I wrote RoomLayouTest.java.

This class has 3 unit tests:

1. testGameStageRoom()

This test checks that the initial room the player enters has the appropriate design layout by checking that the design corresponds to expectation based on the room ID.

The test then verifies that the room layout is within the boundaries of the room, so no tiles are outside the walls. The test does so by getting all the physical objects. It then checks that the “wall tiles” are within the bounds.

1. testDesignID()

The test checks that the layout design will be appropriate for any room.

It does so by checking that the room ID from one to thirty all create the appropriate layout.

This ensures that the layout is specific to the room, and will not change when the player leaves and returns to a particular room.

1. testDimensionWall()

This test checks that if the room’s width and height changes, the tiles will still behave as expected.

This does so by checking when the width is fixed, and the height increments from 20 – 100. After each increment, the “wall tiles” are checked to be within the boundary.