dungeon_dudes testplan

WO1 Clayton E. Williams

October 2023

1 Purpose

dungeon_dudes is a text-based RPG that users interact with at the command line. A majority of the game has already been written. The goal of this project is to use the provided guide for how different characters and monsters interact, and develop a module to implement a character or monster for game play.

The purpose of this test plan is to provide a brief overview of the tests conducted to provide reasonable assurance that when implemented, Humanoid classes will not cause a crash or unexpected behavior.

2 Components

The test coverage of dungeon_dudes does not contain any manual tests. All test cases are contained within three test modules

2.1 Test Modules

- test_bandit.py

- test_murloc.py

- test_ogre.py

2.2 Test Cases

Each test case follows a similar procedure. A setup() function is used to create an instance of the respective subclass, and the first test case is against the attributes. The intent is to test that when initialized, the member attributes are not None, number of potions equals 1, and the level is set to 1.

The remaining test cases test attributes when leveled up. The Humanoid class adds an additional healing potion at level 10. Each Monster is initialized at level 10, and tests that number of healing potions is now 2.

In addtion to testing healing potions, Murlocs and Bandits increase their sizes at varying levels. Bandits grow by one at level 8 and 15, so a new bandit needs to be created at those levels and checked that the number of bandits are 4 and 5 respectively. Murlocs start at a size of 4 and grow by 1 at level 10. A new Murloc instance needs to be created at level 10 and assert the tribe size is now 5.

3 Running Test Suite

The test modules must be run independently:

```
$dungeon_dudes/ python3 -m unittest williams_test/test_bandit.py
$dungeon_dudes/ python3 -m unittest williams_test/test_murloc.py
$dungeon_dudes/ python3 -m unittest williams_test/test_ogre.py
```