AI Analysis - MOBs (Robot and Turrets)

Design Objective

Following the inclusion of a Combat System in the concept, the need arose to insert an AI that could allow the player to face a correct level of Challenge and exploit the combat mechanics. The AIs inserted are divided into 3 different types: **Turrets** (*Ranged Combat*), **Robots** (*Melee Combat*) and **Boss** (*Melee/Ranged Combat, analyzed and designed after the pitch review*). The robots and turrets are the government's enforcers, machines built to identify and destroy every type of art form in order to erase human creativity and standardize all human beings. For this reason they are attracted to the main character and attack him (the MC is a rebel, he continues to express his artistic streak with music, which is why he is a target of the machines).
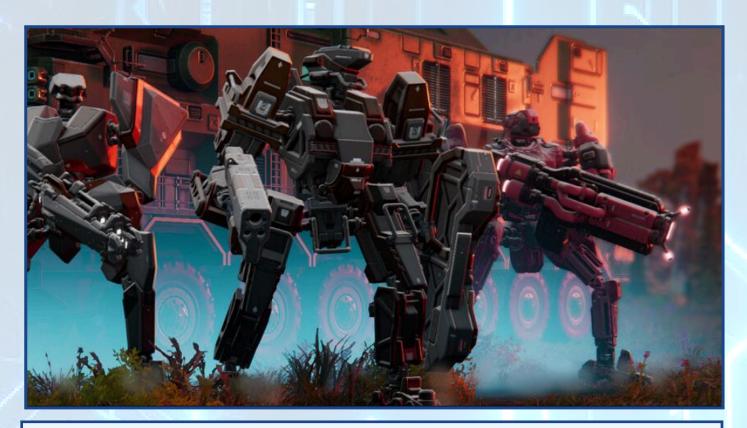

Mobs - AI Type

🟨 FSM - Turrets and Robots Moveset Explanation

The AI included in the game concept are of the Final State Machine type. They are artificial intelligences that vary their current state based on triggers (in the specific case, spherical spatial triggers in which the direction of detection of the character is indifferent). When a trigger is activated and the current state is changed, the AI performs different operations compared to the previous one. Through Fakes and Patrol, it is possible to give the player the impression that they are as "alive" as possible.

Observable Behavior

With each change of state, the AI will show the player behavioral changes with visual and auditory effects. When switching from Patrol State to Chasing State, the robots will make a sound and show a warning popup to the player in order to catch his attention and let him know that he is under attack. Each attack of the robots and turrets is punctuated by 3 beats before. At each beat the lighting color of the AI is changed which will go from green (3 beats left to the attack) to red (1 beat to the attack). The attack is preceded by a large movement of the limbs as regards the Robots.

Continuous Behavior

The transition between the various AI states is continuous. In this way the enemies will never be still (Patrol for the Robots, continuous rotation for the Turrets) and will never give the player the impression of not being alive or dynamic. During combat, the robots will perform Barks to increase the player's perception of their intentions.

Interactive Behavior

Each AI state can be interrupted by movement from the player. In fact, by exiting the Robot and Turret detection triggers the player will interrupt both the Chasing phase (>8m distance) and the attack phase (>2m distance).

Constrained Behavior

Objective	Description
Gameplay Objective	To continue with the gameplay, the player will find himself in arenas that can only be opened by defeating all the enemies.
Emotional Objective	The MOBs want to deliberate aesthetics of Challenge (PvE), Logic, Discovery and Creation (combo-maker and use of combos in combat), Excitement (fast-paced combat)

Sequential Behavior & Patterns

The behavior of the AI included in the Concept is completely sequential, a fixed pattern is always followed for the Attack and Patrol phases. During the Chasing phase, the AIs simply follow the player (movement and rotation for the Robots, only rotation for the Turrets).

Serve the user

The objective of the enemies is to create a gradual challenge for the player and allow him to obtain mastery in the use of the main Combat mechanics. Throughout the combat each AI always wants to interact with the player (Barks, light and auditory signals, attacks, chasing).

AI Triggers

Robots

Trigger	Description
8 Meters Trigger Sensor	Sensor used for **Patrol State**. When the distance from the player is greater **than 8 meters**, Robots remain in the **Patrol State** and follow the next point. When the distance is below 8 meters and greater than 2 meters, Robots will follow the player in the **Chasing State**.
2 Meters Trigger Sensor	Sensor used for **Attack State**. When the distance from the player is below **than 2 meters**, Robots start to count Beats in order to attack the player.
Internal Beat Sensor	At the fifth beat in which the Robot has entered the **Attack State**, it begins to warn the player of the attack (*from the fifth to the seventh beat the robot uses VFX and SFX to warn the player*).

Turrets

Trigger	Description
15 Meters Trigger Sensor	Sensor used for **Sentinel State**. When the distance from the player is greater **than 15 meters**, Turrets remain in the **Sentinel State** and rotate searching for the player. When the distance is below 15 meters, Turrets start to follow the player in the **Aiming Status** and to count Beats for the **Attack Status**.
Internal Beat Sensor	The third and fourth beats are signaled to the player to indicate that the Turret is about to attack (VFX and SFX).

THUMBNAIL
Turrets concepts

Tuning

📗 **Turrets and Robots - Stats**

GAMEPLAY

Fakes

Animations

In every state the Turrets and Robots are in, the goal is to give the player the impression that they are always active and that they are always doing something. To do this, animations will be inserted which, through the use of sounds and visual effects, will allow the MOBs to always do something and always remain active.

Insight for Attack Animations and Anticipations: 🔲 ***FSM - Turrets and Robots Moveset Explanation***

Barks

Through sound effects, the robots and turrets will emit words that aim to provoke the player and make him feel all the desire they have to capture him (the objective remains to simulate an environment that is constantly alive and attentive to the player).