

Dungeon Crawler Game

For my project, I will create a simple text-based adventuring game using Java, in which the player will progress through a procedurally-generated “dungeon”. This dungeon will have different level, each made up of five floors, which in turn will have a randomly-configured number of up to twenty-five rooms. In order to travel deeper into the dungeon, a player will need to find a room in each floor with a “hatch”, which will allow them to descend to the next floor. The fifth floor of each level will have a boss fight before the player can descend to the next level.

When the player enters a new level, the previous level will be deleted, preserving memory space. This makes so that if, theoretically, the player were able to reach level one-thousand, their computer would not have to store one-thousand levels worth of data. Players will have to negotiate a number of problems as they progress through the dungeon, including fighting enemies, avoiding traps, solving puzzles, and managing their character’s hunger, thirst, and exhaustion.

The object classes which I would most likely use for the game include:

- Player
- NPC
 - Enemy
 - Neutral
 - Ally
- Item
- Level
 - Floor
 - Room

Gameplay mechanics such as the combat system and inventory management are aspects which I need to finalize. Most likely, the player will be given a prompt which lists their available actions and asks them which one they would like to take. “Check Inventory” and “Travel”, with the former providing a list of items in the character’s inventory, and the latter asking the character the direction in which they would like to move.

The combat system, on the other hand, will give the player a different set of available options, most of which revolve around attacking an enemy, which enemy they want to attack, what they want to use to attack, etc. Successfully landing an attack will be based on a randomly generated number, and certain statistics regarding the player’s character’s abilities.