


## CS 472 Lab 2 Testing Report

The results that I received from JaCoCo are not similar to the results I received from IntelliJ. With no modifications or additions, the coverage percentages varied greatly between the two and the same goes for once I implemented more test units. In regard to the visualization of uncovered branches provided by JaCoCo, I must say it was helpful. However, the depth of this was not significant to me for this particular lab. This is not to say that those details could be extremely helpful for a larger project with different goals. With that being said, I prefer the IntelliJ display. It is incredibly clean and concise in comparison and allows for a quicker and more intuitive understanding.

**REPO LINK:** <https://github.com/050cal/472-2023-G3.git>

## Unit Test 1

```
import nl.tudelft.jpacman.game.SinglePlayerGame;
import org.junit.jupiter.api.Test;

/**
 *  New Test Case example
 * @author Calvin Brooks
 */
no usages
public class SinglePlayerGameTest {
    no usages
    SinglePlayerGame spgTest = new SinglePlayerGame();

    no usages
    @Test
    void SinglePlayerGameTest() {new SinglePlayerGame();}
}
```

For the first test file, I invoked the SinglePlayerGameTest constructor.

## Unit Test 2

```
 * @author Calvin Brooks
 */
no usages
public class PlayerTest {
    1 usage
    private static final PacManSprites spriteObj = new PacManSprites();
    1 usage
    private final PlayerFactory pFac = new PlayerFactory(spriteObj);
    no usages
    private Player player = pFac.createPacMan();

    no usages
    @Test
    void PlayerTest() {boolean test = new Player();}
}
```

For the second test file, I followed a similar route as the `isAlive` test but instead tested the invocation of `PlayerTest`.

### Unit Test 3

```
* @author Calvin Brooks
*/
no usages
public class BoardPanelTest {
    no usages
    SinglePlayerGame boardTest = new SinglePlayerGame();

    no usages
    @Test
    void BoardPanelTest() {new BoardPanel(boardTest);}
}
```

For the final test file. I tested the `BoardPanelTest` invocation using the constructor with a player game parameter.