildings and Structures:**

Each territory contains **fortified buildings** that serve as a tower placement and defense hub. These structures are often the focal point of territorial battles, and controlling them is key to gaining an advantage on the map. In the example, two main buildings are present in both the **upper-left** and **lower-right** quadrants, which likely serve as bases for each team.

#### Walls and Obstacles:

Walls and barriers divide map areas, creating natural choke points and paths for players. These obstacles force players to plan their movements carefully, utilizing their knowledge of the map to outmaneuver their opponents. Certain areas may be more easily defensible due to these barriers.

#### Control Radius:

Each team's territory is marked by a colored control radius (red or blue), determining where towers can be placed and where units can be deployed. Control of these areas shifts dynamically as teams capture or lose ground during the game.

#### **2.2.3 Economy**

The economy in *Protocol: Corruption* revolves around **energy management** and **resource utilization**. Players must carefully balance spending and saving resources to maintain control of the map and ensure long-term strategic success.

## 2.2.3.a Breakdown of Placeable Objects by Types

Placeable objects in *Protocol: Corruption* are categorized into several key types, each serving a specific function within the game:

#### Towers:

- Defensive Towers: Placed by players to protect their territory from enemy forces. These towers can be upgraded using energy for increased range, damage, or additional effects, such as slowing enemies or providing area buffs to nearby units.
- Utility Towers: These towers provide non-combat benefits such as resource generation, increased energy recovery, or map vision expansion. They help players passively gain advantages without direct combat.

#### Units:

Players can summon various types of units that will roam within the control radius, attack enemies, or assist in defending towers. Units come in the following categories:

- Melee Units: Focus on close combat, dealing high damage but with lower health.
- Ranged Units: Attack from a distance, providing support while escaping immediate danger.
- Support Units: Enhance the player's army by healing, buffing nearby units, or debuffing enemies.

## 2.2.3.b Case Study: Breakdown of Stats per Placeable Object

Each item in Protocol: Corruption is carefully designed to have a distinct role in the player's overall strategy. Below is an example of how items might be broken down by their stats:

#### Defensive Tower (Basic):

• Cost: 50 Energy

• Health: 300 HP

• Damage: 25 per second (single target)

• Range: 3 tiles

• Special Effect: Grants a 5% defense buff to nearby units.

#### Utility Tower (Basic):

• Cost: 80 Energy

• Health: 150 HP

• Buff: 30 seconds

• cooldown: 1 minute

#### Melee Unit (Basic):

• Cost: 30 Energy

• Health: 150 HP

• Damage: 50 per hit (close range)

• Range: 5 tiles

• **Special Effect:** Gains 10% attack speed when near a friendly tower.

## Ranged Unit (Basic):

• Cost: 50 Energy

• Health: 100 HP

• Damage: 15 per hit (close range)

• Range: 8 tiles

• **Special Effect:** Gains 5% range boots when near a friendly tower.

#### Support Unit (Basic):

• Cost: 100 Energy

• Health: 80 HP

• Boost: heal 15% of health

• Range: 5 tiles

• Cooldown: 30 seconds

## 2.2.3.c Energy Acquisition

Energy in *Protocol: Corruption* is acquired through defeating enemies and capturing territory. **Energy** can enhance the player's abilities or speed up tower deployment.

Loot tables are broken down as follows:

- 1. Common Enemies (common enemies, low-risk territories):
  - Small amounts of energy (10-30 units)
- 2. Mid-tier Enemies (stronger enemies, medium-risk
   territories):
  - Moderate amounts of energy (50-100 units)
- 3. **High-tier Enemies** (bosses, high-risk territories):
  - Large amounts of energy (150-300 units)
- 4. Captured Territory (bosses, high-risk territories):
  - Large amounts of energy (300-500 units)

#### 2.2.3.d Resource Flow

Players must constantly generate and use **energy** to maintain their presence on the map. The key flow of resources is:

#### 1. Energy Generation:

 Players generate energy based on the amount of territory they control. The more land they possess, the faster their energy regenerates. Controlling special areas on the map can provide a bonus to energy generation.

#### 2. Energy Spending:

 Energy is spent on deploying towers, summoning units, and activating special abilities. The challenge lies in balancing energy usage between defensive fortifications and offensive actions.

#### 3. Item Acquisition:

 As players progress, they will acquire stronger towers either by purchasing them through in-game shops using energy or unlocking upgrades through skill tree progression.

#### 2.2.4 Experience, Skill Tree, Leveling Up

The skill tree in *Protocol: Corruption* gives players the ability to tailor their playstyle by unlocking and upgrading abilities that impact both **combat** and **territory control**. As players gain experience and level up, they earn **skill points**, which can be used to unlock new skills or improve existing ones.

#### 2.2.4.a Experience & Leveling Formulas

#### 1. Experience Gain:

- Players earn experience by performing a variety of actions, including:
  - **Defeating enemies**: Each enemy defeated provides a set amount of experience based on their difficulty.
  - Capturing territory: Successfully claiming territory or controlling key objectives grants bonus experience.

#### Experience Formula:

The experience needed to level up follows a logarithmic curve to allow faster early progression and slow down as players reach higher levels. For example:

- Level 1 → Level 2: 100 XP
- Level 2 → Level 3: 250 XP

- Level 3 → Level 4: 500 XP
- Level 4 → Level 5: 1000 XP
- And so on...

#### 2. Leveling Up:

 When a player levels up, they gain 1 Skill Point to allocate in the skill tree. Certain levels also unlock additional perks or enhanced stats, such as increased health, energy regeneration, or tower deployment speed.

#### 2.2.4.b Skill Tree Overview

The skill tree in *Protocol: Corruption* is divided into **three branches**, each focused on a specific aspect of gameplay: **Combat**, **Territory Control**, and **Utility**. Players are free to invest in one or spread their points across multiple branches, depending on their preferred playstyle.

#### Combat Branch

This branch focuses on enhancing the player's ability to fight enemies and defend their towers more effectively. Upgrades in this branch strengthen both units and towers, providing additional offensive and defensive options.

#### • Skills Example:

- Tower Precision: Increases the range and accuracy of defensive towers.
- Overcharge: Temporarily boosts unit attack speed and damage for a limited time.

 Energy Pulse: Unlocks a special ability that sends a shockwave from towers, damaging nearby enemies.

#### Territory Control Branch

This branch emphasizes expanding and protecting territory. Players can unlock new ways to quickly acquire land, increase energy regeneration from controlled zones, and reinforce captured territories.

#### • Skills Example:

- Fast Deployment: Reduces the time it takes to build new towers in controlled zones.
- Energy Conduit: Increases energy regeneration from captured territory by 10%.
- Territory Shield: Provides a temporary shield to any newly acquired territory, protecting it from attacks for a short period.

## Utility Branch

The utility branch focuses on passive bonuses and strategic abilities that impact the game's overall flow. These skills do not directly contribute to combat but provide advantages that help in resource management, strategy, and exploration.

## • Skills Example:

- Energy Efficiency: Reduces the energy cost of all actions by 10%.
- Loot Boost: Increase the energy drop amount from enemies by 10%.

## 2.2.4.c Skill Tree Progression Example

Here's an example of how a player could progress through the skill tree based on their desired playstyle:

#### 3. Early Game (Level 1-5):

- Focus on quick progression by unlocking Energy Efficiency from the Utility Branch to manage resources better.
- Invest in Tower Precision from the Combat Branch to ensure early defensive towers have extended range and accuracy.

#### 4. Mid-Game (Level 6-10):

- Begin focusing on Territory Control by unlocking Energy Conduit for faster energy regeneration.
- Combine this with **Overcharge** from the Combat Branch to make unit attacks more potent during critical moments.

#### 5. Late Game (Level 11-15):

- Maximize control over the map with Fast Deployment, allowing the player to rapidly build towers and outpace enemy attacks.
- Finalize your combat efficiency with Energy Pulse, unlocking a powerful crowd control ability for taking on swarms of enemies.

#### Skill Synergies

Each branch of the skill tree has potential synergies that players can use to develop unique strategies:

- Offensive Tower Strategy: Focus on skills from the Combat and Territory Control branches. Tower Precision increases the tower's effectiveness, while Fast Deployment ensures quick reinforcement of defensive lines.
- Energy Regeneration Focus: Players can prioritize the Utility and Territory Control branches, reducing energy costs with Energy Efficiency and enhancing territory gains with Energy Conduit.

• **Defensive Playstyle:** Combine **Territory Shield** from the Territory Control branch with **Energy Pulse** from the Combat Branch to ensure newly acquired land is well-defended.

#### **2.2.5 Enemies**

Enemies in *Protocol: Corruption* vary by behavior, type, and game area, presenting the player with escalating challenges as they progress through the game. Each enemy unit has unique attributes, including health, attack power, movement speed, and special abilities. The game's **A\* Pathfinding System** allows enemies to adapt their behavior based on the player's actions, making encounters more dynamic.

## 2.2.5.a List of Enemy Behaviors

Enemies exhibit a range of behaviors, from mindless rushing to strategic territorial control. Here's a breakdown of the core enemy behaviors:

- Aggressive Rushers: These enemies prioritize moving quickly to overrun the player's defensive positions. They have low health but come in large numbers and can overwhelm poorly fortified areas.
  - Example: Drones Small, fast units that prioritize attacking player towers in groups.
- 2. **Tanky Guardians**: These enemies act as shields for more fragile enemy units. They are slow-moving but have high health and defense, requiring concentrated firepower to take down.

- Example: Soldiers Large, durable enemies that absorb damage while protecting nearby minions.
- 3. **Strategists**: Enemies with this behavior focus on disrupting the player's strategy by attacking key points or sabotaging resource collection. They target weak spots and prefer indirect confrontation.
  - Example: Sappers Enemies that bypass defenses and plant bombs near the player's conquest nodes
- 4. **Territory Invaders**: These enemies seek to occupy the player's controlled territory by corrupting it. They are slower, but deal increased damage to towers and captured zones.
  - Example: **Territorial Corruptors** Specialized units that corrupt land, turning it against the player and reducing energy generation from that zone.
- 5. Ranged Support: These enemies stay back and provide long-range attacks or buffs to other enemies. They require the player to prioritize them early or risk suffering continuous damage or debuffs.
  - Example: **Corrupted Mages** Ranged attackers that weaken player towers with energy-draining spells.

## 2.2.5.b Artificial Intelligence and Behaviors

The **AI** in *Protocol: Corruption* is designed to adapt to player strategies and create dynamic encounters. The following factors influence enemy behavior:

- Proximity to the player or player-controlled areas: Enemies will prioritize targets that are close to them, especially if they detect weak or poorly defended zones.
- **Player aggression:** If the player is actively expanding territory, enemies may respond by sending larger, more aggressive waves to push back.

- Type of enemy unit: Each enemy has specific rules dictating how they behave, with Rushers focusing on speed, Strategists on sabotage, and Guardians on protecting weaker units.
- **Synergy between units:** Enemies often work together, with Tanky Guardians shielding Ranged Support or Strategists creating openings for Rushers.

#### 2.2.5.c Breakdown of Enemy Types by Game Area

Enemies are categorized into tiers, with each tier corresponding to different areas of the game. As the player progresses through the waves, they encounter increasingly dangerous enemy variants.

#### 1. Early Game (Starter Zones):

- Corrupted Minions (Rushers): Weak and fast-moving, these enemies are the first line of defense for enemy forces. They prioritize swarming the player but can be taken down with simple tactics.
- Corruption Golems (Guardians): Slow-moving but incredibly durable, these enemies soak up damage and make it difficult for the player to advance.

#### 2. Mid-Game (Advanced Territories):

- Sappers (Strategists): Introduced early to disrupt the player's territory control. They plant bombs near energy sources, forcing players to defend key points.
- Territorial Corruptors (Invaders): As players begin to control larger portions of the map, these enemies spawn to steal land, reducing player resources.

#### 3. Late Game (End Zones):

 Corrupted Mages (Ranged Support): High-level enemies that weaken player defenses from a distance. They must be eliminated quickly or the player will face significant debuffs.

#### 2.2.5.d Special Enemy Abilities

In addition to their core behaviors, certain enemies possess **special abilities** that challenge the player's strategy:

- **Energy Drain**: Corrupted Mages can sap energy from player-controlled towers, weakening their effectiveness and forcing the player to retreat or repair.
- **Corruption Aura**: Some Territorial Corruptors emit an aura that gradually corrupts nearby territory, even if the player holds control. This requires immediate attention before it spreads.
- **Self-Destruct**: Sappers explode upon death, dealing massive damage to nearby structures and units, encouraging players to take them out from a distance.
- **Shield Wall**: Corruption Golems can activate a temporary shield that reflects a portion of the damage dealt back to the attacker, requiring players to time their attacks carefully.

## 2.2.5.f Enemy Design and Visual Style

Enemies in *Protocol: Corruption* feature a visual theme tied to the concept of decay and corruption. Their designs reflect this with twisted and corrupted forms. The color palette includes dark purples, blacks, and sickly greens.

## 2.2.6 Fight System

The fight system in *Protocol: Corruption* revolves around strategic placement of towers, deployment of units, and managing both territorial control and resource generation. Combat is a blend of real-time tactical decision-making and turn-based mechanics, where the outcome is determined by factors such as unit positioning, attack timing, and proper use of terrain.

## 2.2.6.a Pathfinding

The fight system relies heavily on an *A\* pathfinding system*, which dictates how both enemy and player-controlled units navigate the map. Pathfinding influences how units move, avoid obstacles, and engage targets.

- Movement Restrictions: Units can only move along designated grid paths, avoiding diagonal movement. This adds a layer of strategy, as players must place towers and units in positions that force enemies into chokepoints or along more difficult routes.
- Enemy AI Pathfinding: Enemies prioritize reaching player-controlled towers or conquest nodes but adapt based on tower placement, obstacles, and player actions.
  - Dynamic Recalculation: If a player blocks a path or places new defenses, the AI recalculates its approach, ensuring that combat is responsive and tactical.

## 2.2.6.b Fight System Formulas

The fight system uses several formulas to calculate the outcomes of attacks, defenses, and other combat interactions. These formulas govern the balance between player-controlled units, towers, and enemy forces.

#### 1. Damage Formula:

Damage = Base Attack Power - Defense Value

Example: If a unit with 50 base attack power and an enemy with 30 defense. The damage would be 50 - 30 = 20 damage.

#### 2. Territory Influence Formula:

- Controlling territory enhances unit performance.
   This is calculated by:
  - Territory Buff = (Controlled Territory / Total Territory) \* 10%
  - The more territory the player controls, the stronger their units and towers become, encouraging players to maintain territorial dominance.

#### 3. Energy Gain Formula:

- Energy is crucial for building and upgrading towers and deploying units. Energy is generated by controlling territory and defeating enemies.
- o Energy Gain per Second = (Controlled Territory % /
  Total Map %) \* Energy Multiplier.
- **Example:** If a player controls 40% of the map and the Energy Multiplier is 5, the player gains (40/100) \* 5 = 2 energy per second.

#### 4. Attack Speed Formula:

- Units and towers have varying attack speeds, determined by:
  - Attack Speed = Base Speed + (Weapon Speed Modifier) (Armor Weight / 10).
- Lighter, faster units will attack more frequently but have lower defense, while heavier units attack slower but with more impact.

# III) GAME ENVIRONMENT

#### 3.1 Environment

Protocol: Corruption is set in a virtual 1980s computer world, featuring a synthwave aesthetic with neon colors, grid-based landscapes, and Tron-inspired architecture. This stylized digital environment captures the look and feel of retro-futurism, combining sleek lines and glowing elements with hints of technological decay to reflect the game's themes of corruption and digital warfare. The world is divided into several biomes, each introducing a unique aesthetic, challenge, and strategic implications.

#### Zone Types:

- Mainframe Core(end): The central hub of the game world, representing the "brain" of the computer. It features towering data structures, pulsing neon circuits, and massive cooling towers. Enemy AI is especially challenging here, protecting the core at all costs.
- Data Storage Fields: A zone filled with stacked "data towers" and archives, represented by glowing grids and data blocks. This area is a maze of digital walls and corridors, with enemies lurking to defend important information with many additional points to capture.
- Virus-Infected Areas: Corrupted zones with visual glitches, flickering lights, and broken digital pathways. These areas spread slowly, consuming player-controlled regions if not contained, and pose unique environmental hazards.
- **Circuit Pathways**: High-speed transit zones resembling futuristic highways, complete with moving light patterns to simulate data flow. These areas allow for faster movement but are exposed to frequent enemy patrols.

#### 3.2 Game World

In *Protocol: Corruption*, the game world is divided into distinct zones, each with **five levels**. Players must clear each level within a zone before advancing to the next, progressing through increasingly challenging environments within a synthwave-inspired, digital landscape. Each zone represents a unique part of the computer's system, with escalating difficulty, strategic challenges, and thematic elements that reflect its purpose within the corrupted virtual world.

#### • Level-Based Structure:

- Each zone contains five structured levels, and players must complete each level to advance. Levels are designed as isolated, combat-focused maps with specific objectives, such as capturing control points, defeating waves of enemies, or protecting critical structures.
- Upon completing all five levels in a zone, players unlock access to the next zone, each presenting new environments, enemy types, and strategic challenges.

#### Zone Themes:

- Each zone reflects a different aspect of the computer's system, such as Data Storage, Core Processing, and Network Control. Thematically, each zone is visually distinct, with unique color schemes, architectural elements, and environmental hazards.
- Progressing through zones simulates "digging deeper" into the heart of the corrupted system, with each new zone revealing more about the underlying mystery and introducing more formidable enemy defenses.

#### • Territory Acquisition within Levels:

 Players will encounter multiple capture points within each level that they must take over by

placing towers. Each capture point grants tactical advantages, such as improved spawn rates, additional energy (currency), or expanded vision over the map.

 AI Resistance: Each level is guarded by enemy AI forces dedicated to maintaining control. Enemies will actively attempt to reclaim lost control points, creating dynamic battles that test the player's defense strategies and resource management.

#### • Progressive Difficulty:

- As players advance through the levels within each zone, enemy difficulty and the complexity of the level layouts increase. Later levels in a zone may introduce environmental hazards like unstable data pathways, which periodically disable or damage player towers.
- Levels become increasingly challenging due to enemy reinforcements, higher aggression, and obstacles that require players to adapt their strategy to maintain territory control.

## IV) IN-GAME ART

In *Protocol: Corruption*, the in-game art embraces a sleek, neon-heavy aesthetic with vector-based graphics and grid-focused designs, evoking the retro-futuristic style of 80s digital sci-fi. The visual direction aims to create a distinct, immersive world where each level feels like a unique part of a simulated digital universe, emphasizing sharp lines, glowing elements, and clean vector graphics.

#### 4.1 Tilesets

## • Neon Grid Designs:

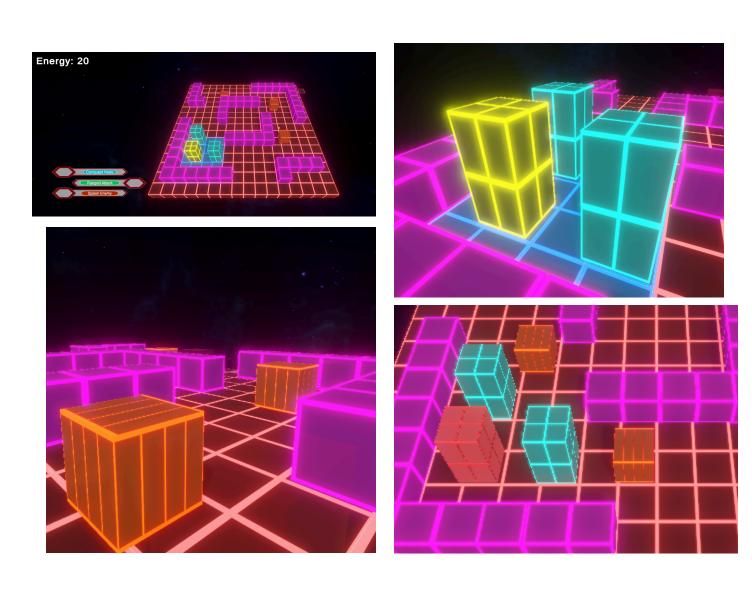
 The world is built on neon-lit grid patterns, where floors, walls, and platforms are defined by sharp,

- glowing lines on dark backgrounds. The grids create a sense of depth and form the primary visual structure across each level.
- Zone-Specific Color Palettes: Each zone within the game uses a specific neon color scheme to differentiate its environment, with cool blues for data areas, intense reds for secure processing zones, and electric greens for high-risk regions. These visual cues help players recognize the distinct nature of each zone.

#### • Vector-Based Elements:

- All in-game assets, from obstacles to UI elements, are vector-based, ensuring a consistent and polished look. This includes streamlined geometric shapes and wireframe designs that represent objects and environmental elements in a stylized, futuristic manner.
- Corruption Effects: In corrupted zones, vector elements distort and flicker, with glitchy overlays that simulate data decay. The simplicity of vector graphics heightens the impact of these effects, highlighting corrupted areas and signaling danger.

# VI) SCREENSHOTS



# VII) MUSIC & SOUND EFFECTS

The music and sound effects in Protocol: Corruption are designed to immerse players in a high-stakes digital battleground. The dark, punchy synthwave soundtrack is the core of the audio design, blending intense beats with gritty synth lines to reinforce the feeling of being deep in a hostile system. Ambient and contextual audio cues further intensify the experience, ensuring each battle and exploration sequence feels compelling.

#### 8.1 Music

#### Dark, Battle-Focused Synthwave Soundtrack:

 The game's soundtrack consists of high-energy, dark synthwave tracks with driving basslines, powerful drum beats, and intense synth riffs, creating a simultaneously retro and foreboding atmosphere.

#### References

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#### Zone-Specific Themes:

- Data Storage Zone: Tracks are more ambient yet still edgy, with ominous undertones that foreshadow the growing threat.
- Core Processing Zone: Heavy, battle-like synth beats create an adrenaline-fueled experience as players face more challenging enemies.
- Network Control Zone: High-energy, dark synthwave tracks with echoing synth lines and escalating tension keep players on edge in this critical zone.

#### 8.2 Sound Effects

#### Intense Retro Digital Effects:

- Sound effects are designed to be sharp and punchy, using a mix of gritty digital bleeps and heavy, percussive tones. Key actions like attacking, deploying defenses, and capturing territory are accompanied by forceful, synthetic sounds that drive home the high-stakes environment.
- Player Actions: Sounds for attacks and ability usage are impactful, with a satisfying punch and echo that reinforces the player's presence in the digital world.

#### **Environmental and Corruption Effects:**

- Corrupted zones feature low, rumbling hums, distortion, and glitch-like audio, adding an eerie atmosphere.
   Players hear unsettling digital feedback as they approach these areas, increasing tension before encounters.
- Ambient Computer Sounds: Background sounds like deep, resonant hums, modem pings, and subtle distortion emphasize the computerized environment, amplifying the retro sci-fi feel.

## 8.3 Breakdown of Music and Ambient Sounds per Region

Zone	Music Style	Ambient Sounds
Data Storage	Low, foreboding synths with a gritty bass undertone	Soft hums, clicks, and whirrs
Core Processing	Heavy, intense beats with dark synths	Deep hums, occasional static bursts
Network Control	Fast-paced, dark synthwave with echoing riffs	Modem sounds, digital pulses
Corrupted Zones	Distorted synths with dissonant, glitchy sounds	Glitches, high-pitched distortion

# VII ) REPLAYABILITY AND ADDITIONAL GAMEPLAY IDEAS

Protocol: Corruption aims to provide players with a compelling and repeatable gameplay experience. Through layered mechanics, varied challenges, and evolving gameplay, players can enjoy fresh experiences across multiple sessions.

#### 9.1 Replayability

#### • Randomized Map Layouts and Enemy Placement:

- To keep each playthrough unique, map layouts and enemy spawns can vary within each zone, giving players new tactical challenges on every run.
- Dynamic Enemy Scaling: Introduce enemy difficulty scaling based on player level or performance, encouraging strategic adjustments for every zone.

#### • Difficulty Levels:

 Adding multiple difficulty settings will allow players of varying skill levels to engage with the game. Higher difficulty levels could introduce more enemies, faster corruption rates, or limited resources, pushing players to use advanced strategies.

## 9.2 addition Gameplay Ideas

## Alternate Play Modes:

- **Survival Mode**: Players face endless waves of enemies, aiming to survive as long as possible while defending their territory.
- Challenge Mode: Specific challenges, like completing levels with limited resources or preventing any

corruption spread, test players' mastery of the game's mechanics.

#### Customizable Loadouts and Skills:

• Allow players to unlock alternate skills and abilities or customize their starting loadout. This creates multiple possible strategies as players experiment with different skill combinations to find their optimal playstyle.