Design Rationale for REQ2: The Abandoned Village's Surroundings

Introduction

In this section, I will provide a detailed explanation of the design and implementation of the "Void" and "graveyard".

Design Implementation

1. Creating the Void class

   This class is inherited from the ground class and has a simple implementation. The actors are allowed to step on this, in the instance of player stepping in it, the player dies. This follows the open-closed principle and single responsibility principle.

2. Creating the graveyard class

   This class is inherited from the ground class also has its own methods and variables. This ground is supposed to spawn two actors with probabilities, according to which map the respective character with its probability gets spawned, this is done by the tick method.

Summary

In summary, the detailed design rationale encompasses various object-oriented principles, including encapsulation, the SRP, the Open-Closed Principle, the Interface Segregation Principle, and modular and flexible design practices. The implementation details considered in each design decision ensure code maintainability, code reusability, and overall system flexibility.