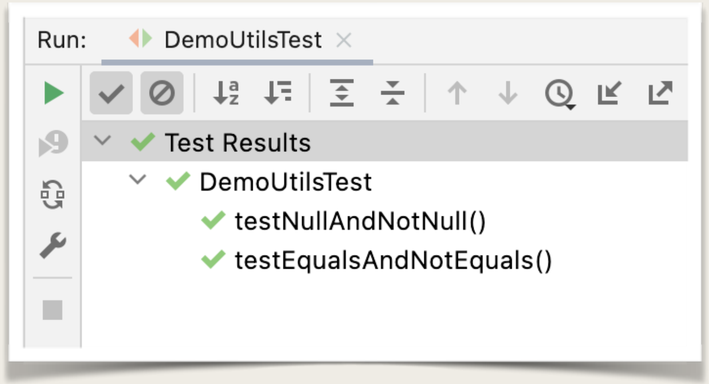
luv2code

JUnit Custom Display Names

Custom Display Names



- Currently the method names are listed in test results

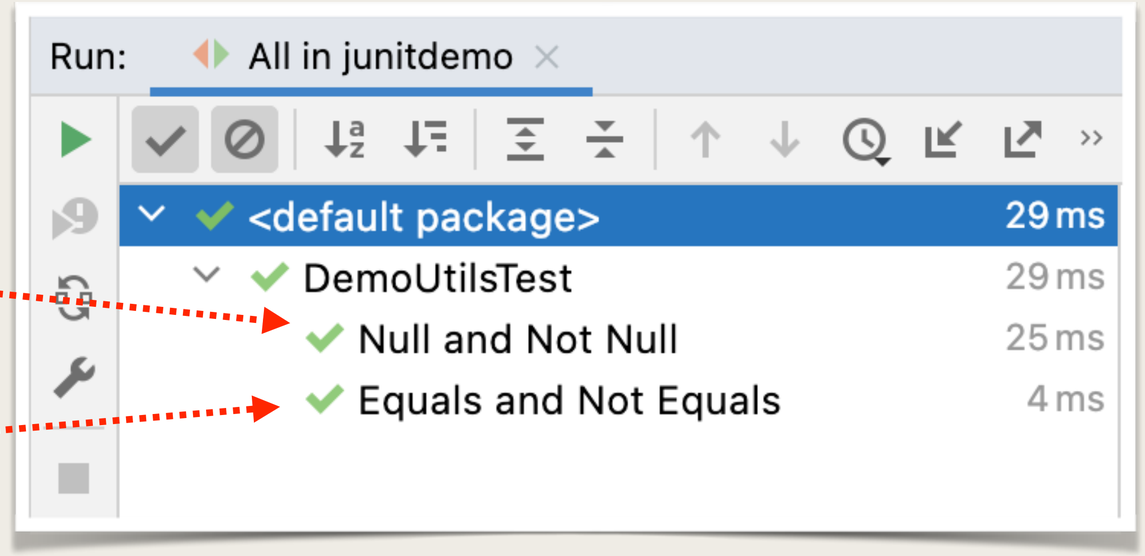
- We'd like to give custom display names
  - Provide a more descriptive name for the test
  - Include spaces, special characters: *Test for Equality to support JIRA #123*
  - Useful for sharing test reports with project management and non-techies

@DisplayName Annotation

Annotation	Description
`@DisplayName`	Custom display name with spaces, special characters and emojis. *Useful for test reports in IDE or external test runner*

DemoUtilsTest.java

```java
package com.luv2code.junitdemo;

import org.junit.jupiter.api.Test;
import org.junit.jupiter.api.BeforeEach;
import org.junit.jupiter.api.DisplayName;
import static org.junit.jupiter.api.Assertions.*;

class DemoUtilsTest {

    DemoUtils demoUtils;

    @BeforeEach
    void setupBeforeEach() {
        // set up
        demoUtils = new DemoUtils();
    }

    @Test
    @DisplayName("Null and Not Null")
    void testNullAndNotNull() {
        String str1 = null;
        String str2 = "luv2code";

        assertNull(demoUtils.checkNull(str1), "Object should be null");
        assertNotNull(demoUtils.checkNull(str2), "Object should not be null");
    }

    @Test
    @DisplayName("Equals and Not Equals")
    void testEqualsAndNotEquals() {

        // execute and assert
        assertEquals(6, demoUtils.add(2, 4), "2+4 must be 6");
        assertNotEquals(8, demoUtils.add(1, 9), "1+9 must not be 8");
    }
}
```



Display Name Generators

I wish JUnit could generate a display name for me

Display Name Generators

- JUnit can generate display names for you

Name	Description
`Simple`	Removes trailing parentheses from test method name
`ReplaceUnderscores`	Replaces underscores in test method name with spaces
`IndicativeSentences`	Generate sentence based on test class name and test method name

Simple Generator

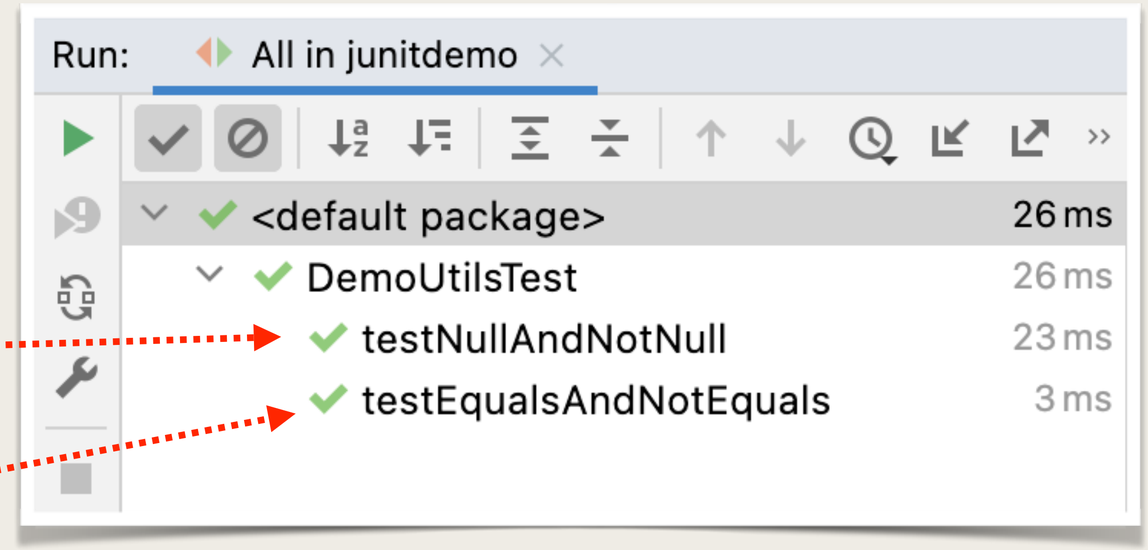
You do not need to use @DisplayName when you use @DisplayNameGeneration

@DisplayName is dominant

DemoUtilsTest.java

```
package com.luv2code.junitdemo;

import org.junit.jupiter.api.Test;
import org.junit.jupiter.api.BeforeEach;
import org.junit.jupiter.api.DisplayNameGeneration;
import org.junit.jupiter.api.DisplayNameGenerator;
import static org.junit.jupiter.api.Assertions.*;

@DisplayNameGeneration(DisplayNameGenerator.Simple.class)
class DemoUtilsTest {

    DemoUtils demoUtils;

    @BeforeEach
    void setupBeforeEach() {
        // set up
        demoUtils = new DemoUtils();
    }

    @Test
    void testNullAndNotNull() {
        String str1 = null;
        String str2 = "luv2code";

        assertNull(demoUtils.checkNull(str1), "Object should be null");
        assertNotNull(demoUtils.checkNull(str2), "Object should not be null");
    }

    @Test
    void testEqualsAndNotEquals() {

        // execute and assert
        assertEquals(6, demoUtils.add(2, 4), "2+4 must be 6");
        assertNotEquals(8, demoUtils.add(1, 9), "1+9 must not be 8");
    }
}
```

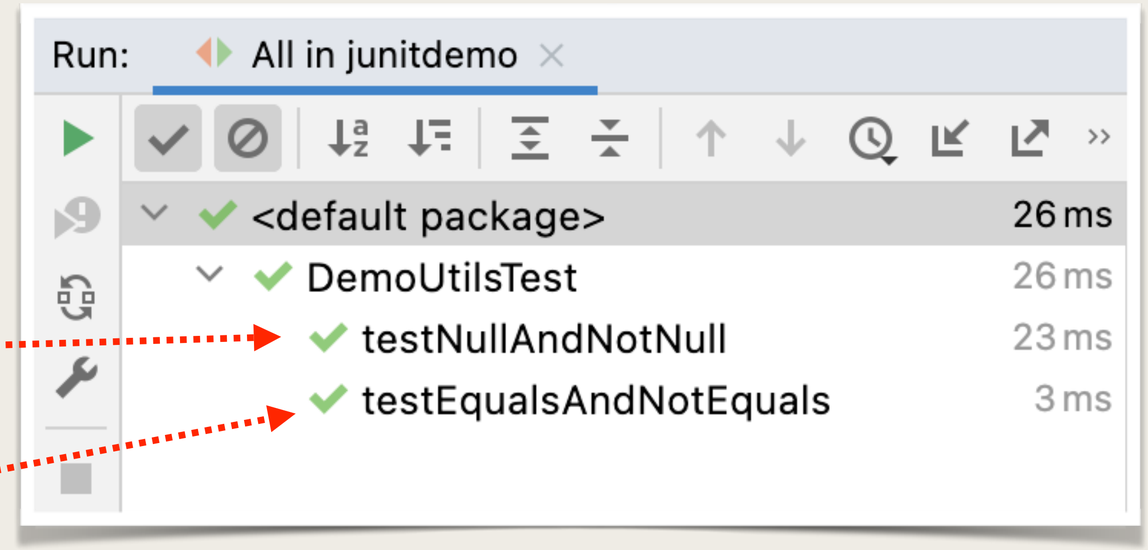
Removes trailing parentheses from test method name



Simple Generator

DemoUtilsTest.java

```java
package com.luv2code.junitdemo;

import org.junit.jupiter.api.Test;
import org.junit.jupiter.api.BeforeEach;
import org.junit.jupiter.api.DisplayNameGeneration;
import org.junit.jupiter.api.DisplayNameGenerator;
import static org.junit.jupiter.api.Assertions.*;

@DisplayNameGeneration(DisplayNameGenerator.Simple.class)
class DemoUtilsTest {

    DemoUtils demoUtils;

    @BeforeEach
    void setupBeforeEach() {
        // set up
        demoUtils = new DemoUtils();
    }

    @Test
    void testNullAndNotNull() {
        String str1 = null;
        String str2 = "luv2code";

        assertNull(demoUtils.checkNull(str1), "Object should be null");
        assertNotNull(demoUtils.checkNull(str2), "Object should not be null");
    }

    @Test
    void testEqualsAndNotEquals() {

        // execute and assert
        assertEquals(6, demoUtils.add(2, 4), "2+4 must be 6");
        assertNotEquals(8, demoUtils.add(1, 9), "1+9 must not be 8");
    }
}
```

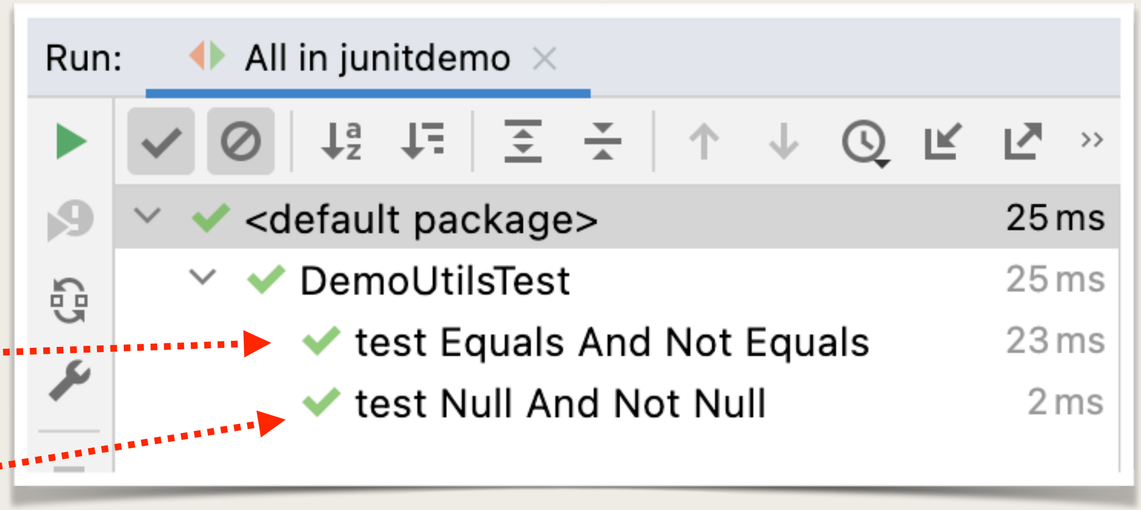


Replace Underscores Generator

DemoUtilsTest.java

```java
package com.luv2code.junitdemo;

import org.junit.jupiter.api.Test;
import org.junit.jupiter.api.BeforeEach;
import org.junit.jupiter.api.DisplayNameGeneration;
import org.junit.jupiter.api.DisplayNameGenerator;
import static org.junit.jupiter.api.Assertions.*;

@DisplayNameGeneration(DisplayNameGenerator.ReplaceUnderscores.class)
class DemoUtilsTest {

    DemoUtils demoUtils;

    @BeforeEach
    void setupBeforeEach() {
        // set up
        demoUtils = new DemoUtils();
    }

    @Test
    void test_Equals_And_Not_Equals() {

        // execute and assert
        assertEquals(6, demoUtils.add(2, 4), "2+4 must be 6");
        assertNotEquals(8, demoUtils.add(1, 9), "1+9 must not be 8");
    }

    @Test
    void test_Null_And_Not_Null() {
        String str1 = null;
        String str2 = "luv2code";

        assertNull(demoUtils.checkNull(str1), "Object should be null");
        assertNotNull(demoUtils.checkNull(str2), "Object should not be null");
    }
}
```

Replaces underscores with spaces

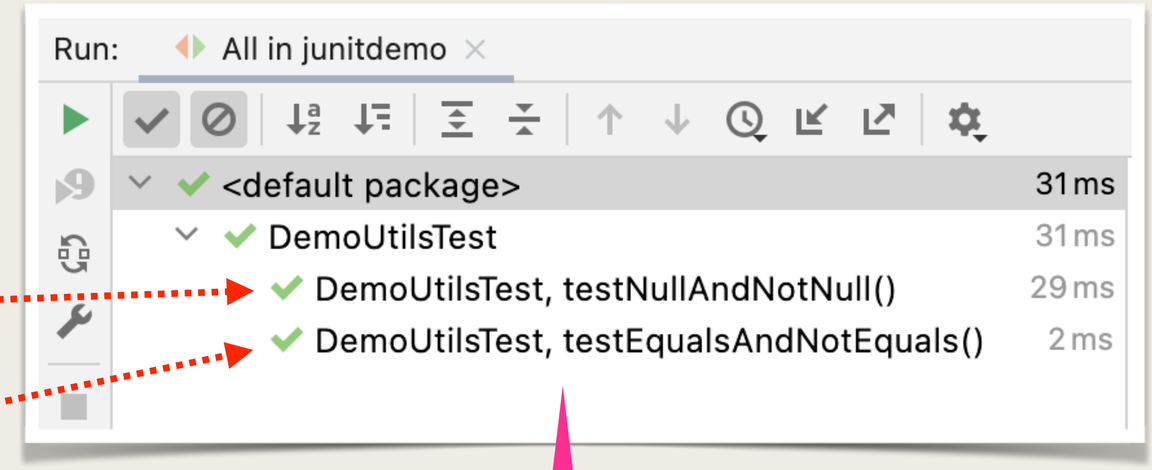


Indicative Sentences Generator

DemoUtilsTest.java

```java
package com.luv2code.junitdemo;

import org.junit.jupiter.api.Test;
import org.junit.jupiter.api.BeforeEach;
import org.junit.jupiter.api.DisplayNameGeneration;
import org.junit.jupiter.api.DisplayNameGenerator;
import static org.junit.jupiter.api.Assertions.*;

@DisplayNameGeneration(DisplayNameGenerator.IndicativeSentences.class)
class DemoUtilsTest {

    DemoUtils demoUtils;

    @BeforeEach
    void setupBeforeEach() {
        // set up
        demoUtils = new DemoUtils();
    }

    @Test
    void testNullAndNotNull() {
        String str1 = null;
        String str2 = "luv2code";

        assertNull(demoUtils.checkNull(str1), "Object should be null");
        assertNotNull(demoUtils.checkNull(str2), "Object should not be null");
    }

    @Test
    void testEqualsAndNotEquals() {

        // execute and assert
        assertEquals(6, demoUtils.add(2, 4), "2+4 must be 6");
        assertNotEquals(8, demoUtils.add(1, 9), "1+9 must not be 8");
    }
}
```

Generate sentence based on test class name and test method name



<testClassName>, <methodName>