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Top Down Game TDD

Intro

This turn-based top-down game offers a simple and intuitive gameplay experience, ideal for both short pick-up-and-play sessions or longer gameplay sessions lasting up to 2-3 hours. Players take on the role of a character who must conquer various levels, defeating enemies and earning points as they progress on their journey.

Rational

Top down game will have to be aimed for low-end PC, as such it must have:

- Simple graphics
- Simple controls
- Few things to render on screen (collisions)

Requirements

Top Down game's features from the GDD

- Top-down angle view
- Free Camera Movement
- Single Player
- Multiple levels
- Simple animations
- Main Menu
- Win/Lose screen
- Enemy AI attack
- Player/Enemy Health system
- Simple timer and score system
- Pickable object

Tools Used

Our game development will make use of the Unity engine and its integrated tool sets, such as the rendering engine. To enhance user experience, we plan to start with a simple input control mechanism that only requires the use of the left mouse button.

System Design

Our game development strategy involves constructing compact and self-contained modular components to facilitate code reuse and experimentation. This design approach aims to create a flexible and scalable game architecture, utilizing single responsibility scripts to further enhance reusability.

In addition, we will simplify and organize our code by implementing a game manager that utilizes the singleton design pattern to store data. By utilizing this approach, we aim to improve code readability and maintainability.

