GAME DESIGN DOCUMENT

Everdungeon

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1. Executive Summary, Quick overview

In the game the player explores an infinitely continuing, randomly generating dungeon collecting treasure. The player has to fight hostile undead mummies, and if he dies, he has to begin a new attempt from the start. The goal is simply to collect as much treasure as possible before dying.

2. Target Audience

The target audience of the game includes anyone who enjoys roguelike or dungeon crawl games, or just simple exploring and combat, and does not require story elements or realistic graphics from a game. The game can be played quite casually with the aim of improving one's high score, so it is accessible to quite a large audience.

3. Main Characters

The main character of the game is a man with an average appearance and clothes. He has the ability to attack enemies by throwing torches at them. The only other information the game gives on the character is that he explores a dungeon collecting treasure.

4. Main Features

4.1 Main mechanics

The game consists of infinite, randomly generating levels where each level contains a door that leads to the next one. The door can only be used once the player finds the key for it, hidden somewhere in the level. The levels are grids of square tiles, where each tile is either a floor tile, where characters can move freely, or a wall tile, which blocks movement and cannot contain objects. The outer tiles of each level are always walls. The game is two-dimensional and uses a top-down view, but angled so that the characters and objects appear sideways.

Each level includes chests that can contain treasure or the key that allows the player to proceed. The levels also contain hostile undead mummies, which follow the player character and hit him if they get close enough, causing damage to the player. The player has a limited number of hit points, and when they are all depleted, the game is over and cannot be continued anymore. The player can destroy the mummies by throwing torches at them. The player has a limited capacity for torches that he can carry, but they can be refilled from bowls of fire included in each level.

4.2 Movement

The player and the enemies can move freely on the floor tiles as the two dimensions allow. No character can move on the wall tiles.

4.3 Physics

Wall tiles block all movement. Characters can move through objects. The torches thrown by the player continue in the direction of the throw until they hit an enemy or a wall. When the player is hit, there is a small period when they will not take damage and can move through enemies unharmed.

4.4 User interface

The game has a main menu where it can be started and quit. Before each level starts its number is shown on the screen. On game over the player's score is shown and options are given to restart or go to main menu. During gameplay the player's number of lives, torches, keys, and coins are shown. The coins act as a score for the game. Over the player character's head is shown temporary information on events like losing health.

4.5 Multiplayer mode

The game is singleplayer only.

5. Genre, Setting, Concept Art book

The genre of the game is roguelike/dungeon crawl. The game is not explicitly set in a medieval setting, but it does not contain any modern technology or aesthetics. The most modern objects are metal keys, coins and chests reinforced with metal, and the interior of the dungeon is made of stone.
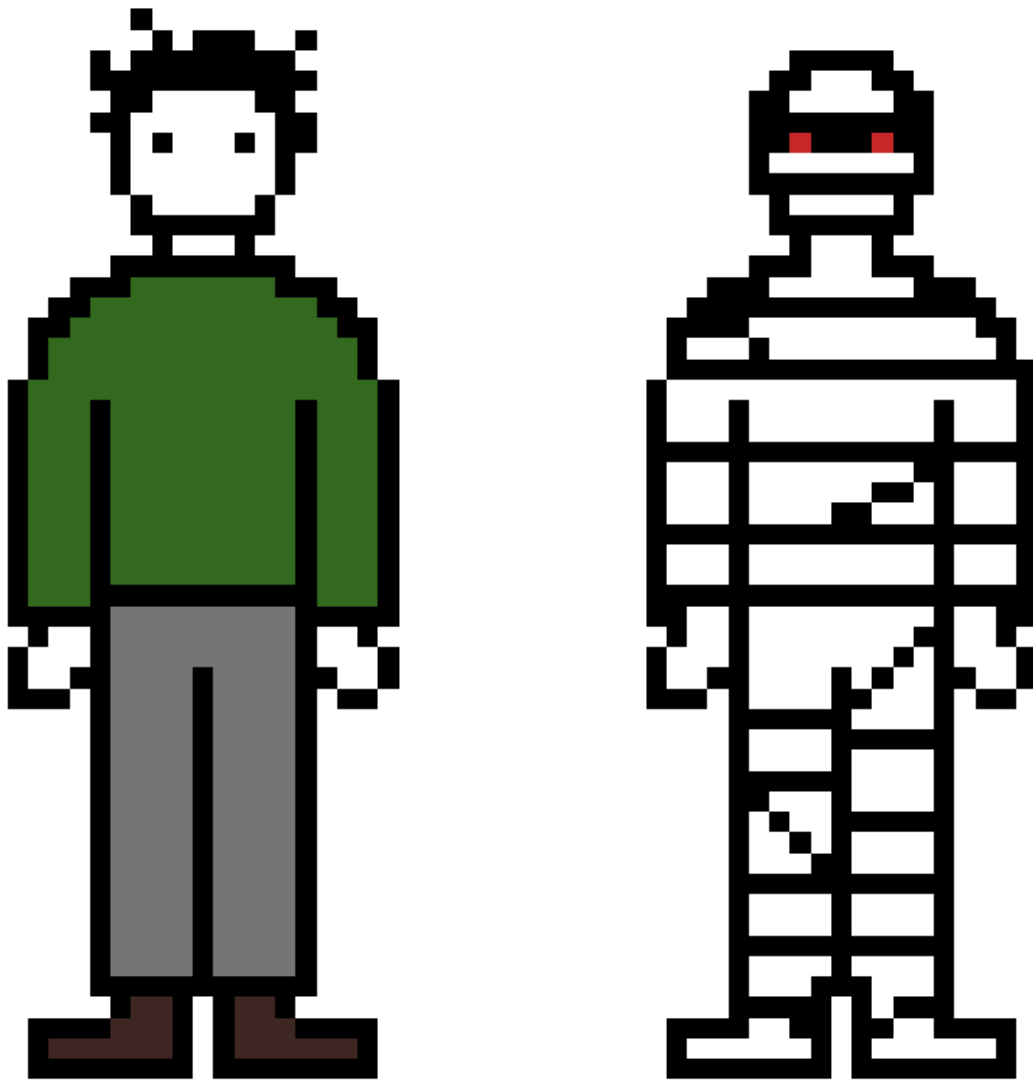
Picture 1. Concept art for the player and enemy characters.
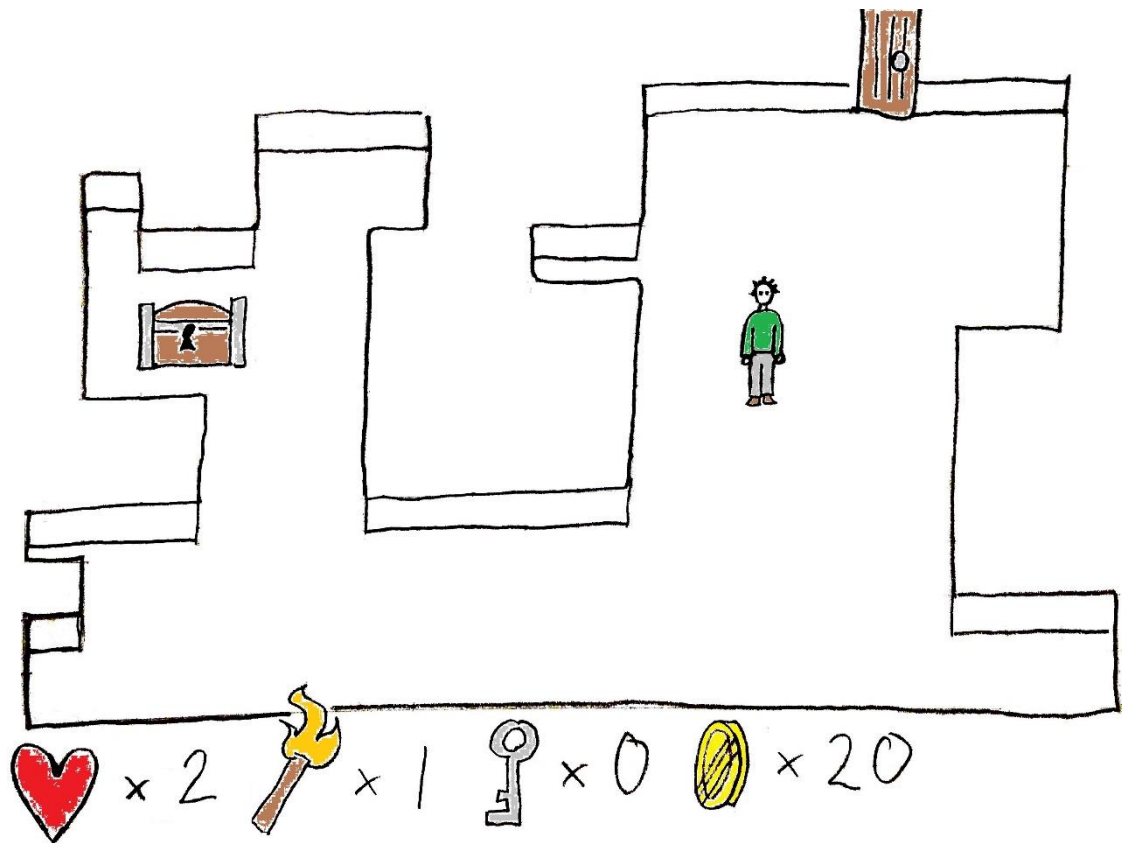
Picture 2. Concept art for level and UI.

6. Enemies, NPCs, Other objects

The enemies of the game are undead mummies who follow the player and can damage him by hitting when he is close enough. The player can destroy mummies by throwing torches at them. The game contains no other characters apart from the player and the mummies.

Objects within the game include doors, which let the player proceed to the next level once that level's key is found, bowls of fire that refill the torches carried by the player, and chests, which can contain treasure or the key for the current level.

7. Story board, script

The game does not have a set out story. The player character simply explores an infinite, multi-leveled dungeon containing treasure and aggressive undead mummies.

8. Technical definitions, Tech guide

8.1 Platforms, versions

The game will be released on Windows PC platform using the Unity game engine.

8.2 Control Scheme

The game uses keyboard controls. The arrow keys or WASD keys can be used to move the player character while the space key can be used to trigger the character's torch throwing ability.

8.3 Requirements

The main features that need to be implemented are the random level generation and assets for visuals and audio. Other features can be implemented in a fairly straightforward fashion using the tools provided by Unity.

9. Business definitions

The game will be completely free to play with no purchasing costs or in-app purchases.

10. Outsourced/Bought Assets

The game will not use any outsourced or bought assets. The only external component is the Unity game engine. All visual and audio assets will be original and made for the game.