

TestBossAttack & TestBossSpawn (in GarySheppardM6Tests)

TestBossAttack tests for the consistent reliability of the attackMonument method from the Boss enemy class. Since the boss attacks the main monument at an “insta-kill” level of damage, this test assures that the damage that the boss deals actually brings the monument health to 0.

TestRandomEnemies tests for the spawning of the Boss enemy after a certain amount of enemies are killed. Since the TowerDefense spawns the Boss in accordance with the enemiesKilled variable, this test ensures that the Boss consistently spawns depending on said variable.

BossSpawnTest and EnemiesKilledTest

The first test checks that the Boss is spawned after the requisite conditions are met (after a certain number of enemies have been killed). It also confirms that no other enemies spawn after the boss has spawned.

The second test checks whether the enemiesKilled functionality works as expected. It spawns a solitary enemy and tower and then kills the enemy. After that it confirms that the enemy has been killed and increments the enemiesKilled counter.

TowerUpgradeTest and TowerUpgradeLocationResolutionTest

These 2 tests both test the tower upgrading functionality. The first test will test to see that the damage increase is properly reflected in the tower after an upgrade, and the second test will ensure that even if 2 towers are in range of the mouse, it will only upgrade the closest one.

TestGameStats

The first test will test to see if the variable for the amount of enemies killed is correct when the game ends. The second test will test to see if the amount of money gained is correct when the game ends.

TestWinGame

The first test will check whether the Win game screen is displayed after the final boss is defeated. The second test will check if the statistics are displayed correctly in the win game screen. This ensures that the gamer receives proper feedback on his game stats and that they are properly displayed on the screen.