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Project Title: PaleoPals

# PaleoPals



## Recap:

PaleoPals will be a 2D side-scrolling palaeontology management game built in SFML 3.0.0. Inspired by the game Turmoil, the player takes on the role of a museum curator and lead palaeontologist, managing an excavation crew, unearthing fossils, and building a prestigious dinosaur collection. The game blends procedural world generation, AI-driven staff behaviours, and a dynamic economy to create a deep, replayable experience.

## Where I expected to be:

- Menu Screen and Menu buttons
- In game pause Menu functionality
- Settings Screen
  
- Map assets loading from JSON
- Grid/Tile based map implemented
- Map data loading from JSON
- Trader and Museum Sprites Loading from JSON
- Trader Menu
- Museum Screen
- Fossil sprites loading from JSON
- Fossil data loading from JSON
- Found fossils stored in Museum Screen
  
- Paleontologist Loading from JSON
- Paleontologist behaviours:
  - idle
  - walk
  - dig
  - find fossil
  - return fossil

## Where I am currently:

- Menu Screen and Menu buttons
- In game pause Menu functionality
- Settings Screen
  
- Map assets loading from JSON
- Grid/Tile based map implemented
- Map data loading from JSON
- Trader and Museum Sprites Loading from JSON
  
- Fossil sprites loading from JSON
- Fossil data loading from JSON
  
- Tile removal on mouse click  
(emulates digging functionality)

**Currently it is safe to say that I do not necessarily meet my expectations of where i wanted to be by this demo date but I now have a base game I can build something technically impressive on**

## Pain Points:

My biggest challenge so far has been loading game content (sprites, names, data, etc.) from JSON files. After reviewing some of Ross's assignments from last year, I finally understood the approach.

Once I got the map data loading working, replicating the same logic for fossils, the trader, and the museum became much more straightforward.

I'm aware that my code could be more efficient—there's definitely room for improvement. I'll need to dedicate time to refactoring before the deadline to ensure everything runs as smoothly as possible.

## What I will be working on next:

In terms of what I will be working on next:

Since I have gotten as far as I have with my project I think I have room to start implementing the more intense/technical aspects of the game

I am planning on getting my first couple of behaviours done for my Paleontologist AI (idle, walk, dig, collect etc...)

this coupled with a working museum system including the storing of found fossils and a codex of all species in the game will give me a good idea as to how I can expand these systems further and build onto them with the other aspects of my game (researcher, trader, upgrades, monetary system)

## Timeline:

November 30th:

- Started Paleontologist behaviour implementation

December 31st:

- Completed Paleontologist behaviours
- Museum Screen/Fossil Codex completed
- Fossil collection stored in museum codex
- Trader Screen Implemented
- Researcher Behaviour Started

January 31st:

- Researcher Behaviours completed
- Able to assign researchers to completed skeleton to gain facts on specific species
- Economy system started
- Hiring of more Paleontologists/Researchers and Trader(changes trader screen from market to include upgrades)
- Upgrade system started
- Sonar upgrade mostly completed (main selling point)

February 28th:

- Research system fully implemented
- Economy system fully implemented
- Major upgrades created and functional
- Make map more customisable/versatile (possibly load preloaded maps from JSON[level 1, level 2, etc...])

March 31st:

- Make map more customisable/versatile (possibly load preloaded maps from JSON[level 1, level 2, etc...]) cont.
- Code optimisation/refactoring for efficiency started

April 30th:

- code efficiency increased
- map fully versatile with multiple levels of varying difficulty
- Final touch ups (sprites/code)