Enox: Protector of Lost Souls
DESIGN DOCUMENT

By Iggyz6 for the 2024 Pirate Software Game Jam

Introduction

Game Summary Pitch

Enox is a reverse tower defense game about protecting lost souls from the predators in Limbo on their journey to the afterlife.

Inspiration

Plants vs. Zombies

The classic 'tower defense game with a twist'. Each plant/tower you can buy has a specific, unique power. Also, it has a very simplistic yet strong artstyle that I plan to draw some inspiration from. Specifically, how **all the 'towers' follow a strict theme** (plant)**, but use creative twists to match their design with their unique power** (i.e. watermelon plant throws its melon as a long-distance catapult). Also that **the main threat is that the enemies will** attack/destroy your towers, **not damage your home base directly**.

"Pest Control" minigame in Animal Jam

My favorite tower defense game. Simple but quite challenging to beat. I want to take inspiration from the **minimalism of its UI system**. The enemies and towers are also based on real-life predator-prey interactions of animals, and fun facts are provided about them. I like the **aesthetic/meaningful collaboration between a tower and the type of enemy it is strong against**.

Pikmin

Horde of little creatures you are trying to protect. Very sad animation/noise when a Pikmin dies, which I'd like to replicate when a lost soul dies in Enox. I want the souls to be **little innocent creatures that you legitimately value, but must accept that some will be lost**. Pikmin does this very well.

How to Say Goodbye

Abstract-ish cartoony art style with a limited color palette. I also want to take inspiration from its themes. **Somewhat goofy, but also touching and sad in its depiction of death**.

Player Experience

In a single screen, the player will build towers to defend lost souls walking along a path from enemies. Success will depend on careful management of the limited resources and deliberate placement of defensive towers.

Platform

The game is developed to be released on itch.io. It also has a version for Windows PC.

Development Software

- Gamemaker Studio version 2.3 for programming and art

- BeepBox for all music and SFX

Genre

Singleplayer, tower defense, challenging, emotional

Target Audience

This game is marketed to both casual and competitive players. The central mechanic is simple to grasp, but inexperienced gamers may find themselves struggling to manage their limited resources. Multiple difficulties are available to support any skill level, and a counter keeps track of how far a player gets into the game before they are defeated. This leads to competitive potential.
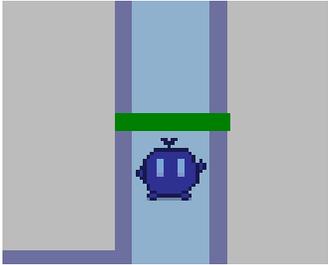
Concept

Gameplay overview

The player uses their mouse to summon towers around the path that lost souls walk on. The towers defend the souls from attack by enemies that approach from the surroundings. The goal is for as many souls as possible to reach the end of the path without being killed by enemies.

Theme Interpretation (Shadows and Alchemy)

'Shadows' interpretation — The player represents Enox, the goddess dragon of the night. She is responsible for protecting lost souls as they journey through Limbo on their way to her domain, the afterlife. All of her creations are produced by shadow magic and drawn with cool colors. She must fight against the light-based creatures of Limbo, which seek to destroy the lost souls. These creatures are drawn with warm colors to represent their opposition to her shadows.
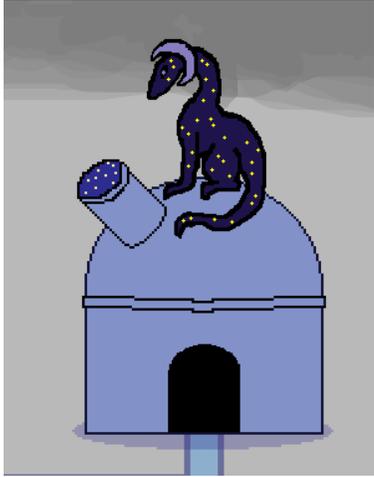
'Alchemy' interpretation — The main core of alchemy revolves around transformation, especially regarding life and death. In this game, the player helps guide lost souls through Limbo to the afterlife, thus ensuring that the natural cycle of life and death continues without disruption. The player works to support the natural transformation of souls between mortal life and afterlife. Once the souls are safely in Enox's domain, this transformation is represented by the souls being converted into stars in the night sky.

Primary Mechanics

Mechanic	Visual Representation
Souls Lost souls walk along the path towards the observatory. You are rewarded if they reach it successfully, but your Lives are reduced if they die before they can reach it.	 A soul walking on the path
Lives The game is lost if a certain amount of souls die. The number depends on the difficulty set when starting the game.	
Towers The player can purchase and place towers around the path. Each tower has different abilities that help the player to protect the souls.	

Mechanic	Visual Representation
	Dark Hound tower attacking an enemy while 2 souls walk past
Enemies Enemies spawn continually in the fogs of Limbo and attack the souls.	 Wisp enemy
Energy Energy is the currency used to purchase towers and use powers. It is earned by defeating enemies and saving souls.	
Waves The game is broken up into waves. During each wave, a certain amount of souls are spawned onto the path and must be protected from enemies. As the game progresses, the waves get more difficult. Between waves, the player can convert any souls that have been saved into stars, which grants the player benefits.	

Secondary Mechanics

Mechanic	Sketch
Enox The player is represented by Enox (the dragon), who usually sits atop the observatory and has an animation to show when the player is placing a tower or completing another action. However, the player can also choose to temporarily take control of Enox herself and attack enemies directly. Enox is controlled with the keyboard and has several darkness-based attacks. The player cannot place any towers while controlling Enox.	
Upgrades Towers can be upgraded to make them more powerful.	
Element compatibility Some enemies have a unique "element" type that is weak to a certain tower. Supereffective pairings do 1.5x damage to the enemy.	 Shade tree is supereffective against Wisp enemy
Soul upgrades Certain circumstances will give the player the opportunity to upgrade all future souls. This will either buff their stats	

Mechanic	Sketch
or give them unique abilities.	
Boss enemies Once the player has survived enough waves, a boss wave will begin with an extra-strong boss enemy. Once this enemy is defeated and the wave survived, the player wins the run.	

Art

Theme Interpretation

The theme of Shadows will feature heavily in the art of the game. **All of the player-friendly sprites** (the souls, the path, the towers, Enox herself) **will be done in exclusively cool colors, while the enemy sprites will be done in warm colors.** This depicts the

battle between dark (us) and light (the enemies). The title screen of the game depicts this well (see picture). Further, **all of the enemies the player faces are based around sources of light** (i.e. lightbulb, crystal, bioluminescence, fire), **and have a corresponding shadowy tower that combats them specifically.**

Design

Besides the color coordination described above, the design will not be strictly controlled beyond my own pixel art style. It tends to feature outlines, cel shading, a lack of shadows or multicolored details, and a cartoonish style. Some of this (i.e. the shadows), I would dedicate more details to if I had more time to work on this game.
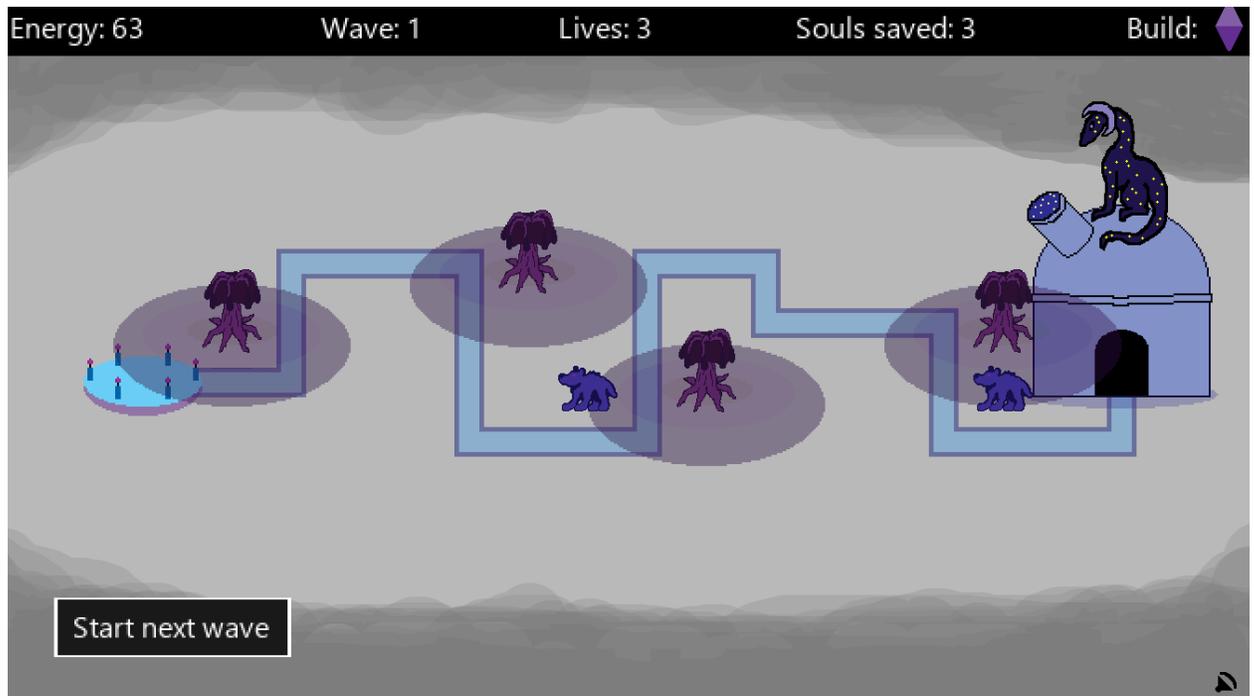
A general screenshot of the gameplay, with several towers placed.

Audio

Music

The main music of the game was inspired by the soundtrack of Plants vs. Zombies. I strove to make a simple, repeating tune that could play on loop during the gameplay without getting too annoying. But I also was sure to implement a volume controller so that players can reduce the volume if it gets too obnoxious. I used [Beepbox](#) to create the short, looping

tune using computer-generated instruments. This was my first time creating audio of any kind, so I'm happy that I figured it out at all.

Sound Effects

I didn't have time to add sound effects, but if I did, I would have made a collection of sound effects that would trigger when an important event happens. For example, when an enemy spawns, a soul takes damage, or a tower is constructed. But since so many of these events are happening at any one time, the sound effects would be short and minimal. Likely they would have been computer-generated noises or piano tones.

Game Experience

UI

The UI consists mostly of plain text listing important values to keep track of. A future improved version would use icons to display this info instead. It is primarily based on [this tutorial](#) by GameMaker Casts, which I used for much of the initial creation of the tower defense aspects of the game.

Controls

Keyboard
Mouse

Gamepad
Not supported

Development Timeline

MINIMUM VIABLE PRODUCT

#	Assignment	Type	Status	Finish By	Notes
1	Design Document	Other ▾	Finished ▾		
2	Sketch of full example screen	Art ▾	Finished ▾		
	Basic background art	Art ▾	Finished ▾		…Spent way too long drawing fog
	Basic sprites for lost soul, path, start zone, end zone, tower, enemy	Art ▾	Finished ▾		Try to keep to consistent color shades/coolness: Warm colors for enemy things, cool for friendly
3	Souls walk along path	Coding ▾	Finished ▾		
4	Souls die if their health reaches 0	Coding ▾	Finished ▾		
	Souls dying decreases overall health	Coding ▾	Finished ▾		
5	Souls enter goal and # increases	Coding ▾	Finished ▾		
7	Better lost soul sprite	Art ▾	Finished ▾		
8	Shop UI appears/disappears	Coding ▾	Finished ▾		
9	Can buy tower from shop and drag it onto field	Coding ▾	Finished ▾		

#	Assignment	Type	Status	Finish By	Notes
	Clicking on placed tower brings up tower menu (and visual representation of radius)	Coding ▾	In progress ▾		
	Can sell tower from tower menu	Coding ▾	Not started ▾		
	Can upgrade tower from tower menu (and upgrade increases tower stats)	Coding ▾	Not started ▾		
10	Shade tower creates shade	Coding ▾	Finished ▾		
	Shade damages enemies inside it	Coding ▾	Finished ▾		
11	Enemies move towards soul if in pursuing state	Coding ▾	Finished ▾		
12	Enemies move between pursuing and attacking state if within attack range of soul	Coding ▾	Finished ▾		
	Enemies in attack state attack soul	Coding ▾	Finished ▾		
	Hound tower attacks enemy if in range	Coding ▾	Finished ▾		
	Enemy dying gives you Energy	Coding ▾	Finished ▾		
	Running out of Life ends run / Basic Game Over	Coding ▾	Finished ▾		

#	Assignment	Type	Status	Finish By	Notes
	menu				
	Tower attacks deal 1.5x damage if supereffective	Coding ▾	Finished ▾		
13	Enemy sprites	Art ▾	Finished ▾		
	Tower sprites	Art ▾	In progress ▾		
	Bell tower unique attack	Coding ▾	Finished ▾		
	Roc tower unique attack	Coding ▾	In progress ▾		
	Tempesti tower unique attack	Coding ▾	Not started ▾		
	Fix overlap/layer order of large towers	Coding ▾	Not started ▾		
	Fix layer order of Observatory	Coding ▾	Not started ▾		
14	Different enemies can spawn (and higher difficulty ones are more likely in higher waves)	Coding ▾	Finished ▾		
	Wisp enemy unique attack	Coding ▾	Not started ▾		
	Crystal enemy unique attack	Coding ▾	Not started ▾		
	Fish enemy unique attack	Coding ▾	Not started ▾		
	Phoenix enemy unique attack	Coding ▾	Not started ▾		

#	Assignment	Type	Status	Finish By	Notes
	Tower icons in shop menu display additional info when you hover over them (i.e. short description and what they're super-effective against)	Coding ⏷	Finished ⏷		
	When placing tower, show radius of its reach	Coding ⏷	Not started ⏷		
15	Waves progress and spawn more/higher HP enemies	Coding ⏷	Finished ⏷		
	Testing difficulty/scaling of waves	Other ⏷	In progress ⏷		
	Pause between waves for player to convert souls to stars (and player starts next wave when ready)	Coding ⏷	In progress ⏷		
	Converting souls to stars does basic animation	Other ⏷	Not started ⏷		
	Converting souls to stars grants benefits?	Art ⏷	Not started ⏷		
16	Make background music	Audio ⏷	Finished ⏷		
	Basic menu	Art ⏷	Finished ⏷		
	Observatory sprite	Art ⏷	Finished ⏷		

#	Assignment	Type	Status	Finish By	Notes
	Good animation of converting souls to stars at the end of the day	Coding ▾	Not started ▾		
	Enox sprites (on observatory, dialogue)	Art ▾	In progress ▾		
	Enox dialogue when converting souls to stars	Coding ▾	Not started ▾		
	Basic tutorial (dialogue box)	Coding ▾	In progress ▾		
	Make some sound effects	Audio ▾	Not started ▾		
	Secrets…shhhhh	Other ▾	Not started ▾		
17	Any extra polish	Other ▾	In progress ▾		
18	SUBMIT	Other ▾	Finished ▾	July 31	Create Itch Page and upload. Don't forget screenshots!

BEYOND (if ahead of schedule / extra time)

Make more sound effects	Audio ▾	Not started ▾		
Beating enough waves leads to Boss wave, with unique Boss enemy	Coding ▾	Not started ▾		
Beating Boss wave wins the game :)	Coding ▾	Not started ▾		

Better sprites (add shadows, more color variation, more frames)	Art ▾	Not started ▾		
Make better background music	Audio ▾	Not started ▾		
UI buttons highlight when you hover over them	Coding ▾	Finished ▾		
Pause menu	Coding ▾	Not started ▾		
Better tutorial	Coding ▾	Not started ▾		
Fastforward button	Coding ▾	Not started ▾		
Can take control of Enox temporarily by clicking her on observatory (make new Object to represent her during this period)?	Coding ▾	Not started ▾		
Enox keyboard/mouse controls	Coding ▾	Not started ▾		
Enox attack is triggered by Space and damages enemies in range	Coding ▾	Not started ▾		
Enox alternative attack??	Coding ▾	Not started ▾		
Can move placed tower to a different	Coding ▾	Not started ▾		

spot?				
Different animation for when souls are being attacked	Art ▾	Not started ▾		
Different animations for different enemy states	Art ▾	Not started ▾		
Different animations for different tower states	Art ▾	Not started ▾		
Settings Menu	Coding ▾	Not started ▾		
Difficulties (different #s of souls you can lose)	Coding ▾	Not started ▾		
Save feature?	Other ▾	Not started ▾		
Leveling feature (more souls saved/waves survived => unlock new upgrades/towers)	Art ▾	Not started ▾		
Multiple Boss enemies (and which one you get in a run is random)	Coding ▾	Not started ▾		