Operating System Conditions - @DisabledOnOs and @EnabledOnOs

This lesson demonstrates how to disable or enable the test method or a complete test class using OS-level conditions.

we'll cover the following ^

• @DisabledOnOs and @EnabledOnOs

@DisabledOnOs and @EnabledOnOs

Junit 5 helps us to disable or enable test cases using various conditions. JUnit Jupiter API provides annotations in org.junit.jupiter.api.condition - https://junit.org/junit5/docs/5.3.2/api/org/junit/jupiter/api/condition/package-summary.html

package to enable/disable tests based on a certain condition. The annotations provided by API can be applied to test methods as well as the class itself. The two annotations which are applied to disable/enable tests based on Operating system are - <code>@DisabledOnOs</code> and <code>@EnabledOnOs</code>. Let's take a look at a demo.

```
package io.educative.junit5;

import static org.junit.jupiter.api.Assertions.assertFalse;
import org.junit.jupiter.api.Assertions.assertTrue;

import org.junit.jupiter.api.Test;
import org.junit.jupiter.api.condition.DisabledOnOs;
import org.junit.jupiter.api.condition.OS;

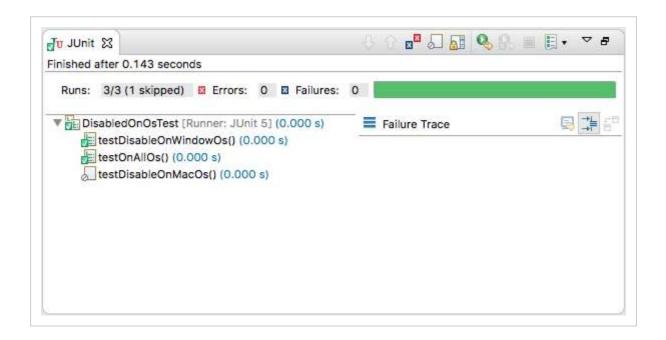
public class DisabledOnOsTest {

    @Test
    void testOnAllOs() {
        assertTrue(3 > 0);
    }

    @DisabledOnOs(OS.MAC)
    @Test
    void tottDisableOnMasOr() {
```

```
assertFalse(0 > 4);
}

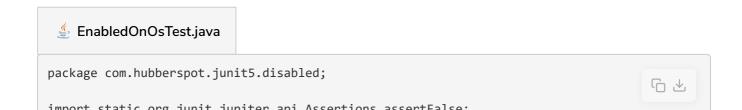
@DisabledOnOs(OS.WINDOWS)
@Test
  void testDisableOnWindowOs() {
    assertFalse(10 > 40);
}
}
```



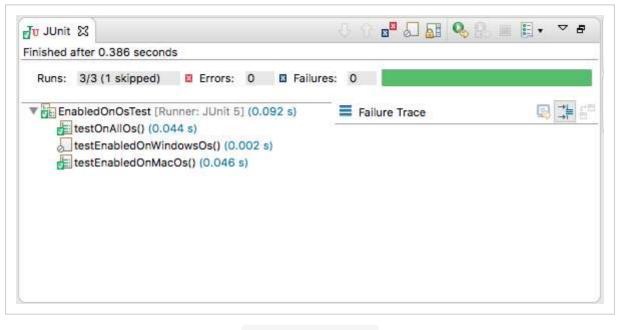
Above test program has 3 test methods and <code>@DisabledOnOs</code> is applied on 2 test methods as -

- 1. testDisableOnMacOs() Here, @DisabledOnOs annotation takes in value as OS.MAC. It makes the test method skip to execute on Mac operating system. It will not skip on other operating systems.
- 2. testDisableOnWindowOs() Here, @DisabledOnOs annotation takes in value as OS.WINDOWS. It makes the test method skip to execute on Windows operating system. It will not skip on other operating systems.

The above test methods are executed on the Mac operating system. Thus, the output shows that 1 test method marked as, <code>@DisabledOnOs(OS.MAC)</code> is skipped for execution.



```
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import static org.junit.jupiter.api.Assertions.assertTrue;
import org.junit.jupiter.api.Test;
import org.junit.jupiter.api.condition.EnabledOnOs;
import org.junit.jupiter.api.condition.OS;
public class EnabledOnOsTest {
   @Test
    void testOnAllOs() {
        assertTrue(3 > 0);
    }
    @EnabledOnOs(OS.WINDOWS)
    @Test
    void testEnabledOnWindowsOs() {
        assertFalse(0 > 4);
   @EnabledOnOs(OS.MAC)
    void testEnabledOnMacOs() {
        assertFalse(10 > 40);
}
```



Output of tests

Above test program has 3 test methods and @EnabledOnOs annotation is applied on 2 test methods as -

- 1. testEnabledOnWindowsOs() Here, @EnabledOnOs annotation takes in value as OS.WINDOWS. It makes the test method enabled to execute only on the Windows operating system. It will get skipped on other operating systems.
- 2. testEnabledOnMacOs() Here, @EnabledOnOs annotation takes in value as -

OS.MAC. It makes the test method enabled to execute only on Mac operating system. It will get skipped on other operating systems.

The above test methods are executed on the Mac operating system. Thus, the output shows that 1 test method marked as, <code>@EnabledOnOs(OS.WINDOWS)</code> is skipped for execution. It will execute when tests are run on Windows operating system.

In the next lesson we will learn about <code>DisabledOnJre</code> and <code>EnableOnJre</code> based conditions.