

Static

Static is a roguelike first person shooter. Players start at the lowest floor of an underground facility and combine guns and a unique mechanic to fight their way through increasingly harder levels to reach the surface. Success is hard-earned. Failure is common and integrated into the design.

The game idea is based on the prominent use of flashlights to momentarily stop the movement of monsters/chasers in horror media. Also very commonly associated with creepy dolls, this game will take “it moves when you are not looking” as its core idea. This will put the player in situations where danger could always be lurking behind, similar to the unpredictable movements of Slenderman always catching up to you.

Game Description

Context & Narrative

In an effort to create cold fusion reactors, researchers of a multi-trillion-dollar company develop a theory to manipulate quantum wave functions. The company invests a large part of its resources in an experiment to prove this theory and builds an underground facility. The experiment fails; and has unexpected consequences. The facilities systems fail. Power is unreliable. A small group of personnel finds itself without food or water or any means to communicate with higher floors locked inside the lowest floor by strange, aggressive creatures.

In the lowest level of the facility, the player takes the role of a janitor without any knowledge of the experiment performed. To get help they ascend through the floors above, making their way towards the surface while uncovering the truths behind this weird phenomena.

Mechanics

Player

Moving

The player character can move forward and backwards and strafe at the same speed. They can also sprint forward but cannot shoot when doing so. They can also leap over obstacles.

Shooting

The player character has a selection of guns available. Shooting them consumes ammo, which the player character must collect and then must reload into their weapons, avoiding enemies in the meantime. Projectiles do not move while being visible to the player.

Looking

Enemies are static and cannot attack when visible on the screen. This mechanic was inspired by the course theme slender man. The player must use this to their advantage when fighting them, balancing aiming, movement, and tactics.



Choosing

The player must choose between different guns. The guns vary in damage, fire rate, reload speed, ammunition type and other factors. The player must adapt to finding the wrong ammunition for the current weapon.

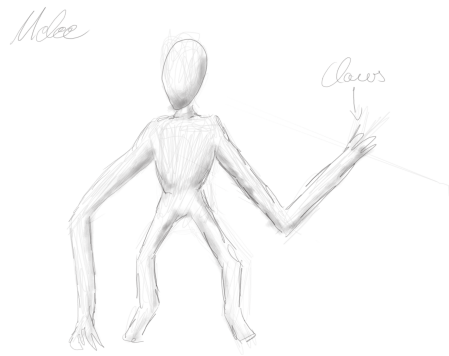
Enemies

Enemies spawn randomly outside the player's view, preferably in the back. Enemies have a humanoid base shape but they are faceless and have warped proportions resembling Slenderman with his outstretched arms. The bodies of enemies are smooth and featureless. Since the movements of enemies are never visible to the player, basic animations for movement and attacking are sufficient.

In the games that made Slender popular, the player sometimes has to make unfavorable decisions to avoid Slenderman like turning off their flashlight. We want our player's to face similar decisions, however in the context of an action shooter game, and thus having multiple enemy types will allow us to force players to mix their playstyle and make such choices.

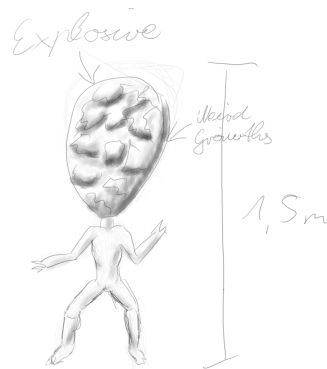
Base

Base enemies rush to the player character for melee attacks. They are smaller than other enemy types, feature huge arms and claws to communicate their attack pattern to the player.



Explosive

Explosive enemies also rush to the player character. When close by, they explode to deal damage to the player character. When killed, they also explode, forcing the player to retreat after firing at them without looking away. Explosive enemies feature large heads from which the explosion originates.



Ghost

Ghost enemies move inside walls. They can only attack when the player is close to a wall or corner and cannot be killed. This prevents the player from backing into a corner or wall to cover their back.



Elite

Elite enemies behave like base enemies but try to avoid the player's vision by staying in the player character's back while approaching. They are tall and stand out against other enemies.



Gameplay Loop

The game is based on repeat runs through the facility.

Start

The player character starts at the lowest building floor in a safe area. Here they can talk to the other survivors and choose a starting weapon for their next run. The run starts once the player character ascends a special staircase.

Progress

Each floor is a hand-crafted level, filled with items and enemies. The player character starts at the stairs to the lower floor. From here, they must find a way to ascend another floor, which may be stairs, an elevator or a ladder. The player character is constantly attacked by enemies and the player must fend them off to reach their goal. The next floor is chosen at random from a pool of floors with matching transitions.



End

A run ends once the player character is defeated or they reach the surface. When defeated, the player character is reset, and the player starts anew at the lowest floor. As a compensation for their failure, the player is rewarded with information regarding the experiments. When the player reaches the surface, they have won and the game ends. In this case a final piece of information is awarded.

Levels

Each level of our game consists of a floor picked randomly from a set of previously created levels. The levels are connected to each other through entry/exit points in between floors. Building upon classic roguelike mechanics, the game consists of different floor designs with recurring patterns and increasing levels of difficulty achieved by introducing new enemy types, increasing their numbers and/or modifying enemy stats. Progression through levels will not only increase difficulty, but will also reveal more parts of the narrative.

We also envision the procedural generation of the levels as a higher target, which would allow us to have potentially infinite numbers of levels without the need to handcraft them. Although the procedurally generated levels may not be as optimal or strategically well-balanced as the hand-crafted counterparts, they would save us some valuable time during the development phase by removing the need to manually set up each level; and would also allow us to tweak the level difficulty by tweaking the procedural generation parameters of the level (e.g. room sizes, wall density, frequency of dead ends).

Technical Achievement

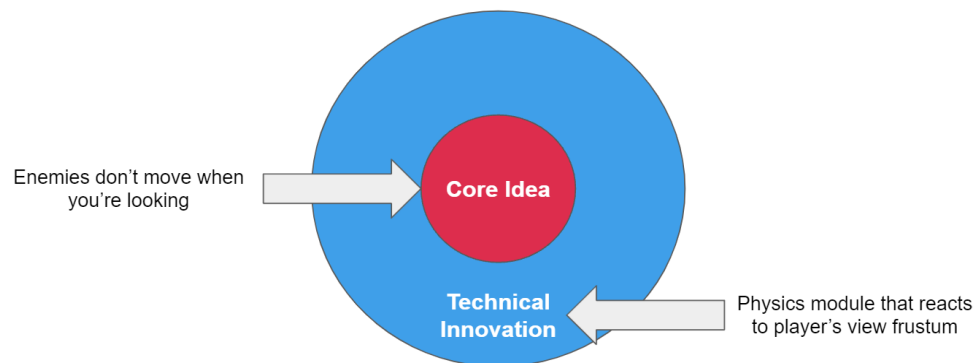
The core technical item for our proposed game consists of a physics module which allows halting the simulation for specific entities within the scene. This core mechanic detects whether entities are visible to the player and halts the physical simulation of entities which are visible.

By doing so, we only allow the enemies to move when they are outside of the view frustum, or in other words, not currently seen by the player. While the enemies may be prevented from attacking the player character while being seen, the player will receive a false sense of security: They can still be attacked from behind or from anywhere else where they are not currently looking at. The realization of this technical achievement binds well with the theme “Slender Man” by incorporating a modification of the core mechanic in the original game “Slender: The Eight Pages”, in which the enemy (Slender Man) moves/teleports when not visible by the player but stands still while being looked at.



Furthermore, we aim to utilize cues (e.g., spatial audio) to warn the player of potential attacks from blind spots, thus giving the player a chance to defend. In addition to that, we envision the integration of some moving entities within the view frustum (e.g. particle effects) to introduce more dynamic to our game. As for the visualization of the enemies, the team is currently planning to implement a dithered optic in order to increase the level of difficulty in seeing the opponents directly.

Big Idea



Development Schedule

Layered Development Description

Functional Minimum

- Shooter mechanics
- Base enemies
- Physics module interacting with enemy simulation
- One hand-crafted level

Low Target

- Spatial audio cues
- Multiple hand-crafted levels
- Narrative integrated into player failure/death

Desired Target

- Environmental hazards
- Custom shaders for improved aesthetics (e.g. dither)

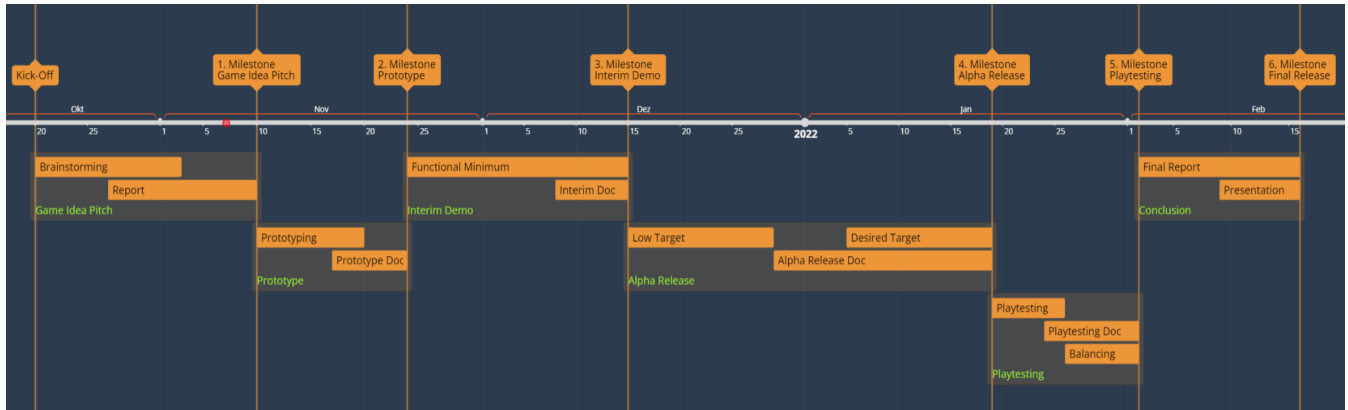
High Target

- More enemy variety
- More weapon types

Extras

- Different environments/styles for varying levels
- Procedurally generated levels

Timeline



Tasks

Milestone 1: Game Idea

Week	Goal	High Level Tasks	Assignee	Estimated Hours
Week 1: 20.10 - 27.10	Ideas	Research	All	5h
		Find game ideas	All	5h
Week 2: 27.10 - 03.11	Game Idea	Decide on idea	All	2h
Week 3: 03.10 - 10.11	Report	Sketches	Matthias, Musfira	4h
		Document	All	10h
		Presentation	All	5h

Milestone 2: Prototype

Week	Goal	High Level Tasks	Assignee	Estimated Hours
Week 4: 10.11 - 17.11	Prototyping	Explore ideas for the prototype	All	5h
		Build prototype	All	10h

Week 5: 17.11 - 24.11	Report	Document	All	4h
		Presentation	All	4h

Milestone 3: Interim Demo

Week	Goal	High Level Tasks	Assignee	Estimated Hours
Week 6: 24.11 - 01.12	Prepare assets	Player character controller	Matthias	5h
		Model & animate enemies	Mert, Musfira	15h
Week 7: 01.12 - 08.12	Create digital prototype	Shooter mechanics	Mert	10h
		Implement enemies	Doğa	15h
		Physics interaction	Matthias	15h
Week 8: 08.12 - 15.12	Create digital prototype	Find props, create single level	Musfira, Mert	15h
		Testing	All	2h
	Report	Document	All	4h
		Presentation	All	4h

Milestone 4: Alpha Release

Week	Goal	High Level Tasks	Assignee	Estimated Hours
Week 9: 08.12 - 15.12	Implement game basis	Add audio	Doğa, Mert	15h
		Create more levels	Matthias	15h
		Write narrative	Doğa	10h
Week 10: 15.12 - 22.12		Integrate narrative elements	Doğa, Musfira	15h
		Player HUD	Musfira	5h
		Hub space	Musfira, Doğa	15h

Week 11: 22.12 - 29.12	Christmas			
Week 12: 29.12 - 05.01				
Week 13: 05.01 - 12.01	Desired target improvements	Custom shaders	Matthias, Mert	5h
		Environmental hazards	Doğa, Matthias	10h
		Items/gadgets	Mert	10h
Week 14: 12.01 - 19.01	Report	Document	All	4h
		Presentation	All	4h

Milestone 5: Playtesting

Week	Goal	High Level Tasks	Assignee	Estimated Hours
Week 15: 19.01 - 26.01	Playtest	Prepare questionnaire	All	15h
		Arrange playtest sessions	All	20h
Week 16: 26.01 - 02.02	Report	Review results and suggest improvements	All	15h
		Document	All	5h
		Presentation	All	4h

Milestone 6: Final Release

Week	Goal	High Level Tasks	Assignee	Estimated Hours
Week 17: 02.02 - 09.02	Demo	Final report	Musfira	5-6h
		Prepare demo presentation	All	5h
Week 18: 09.02 - 16.02	Final video	Prepare video material	All	5-6h
		Edit & finish the video	Musfira	5h

Assessment

Draw

Our biggest draw is the uniquely challenging mechanic of “*things move when you’re not looking*”. After mastering this mechanic players can pull off satisfying combos by planning ahead when they are safe from the back or just revel in the feeling they get by being able to instinctively find out where to look next and make quick executions.

Audience

Our audience consists of people who enjoy action shooters and can sit down for about an hour for a session. The ideal player would be someone who likes to challenge themselves with learning and mastering the interaction our mechanic allows; and is willing to try again and again to get through. The roguelike/lite elements will ensure that they can pick the game up weeks later without needing a refresher, and feel they are not tied to their chairs and can put the controllers down in an hour. At the same time it will also encourage them to try again and again to see if they can push further if the player is of such an ambitious mind.

What Success Looks Like

We would deem our core mechanic successful if it can deliver this almost puzzle-like feeling that you need to get used to and be able to use it to your advantage to add to your experience of the game. Rather than feeling like just another shooter or getting in between the player and their enjoyment we want this mechanic to feel satisfying to take advantage of while keeping the player at their toes by constantly threatening them by the danger of what they cannot see. “I was doing so well until that thing caught up from behind” is a sentiment we expect a lot in the initial learning phase while quickly being followed by “But I managed to turn towards it right before it got me” after learning the ropes. However apart from this we also want to deliver the tense and nervous atmosphere of danger always lurking behind. While this mechanic helps us to achieve that it should be supplemented by visual and audio design that compliments it as well as narrative elements that will keep the player’s immersed in the experience so that we can engage the player emotionally.