



Design Expansion Ideas for a Roguelike Auto-Shooter Game

Enemy Movement & Swarm Behavior

- **Boid-Like Flocking Swarm:** Introduce a group of small enemies that use *flocking* rules (alignment, cohesion, separation) to move as one unit ¹. They organically swirl around obstacles and attempt to encircle the player, even splitting and re-forming their flock after avoiding obstacles ². *Best for later arenas (more complex movement patterns could overwhelm Arena 1 beginners).*
- **Encircling “Murmuration” Wave:** Occasionally spawn a *swarm wave* that rushes in a broad formation and encircles the player (inspired by starling murmurations). For example, a ring of enemies with high health could spawn at the screen edge and slowly tighten around the player ³, forcing the player to break through. *Fits as a special event in intermediate arenas once players learn basic crowd control (too intense for Arena 1).*
- **Wolf-Pack Flankers:** Enemies that exhibit *pack tactics*, coordinating to attack from multiple angles instead of all chasing directly. For instance, one group engages frontally while others swing wide to flank, mimicking how wolves herd prey. This tests player awareness and encourages constant repositioning. *Use sparingly in mid-game arenas – Arena 1 should stick to simpler direct chasers.*
- **Charging “Spearhead” Enemy:** A fast enemy type that periodically **telegraphs and dashes in a straight line** toward the player. This charger adds bursts of pressure and punishes linear movement patterns. (E.g. Brotato's Racing Snail charges extremely quickly in a line ⁴.) *Could be introduced in Arena 1's boss or Arena 2, after players grasp basic dodging.*
- **Ranged Zoning Enemy:** An enemy that **maintains distance and fires projectiles**, forcing the player to dodge bullets while managing melee foes. For example, a stationary turret or archer enemy that hangs back and shoots (similar to the Fire Breather in Brotato, which stands at range and spits fireballs ⁵). This creates a “zoner” threat that players must prioritize or avoid. *Introduce in Arena 2 or 3 once the player is comfortable with pure melee swarms.*
- **Area-Denial Trapper:** An enemy focused on **creating hazards** rather than direct damage. It might drop mines, puddles of slime, or fire patches on the ground, turning parts of the arena into kill zones. This enemy doesn't chase quickly; instead it claims territory and funnels the player's movement. (For instance, a spider-like foe leaving slowing webs.) *Best for a future arena focused on spatial control (not Arena 1, as new players could be overwhelmed by too many hazards).*
- **Buffer/Leader Unit:** A **leader enemy** that provides buffs (speed, damage, or defense) to nearby minions, simulating swarm intelligence where others align to a leader. Players must target the leader to disrupt the swarm's coordination. For example, a shaman that drums to enrage nearby foes or a

glowing “alpha” fish that the school follows. *Fits in post-Arena 1 content once players can identify and prioritize targets under pressure.*

- **Splitter Swarm Enemy:** A foe that **splits into smaller units** when defeated, akin to a mitosis or hydra effect. Killing a “Splitter” could spawn two or more mini-enemies, instantly turning a simple encounter into a swarm ⁶. This teaches target prioritization – players learn to save AOE attacks or clear space before splitting an enemy. *Could appear as a surprise in Arena 2 or 3 (Arena 1 should avoid this to keep initial waves clear and readable).*
- **Treasure Carrier (Fleeing Enemy):** A rare, non-aggressive enemy (e.g. a “Gold Puffer” or goblin) that **spawns occasionally with a cache of XP or an item**, then attempts to flee. If the player chases it down before it escapes, they earn extra XP or a power-up. This introduces a risk-reward during waves – divert attention to chase the prize or focus on survival. *Can be used even in Arena 1 as a bonus mechanic, since ignoring it has no penalty – it simply rewards skilled play without adding complexity to core combat.*

Arena Features & Environmental Mechanics

- **Dynamic Hazard Zones:** Design arenas with periodic **environmental hazards** that force movement. For example, meteorites could bombard random spots ⁷ or sections of the floor could electrify on a timer. Players get a telegraph (warning indicator) and must reposition to **safe zones**. This creates routing challenges mid-combat. *Not used in Arena 1 (which should remain straightforward), but great for later themed arenas or a “hazard training” arena.*
- **Moving Safe Zone Mechanic:** An arena (or mode) where a deadly effect slowly blankets the arena **except for a safe zone that moves**. For instance, toxic gas encroaches, and only a glowing circle (that shifts location periodically) is safe. The player must continuously move and fight toward the safe zone. *Suitable as a special challenge arena or survival mode, not for Arena 1’s introductory focus.*
- **Player-Triggered Traps:** Scatter **interactive traps** in the environment that savvy players (or certain enemies) can trigger. Examples: floor spikes that activate when stepped on, flame geysers that fire intermittently, or collapsing pillars. The player can lure enemies into these traps for bonus damage or crowd control. *These make arenas more engaging in mid-game; Arena 1 should have no traps, but Arena 2+ could introduce one trap type at a time to teach their use.*
- **Breakable Cover and Obstacles:** Implement **destructible pillars or walls** that provide temporary cover. Heavy enemy attacks or repeated use will shatter the cover ⁸, removing the safe haven. This reinforces that hiding is fleeting – as seen in Arena 2’s boss (The Monolith) which turns cover into a liability. *Arena 1 has no cover, but Arena 2 explicitly teaches this: pillars offer safety until enemies (or the boss) destroy them, encouraging constant movement.*
- **Shifting Arena Layouts:** Add **moving terrain or reconfiguring layouts** to arenas. For example, rotating platforms that slowly change position ⁹, walls that rise or lower between waves, or bridges that occasionally extend/retract. A “living” arena keeps players on their toes as routes open or close over time. *This fits a more advanced arena (Arena 3 or 4) when players can handle simultaneous combat and navigation challenges.*

- **Environmental Weapons (Explosive Objects):** Place **hazardous objects** in arenas that players can use to their advantage. Examples: exploding barrels that deal massive area damage, rolling boulders, or turrets that can be activated. Savvy players will shoot a bomb crate when a horde surrounds it. Enemies could also accidentally trigger these. *Can be introduced in a light way in Arena 2 or 3 to spice up gameplay once basics are mastered.*
- **Roaming Neutral Hazards:** Include **independent hazards** that affect both player and enemies. For instance, a sawblade that bounces around the arena or a roaming flame-spout. These act as pseudo-enemies that neither side controls, adding complexity to positioning. *Use in later arenas or bonus modes, as it adds chaos – ensure telegraphs are clear to maintain fairness.*
- **“Survival” Arena (Timed Challenge):** Create a mode or arena where the goal is not wave-clearing but **surviving a set time** under endless onslaught. Enemy spawns ramp up over time instead of ending in a boss fight. This *survival arena* tests endurance and dodging. (It could unlock after beating Arena 1 as an optional challenge, emphasizing the movement identity in a pure form.) *Because it's purely time-based, it's distinct from main progression – better as a bonus mode or later arena once core mechanics are unlocked.*
- **“Elite Rush” Arena:** An arena where instead of large swarms, the player faces **waves of fewer but much tougher enemies (elites)**. Each wave might spawn a couple of mini-boss-like foes with telegraphed attacks, higher HP, or special abilities. This teaches one-on-one or one-on-few dueling skills and target prioritization under pressure. *Best as a specialized arena after Arena 3 or as a side mode – it contrasts with the movement-heavy Arena 1 by focusing on boss-like encounters.*
- **Arena Identity and Themes:** Ensure each arena has a **clear theme/identity** that builds on prior ones. For example, Arena 1 is an open field emphasizing free movement. Arena 2 introduces pillars and enemy shields (cover mechanics). Arena 3 adds vertical platforms (jumping and multi-level awareness). Future arenas might emphasize *tight corridors* (navigation puzzles and ambushes) or *environmental chaos* (e.g. lava flows or darkness). Each arena's mechanics should reinforce its theme (e.g. a “Corridor Gauntlet” arena with narrow passages and trap ambushes for a claustrophobic challenge). *Arena 1 remains the pure movement tutorial, while later arenas layer new mechanics on top of that foundation.*

Combat Systems & In-Run Mechanics

- **Mid-Run Shop/Market:** Between waves or arenas, allow the player to **spend a currency** (coins or accumulated materials) on upgrades or healing. This shop could offer weapons or stat buffs and appears at safe intervals (e.g. after a boss or every X waves). *Brotato uses a shop between each wave to buy items with materials gained from enemies* ¹⁰. Integrating a shop plugs into the XP/level system if, for example, excess XP converts to currency or if enemies drop coins. *This fits smoothly after Arena 1's boss or between arenas, giving players a breather and agency in build progression.*
- **Treasure Chests & Crates:** Reward players by spawning **loot chests** during or after challenging waves (or dropped by bosses). Opening a chest could grant extra XP, a random upgrade choice, or a powerful temporary item. (In *Vampire Survivors*, bosses often drop treasure chests that give weapon upgrades ¹¹, and in Brotato, enemies can drop item crates mid-wave ¹⁰.) This adds excitement

and surprise to runs. *Can be introduced early (the first boss chest in Arena 1 would feel rewarding without confusing the player).*

- **Blessings & Curses (Risk-Reward Shrines):** Implement **altar events** where the player can choose a boon with a trade-off. For example, a “Cursed Shrine” might offer +50% damage but reduce max HP, or greatly increase XP gain at the cost of spawning extra enemies. These in-run decisions let players tailor difficulty and reward to their liking (similar to Hades’ Chaos boons or optional curses in other roguelites). *Keep these optional and introduce gradually – e.g. a shrine might first appear in Arena 2 or 3 once the player is comfortable with baseline play.*
- **Elite Enemies with Augments:** Occasionally spawn **elite variants** of normal enemies that have special properties or abilities, telegraphed by an aura or color. For instance, an elite enemy might explode on death, have an aura that buffs other enemies, or periodically fire projectiles. This is inspired by ARPGs (Diablo’s elite affixes) and games like Soulstone Survivors where higher Curse levels cause pillars or meteors to spawn as extra elite effects ¹² ¹³. Defeating elites could grant extra XP or drops as a reward. *Introduce in later waves of Arena 1 in a mild form (e.g. a slightly larger “elite” Puffer) and expand in future arenas with more varied augments.*
- **Boss Ability Rewards:** Upon defeating each boss, offer the player a chance to **gain a modified version of the boss's ability** for the remainder of the run. For example, after beating the Red Puffer King, the player could choose a temporary upgrade like “Puffer Shield – periodic damage reduction” or “Minion Summon – occasionally spawn a friendly Fast Bouncer.” This makes each boss fight not just a goal but an opportunity to power up in a thematic way (akin to Mega Man games rewarding boss powers). *This fits well with the existing upgrade menu – a boss reward can be presented as one of the post-boss upgrade choices, integrating into the XP system.*
- **On-Field Power-Up Drops:** Add classic arcade-style **power-up pickups** that drop from enemies or spawn occasionally. Examples: a brief invincibility shield, a smart-bomb that clears weaker enemies, a speed boost, or a healing heart. Vampire Survivors and similar “auto-shooters” have pick-ups like screen-clearing rosaries or freeze time clocks. These items introduce clutch moments of relief or empowerment. *They should be introduced sparingly (perhaps starting in Arena 2) with clear icons so as not to confuse new players in Arena 1.*
- **Synergy Evolutions:** Encourage build variety by allowing certain upgrade combinations to **evolve into a stronger form**. For instance, if a player has taken both a fire-based upgrade and an oil trap upgrade, they could combine into a “Napalm” effect that ignites the whole screen. In *Vampire Survivors*, combining a maxed weapon with a specific support item yields an evolved weapon. This could translate to the upgrade menu – reaching a threshold in two compatible upgrades offers a special evolved perk. *This system would extend the current upgrade menu; it can be hinted at in tooltips and doesn't need to appear in Arena 1, but can become relevant as more upgrades unlock in later arenas.*
- **Rerolls and Banish (Upgrade Selection Control):** Allow players a limited ability to **reroll their level-up choices** or **banish** an unwanted upgrade from future rolls. For example, each run could grant 1–3 reroll tokens (possibly increased via meta progression) to get a new set of upgrade options, and a banish to remove one option permanently from the pool. This quality-of-life feature is common in roguelites (*Vampire Survivors* lets you unlock reroll and banish to fine-tune builds). It helps mitigate bad RNG and increases player agency in shaping their build. *This can be unlocked as a feature after*

Arena 1 (to avoid overloading a brand-new player) and ties into the persistent upgrade infrastructure (e.g. spend meta-currency or earn a badge to gain reroll charges).

- “Lock” or Save Upgrade Option: Introduce a mechanism to **lock an upgrade offer** – for example, in a shop context, allow the player to pay a small fee to keep an item until the next shop cycle, or in the level-up menu allow one choice to carry over to the next level if undecided. This gives strategic flexibility: players can plan for synergies by holding onto an upgrade for later. (Some auto-battler games and deckbuilders use a shop lock feature to similar effect.) *This idea is more advanced and would come into play once shops or many upgrades are available – not needed in the earliest arena, but useful in longer runs or higher difficulties.*

Meta-Progression Systems

- **Expanded Module Unlocks:** Build on the existing **persistent module system** by adding new modules that cater to different playstyles. For example, a **Defense Module** (unlock via a hidden pickup or achievement) that permanently boosts armor or grants a once-per-run shield, or an **Elemental Module** that adds burn/poison effects to attacks. Each module would have mastery levels (earned by finding or using them repeatedly) to encourage long-term goals. *These modules extend the current infrastructure: e.g. a Crit Module unlocked in Arena 3 could give +5% critical hit chance at Level 1, leveling up with further finds.* This plugs directly into the persistent unlock system and gives players new toys as they progress.
- **Additional Active Abilities:** Allow players to unlock **new active skills** via meta progression, similar to how Dash Strike is granted by the Arena 1 boss ¹⁴. Ideas: a short-term cloak, an area stun, or a defensive barrier. These could be tied to boss defeats or special achievements (e.g. defeating a later boss unlocks a secondary active ability). Players can then choose which active ability module to equip before a run (if only one is allowed at a time) or have multiple if balance permits. This gives a sense of growing arsenal across runs.
- **Unlockable Characters / Loadouts:** Introduce multiple **playable characters or loadout presets**, each with slight stat variations or unique starting modules, unlocked through achievements or progression. For example, a speedy but fragile character unlocked by completing Arena 1 quickly, or a character that starts with the Shield Module unlocked after blocking X damage in total. Many roguelites (Vampire Survivors, Soulstone Survivors, etc.) expand replayability by adding characters unlocked via specific tasks ¹⁵. Each new character would fit into the lore (e.g. a veteran arena champion or a scientist with gadgets) and leverage the persistent upgrade system (perhaps each has a unique module to discover).
- **Persistent Upgrade Tree / Power-ups:** Implement a **meta-progress “lab” or upgrade tree** where players can spend a persistent currency (earned from runs or dropped by bosses) on incremental upgrades. This could resemble Vampire Survivors’ PowerUp menu or Rogue Legacy’s manor upgrades – e.g. +2% damage per level, +5% max health, unlock an extra reroll, etc. This system gives continual goals and can be balanced so that new players aren’t overwhelmed (the first upgrades are cheap and minor). *It complements the module system: modules are unique perks, while this power-up tree is a broad, choice-driven stat boost system.* Players who hit difficulty walls can invest currency to get a slight edge, ensuring long-term engagement.

- **Difficulty “Curse” Modes (Optional Hard Modifiers):** After completing the main arenas, allow players to activate **curses or higher “Danger” levels** for increased challenge and rewards. For example, a menu of toggles: faster enemy speed, higher spawn rates, added environmental hazards, etc., each increasing a “danger level.” This is akin to Soulstone Survivors’ Curse tiers or Brotato’s Danger 1–5 (which increase enemy HP/Damage by set percentages) ¹⁶ ¹⁷. In exchange for upping the difficulty, players could earn more persistent currency or unlock exclusive modules/badges. *This extends replayability after Arena 6 – players can essentially create a custom Arena 7+ by stacking modifiers, all while using the same arenas as a canvas.* It should be clearly marked as optional so as not to scare off casual players, but give hardcore players a way to push themselves.
- **Achievement Badges with Benefits:** Currently badges mark arena completion ¹⁸; consider expanding **badges/achievements** to grant subtle in-game benefits or unlocks. For example, a “Puffer Exterminator” badge for killing 10,000 Red Puffers might increase damage to swarm enemies by 5%. Or completing an arena without taking damage could unlock a cosmetic and a minor stat perk. This gives more weight to achievements and encourages mastery without introducing anything new to learn mid-run (the effects are passive). Badges could also unlock new upgrade cards in the level-up pool – e.g. achieving X kills with a weapon unlocks an evolved version of that weapon in future runs. *Such benefits should be small or configurable (some players enjoy purely cosmetic rewards), but they directly tie the achievement system into both persistent progression and run variety.*
- **Endless/Chaos Mode Unlock:** Upon finishing the final planned arena, unlock an **Endless Arena or “Chaos Mode”** that throws all mechanics together in a procedural or increasing difficulty loop. This mode could cycle through arena layouts or spawn mixes of enemies from all arenas in ever-growing numbers. The goal is simply to survive as long as possible and chase high scores. *Chaos Mode could be tied to the final badge (Arena 6 completion) ¹⁹ and would leverage all the player’s persistent upgrades and skill learned so far.* While not introducing new mechanics per se, it reuses content in a challenging way and gives players a sandbox to fully exploit their builds, which extends the game’s life for enthusiasts.
- **Meta-Progression Currency Economy:** Introduce a **persistent currency** (if not already present) that ties together runs, shops, and upgrades. For example, *Soul Coins* dropped by bosses or awarded for completing arenas could be spent on meta upgrades, or to unlock new modules/characters. This gives a tangible reward even on “failed” runs – players bring back some currency to improve for next time. The currency could also be used for cosmetic upgrades (outfits, arena visual themes) to cater to players who enjoy customization. *Integrating this with existing systems: bosses already drop XP and unlock badges; adding a currency drop or an end-of-run reward converts run success into long-term progress, softening the roguelike randomness with steady growth.*

Each of these ideas is designed to plug into the existing XP, upgrade, and unlock systems without overly complicating the early-game experience. **In Arena 1 (the movement-focused tutorial arena), the emphasis remains on clarity and simplicity:** just basic chasers and a straightforward arena to teach dodging and shooting. As the player graduates to higher arenas, new mechanics (enemy behaviors, environmental twists, combat options, and progression layers) are layered in one at a time – following the game’s progressive teaching philosophy ²⁰. By Arena 6 and beyond, the player will have experienced a rich variety of scenarios – from coordinating around flocking enemy swarms to navigating trap-laden battlefields – all while having the tools (via upgrades and meta-progress) to face those challenges. This

approach ensures high **clarity** at each step and avoids overwhelming the player, even as the game's depth and replayability greatly expand.

Sources: Mechanic inspirations and references were drawn from nature (boid flocking behavior) ¹, design patterns in hit roguelite shooters (e.g. Vampire Survivors' enemy wave events ³ and treasure chests ¹¹, Brotato's enemy types and difficulty scaling ⁵ ¹⁶), and modern roguelike progression systems (such as Soulstone Survivors' curse modifiers ¹⁷). These examples guided the suggestions to ensure they are grounded in proven fun mechanics while remaining feasible additions to the existing game structure.

¹ ² **Boids**

<https://people.ece.cornell.edu/land/courses/ece4760/labs/s2021/Boids/Boids.html>

³ ¹¹ **Enemies | Vampire Survivors Wiki | Fandom**

<https://vampire-survivors.fandom.com/wiki/Enemies>

⁴ ⁵ ¹⁶ **Steam Community :: Guide :: Know Your Enemies**

<https://steamcommunity.com/sharedfiles/filedetails/?id=2872066871>

⁶ **ENEMIES.md**

file:///file_00000001128722f8e2f80a5e4ae2a1e

⁷ ⁸ ⁹ **Level design in top-down shooters: creating diversified experience using maps | by War Robots Universe | MY.GAMES | Medium**

<https://medium.com/my-games-company/level-design-in-top-down-shooters-creating-diversified-experience-using-maps-ff9e21c8e600>

¹⁰ **Items | Brotato Wiki - Fandom**

<https://brotato.fandom.com/wiki/Items>

¹² ¹³ ¹⁷ **Void Fields | Soulstone Survivors Wiki | Fandom**

https://soulstone-survivors.fandom.com/wiki/Void_Fields

¹⁴ **PLAYER.md**

file:///file_00000003c4071f584fe0cd0b3945c91

¹⁵ **The Guide to Vampire Survivors Secrets (Unlocking Characters) - G2A News**

<https://www.g2a.com/news/features/the-guide-to-vampire-survivors-secrets-unlocking-characters/>

¹⁸ ¹⁹ ²⁰ **ARENA.md**

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