Junior Tech Art Auditor test
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First Task Game

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https://erohonfirestom.github.io/Fishing_method/

Goal: Reskin the base code to match the "Fish of Fortune" art style.

Tools: VS Code, Photoshop, Gemini (Banana/CLI), sounds from MyInstants.

Time Tracking and Step-by-Step Log:

- **17:35** – Start of work / Reviewing code
- **17:45** – Creating and implementing sprites
- **17:50** – Creating assets
- **18:20** – Creating background and new gameplay features
- **19:20** – Searching for and implementing sounds
- **20:00** – Working with Git
- **20:23** – Adding mobile controls (buttons)
- **20:32** – Polishing
- **21:12** – Work finished

Total time on game: 3 hours 37 minutes

Prompts for CLI:

- "Enable implementing pictures as sprites"
- "Make asset slots for obstacle, detonator, magnet, and gem; rename 'obstacle' to 'mine'"
- "When detonator is picked up, replace all mines with coins"
- "Make game speed progressive based on score. When a magnet is picked up, collect all coins for 5 seconds. Add a magnet icon on top of the game field that appears when the magnet is active."
- "Make life counter as 3 hearts. When taking damage, change red heart to black and flash the screen. Add short invulnerability effect after taking damage"
- "Add particles when picking up coins, mines, gems, magnets, detonators"
- "Change 'Play Again' label to an image button"
- "Change 'Game Over' label to an image"
- "Remove gray background from 'You Lose' and 'You Win' popups"
- "Change 'You Win!' label in the popup to an image"

- "Add ambient music"
- "Create an image button for sound on/off toggle"
- "Create a popup menu with sound on/off options before the start of the game"
- "Add image backgrounds to all menus and name the asset 'menu_background'"
- "Create slots for sounds: mine pickup, magnet pickup, detonator pickup, gem pickup, coin pickup, win event, and lose event"
- "Disable ambient music during win or lose events"
- "Add corner buttons for mobile players"

Art/tech decisions, and difficulties

First, I aimed to match the "Fish of Fortune" art style close enough. I decided not to use references from existing games, relying instead on text prompts.

Gemini has an interesting feature: it retains context from past chat generations. This means if you are unsatisfied with the result, you often need to start a new chat or refine the prompt significantly. I faced some challenges with this.

Regarding the technical aspect of Gemini CLI, it has some limitations. I had to constantly review its output to avoid bugs and unoptimized code. Regardless of this, it performed well. I added new mechanics to the game that were not in the base version (even though the task was primarily a reskin) to enhance player engagement

Second Task 3D Models

Tools: Blender, Gemini, Robin ai, Mixamo

Art/tech decisions, and difficulties

1.Fish

1. Creating the fish required troubleshooting as I wasn't sure about the final look initially. I tried multiple iterations to find a suitable style. I made a **pragmatic decision** to keep it similar to the reference game. I took a screenshot from the video and asked Gemini to generate a similar fish. When the 3D model was generated, it required optimization. I used the Blender **"Decimate"** tool to reduce the poly count from nearly 20k to 1.7k. Next, I removed unnecessary **vertices** manually. Finally, I **textured** it by hand. Why manually? Because I wanted to use a single texture palette for all models to **optimize** texture size. Additionally, the references had simple colors that did not require unique complex textures.

Prompts for image fish generation: make one fish in this * photo * style

2. Farm House

The Farm House was straightforward. I generated images of farm houses and selected the best one. Upon generating the 3D model and opening it in Blender, I noticed messy geometry. I followed the same cleanup process as with the fish model.

Prompts for image farm house generation: make low poly farm house, without fences, trees, flowers. Only house. Make it simple, like for moblie game, with only color texture

3. Character Model

Character Model The workflow was similar to other models, but with one unique challenge: high polygon count on the hair. I separated the hair mesh and applied the "Decimate" modifier to it separately. Applying animation via Mixamo went smoothly. However, there was an issue during export: when exporting to **.glb** after animating in Mixamo, the model distorted into a sphere. This happens when the model scale is smaller than 1 meter. I fixed the scale to resolve this.

Prompts for image character generation: make person from this photo in chibi style