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CS 583

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Individual 2D Project "One-Pager"

Game Name: <u>Fish On!</u>

<mark>Differences</mark>

Implementation is mostly the same as the one-pager. Some differences are:
- No water art effects
- No splash sound or game-over sound
- Just one level, no different biomes
- No fish journal implementation

Overview

A 2D fishing arcade game where the player controls a character on a dock/boat and attempts to catch as many fish as possible before time runs out. The player casts a line into the water, aims for moving fish, and reels them in for points. Different fish types have unique behaviors and point values. This game encourages skillful timing and position.

Controls

- The controls will be the mouse and keyboard:
  - Move left and right — left/right arrows
  - Cast line — space
  - Control depth —- up/down arrows
  - Reel in — hold up arrow

Art Assets

- Player sprite
- Fishing line + hook
- Fish sprites
- Boat tile
- Water background
- <mark>*Water effects: ripples where the hook enters, bubble trail following the hook down*</mark>
- UI elements: timer, high score, fish counter

Audio Assets

I want the game to give an arcade experience where it's fun, lighthearted and enjoyable, so there should be positivity chimes when fish are caught and upbeat background music to set the tone.There should be sounds for each action and button pressed. Also, there should be a "game over" sound with two different sounds, regular and another celebratory sound if a player beats a previously set high score. Here is a comprehensive list of audio assets:
- Cast sound

- Reel in sound
- *Splash sound: when hook enters water*
- Pop/chime sound: when fish is caught
- *Game over sound: when timer ends*
- Background music: calm, upbeat music that loops

Game Flow
- **Title screen:** There will be a title screen with a "start game" button and a "view controls" button. This can be expanded on with more buttons for different levels of difficulty.
- **Game screen:** There will be a setting with the water, fish, boat/dock, and character. The player controls the character and the line can go into the water. If it touches a fish, it hooks it. The player reels in the line and the score increases. This process is repeated and there should be a timer counting down during it all.
- **End screen:** The final score will be shown and there will be an option to replay or quit.

Potential Challenges
- **Fishing line physics/depth system:** This might be difficult to implement because it should feel smooth and responsive. A key will be pressed to drop the hook and the longer you hold it, the deeper it goes.
- **Fish movement AI:** I need to add variation in speed/direction for the fish and add different types of fish for different behavior and point value.
- **Collision detection:** It is important to have precise collision detection because the hook should know to detect if a fish touched it.
- **UI updates:** The score, timer, and other assets must be in sync with the gameplay events.

Potential Extra Features
- *Add different levels based on difficulty*
- Make some fish avoid hooks
- Add local high scores or mini-acheivements
- *Have multiple locations/biomes with unique fish types*
- *Caught fish can be recorded in a journal*