Team Project

Made By Volpe Mikhail & Dashevsky Vladimir

Mikhail Volpe - GameManager, Dungeon Generation and , Inventory management and UI, Dungeon, Power-up and main character sprites.

Vladimir Dashevsky - Main UI, Charcter and AI scripts, character and item as well as their sprites

Introduction

A randomly-generated dungeon map with enemies to fight and loot to collect. Face mobs, discover powerful pickups, make your way through as many tunnels as you can before being teared apart by dangerous creatures.

Programming Part

Here is a list of classes with short explanation of what they do and how they interact.

The base class, sets up the main playing scene, manages the in-game ui, responsible for between-level transition. Connects all Singleton classes for convenient management.

This class is turned into a Singleton instance via OnLoading script to ensure absence of illogical exceptions.

DungManager class is a collection of methods aimed onto generating the Dungeon itself. It follows a loop of creating rooms and corridors in Vector2 space

FollowingCamera class is a script for targeting player character and following it across the map.

A Singleton class to ensure that only one instance of playable character presents on the map at a time.

PlayersStats contains information about all characteristics both AI and the Player have. It derives from Existential Things - a collection of virtual methods that are similar for both AI and the Player such sprite flip on changing movement direction.

Those methods contain information about the Player Prefab its’ movement behavior and stats.

A simple class of an Stat object made to collect information about a single stat and all of its’ modifiers.

Those classes are responsible for Inventory presence as a single instance and for proper update and management of what is inside.

A script for updating information of an item in a single inventory slot;

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A class for initialization of a single Item piece with all of its’ stats and modifiers.

A trigger which comes into action when the Player moves inside of an object collider to make picking Items possible.

Additional scripts for special in-game objects - dungeon entrance and exit.



Scripts for Power-ups explaining what modifiers to add and how to behave.

