

Hungry Shark Game GDD

GDD by Veronica Rae Leda

Project Links & Tools

Clip Studio Paint
Unity Engine

Game Overview

Gameplay Outline

- This game requires the points scored for the primary asset, a Shark, from catching/eating specific targeted fish. Eating incorrect fish, makes the Shark sick and becomes the losing criteria. Visual layout of game should be landscape (4:3 aspect ratio), for children aged 5-9 (gender independent).

Grading Standards

- We're evaluating your ability to rapidly create game features. This includes establishing a FUN game-play, while making use of existing code solutions, to bring games to life quickly.
- Our evaluation will be placing less emphasis on design versus game mechanics.

Goals

1. Five minutes of game-play.
2. At least one core game mechanic must be implemented.
3. Intuitive gameplay and ease of use are CRITICAL.
4. Make use of third party packages or libraries (for code or graphics).

Gameplay Summary

- A Hungry Shark that can only eat fish that is smaller than him
- Following mouse cursor to move with a delay
- Upon eating fish it can't eat, it gets sick and gets a temporary effect (Slower?)
- It grows bigger with each smaller fish it can eat
- Lose a life when you try to eat a fish bigger than you
- Speed fishes that increase your speed when you consume them
- Smaller sharks will wander randomly, bigger sharks will chase you if within range

Core Gameplay Loop

- Swimming around as a shark, eating smaller fish than you and avoiding bigger fish
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Steps

1. Planning: Make GDD and set up what mechanics I will need
 - PlayerController with a camera follower
 - Timer
 - Base fish class that holds movement and fish AI states of all types of fish
 - Inherited fish classes such as the edible fish that will make player grow, and the sick/speed ones with coroutines that change player speed
 - Object pooling spawner
 2. Set up level environment
 - Clone a previously made 2D game template
 - Download shark and water sprites
 3. Prioritise player movement and ONE edible fish with collision
 4. Make fishes spawn
 5. Prioritise Game loop if other mechanics are not met
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Conclusion and Post Production

Write a short paragraph describing your thinking and approach to this game. Include details of issues, solutions, or areas where further improvement could be made. Briefly discuss your design choices, and how you felt they respond to the requirements we have established for this test.

The very first step I took was deciding where I wanted to go with the game mechanics. I have a 2D template game for unity, with no functioning mechanics besides from a simple game manager and menus. I started out with the idea to make it a top down game, which led me to decide if I wanted to make the controls WASD or cursor-dependent. I decided navigation would be much simpler with cursor, especially if younger children were playing this. The next step was setting up my environments and figuring out what I may need to set the scene. I applied some empty scripts I knew I would need but main focus is planning out the architecture and mechanics so I can reuse code to save me a lot of time. NPCFish will be the parent class that all the npc fishes will inherit from for their base movement. EdibleFish will be all the regular fishes that the shark can eat to increase their size. Speed fishes will give players a temporary speed boost and sick fishes will lose them points and make them temporarily slower. Once my fishes and player were complete, that is when I was able to focus on the game loop, which is just simply a timer with 5 minutes.

The main issue I faced was losing so much time due to debugging silly problems, such as my NavMesh component not working, so I scrapped it and used simple transform movement instead. Then, there was the matter of overscoping when there was 1 hour left and I hadn't completed my speed or sick fishes, so I set them aside and focused on finishing the game loop.

I feel my game suits the requirements as the player can explore and eat fish to grow, but they must steer clear of the bigger fish or else they will lose a life and grow smaller.