Java Runtime Environment Conditions - @DisabledOnJre and @EnabledOnJre

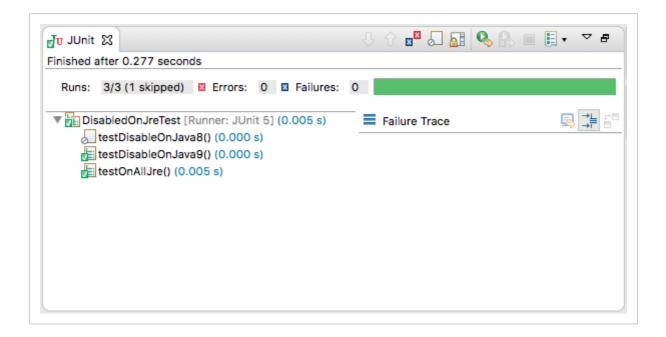
This lesson demonstrates how to disable or enable test methods or a complete test class using JRE level conditions.



@DisabledOnJre and @EnabledOnJre

Junit 5 helps us to disable or enable test cases using various conditions. JUnit Jupiter API provides annotations in <code>org.junit.jupiter.api.condition</code> 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 the particular version of the Java Runtime Environment (JRE) are - <code>@DisabledOnJre</code> and <code>@EnabledOnJre</code>. Let's take a look at a demo.

```
DisabledOnJreTest.java
    package com.hubberspot.junit5.disabled;
    import static org.junit.jupiter.api.Assertions.assertFalse;
    import static org.junit.jupiter.api.Assertions.assertTrue;
    import org.junit.jupiter.api.Test;
    import org.junit.jupiter.api.condition.DisabledOnJre;
    import org.junit.jupiter.api.condition.JRE;
    public class DisabledOnJreTest {
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        @Test
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13
        void testOnAllJre() {
14
            assertTrue(3 > 0);
17
        @DisabledOnJre(JRE.JAVA_8)
        @Test
        void testDisableOnJava8() {
20
             assertFalse(0 > 4);
```



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

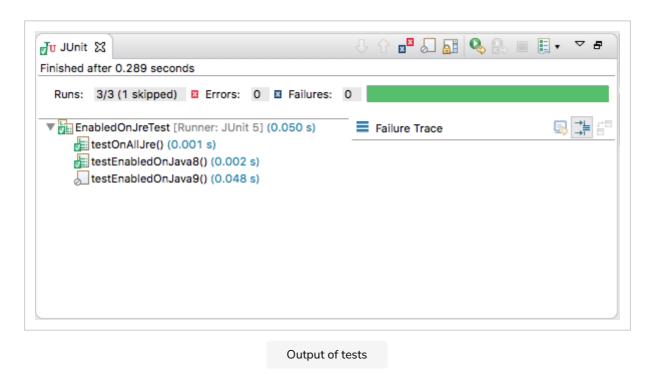
- 1. testDisableOnJava8() Here, @DisabledOnJre annotation takes in value as JRE.JAVA_8. It makes the test method skip to execute on Java 8 runtime environment. It will not skip on other Java runtime environments.
- 2. testDisableOnJava9() Here, @DisabledOnJre annotation takes in value as JRE.JAVA_9. It makes the test method skip to execute on Java 9 runtime environment. It will not skip on other Java runtime environments.

The above test methods are executed on the Java 8 runtime environment. Thus, the output shows that 1 test method marked as,

@DisabledOnJre(JRE.JAVA 8) is skipped for execution.

```
package com.hubberspot.junit5.disabled;
import static org.junit.jupiter.api.Assertions.assertFalse;
import static org.junit.jupiter.api.Assertions.assertTrue;
```

```
import org.junit.jupiter.api.Test;
import org.junit.jupiter.api.condition.EnabledOnJre;
import org.junit.jupiter.api.condition.JRE;
public class EnabledOnJreTest {
          @Test
    void testOnAllJre() {
       assertTrue(3 > 0);
    @EnabledOnJre(JRE.JAVA_8)
    void testEnabledOnJava8() {
        assertFalse(0 > 4);
    @EnabledOnJre(JRE.JAVA_9)
    @Test
    void testEnabledOnJava9() {
        assertFalse(10 > 40);
    }
}
```



Above test program has 3 test methods and <code>@EnabledOnJre</code> annotation is applied on 2 test methods as.

- 1. testEnabledOnJava8() Here, @EnabledOnJre annotation takes in value as JRE.JAVA_8. It makes the test method enabled to execute only on Java 8 runtime environment. It will get skipped on other Java runtime environments.
- 2. testEnabledOnJava9() Here, @EnabledOnJre annotation takes in value as JRE.JAVA_8. It makes the test method enabled to execute only on Java 9

environments.

The above test methods are executed on <code>Java 8</code> runtime environment. Thus, the output shows that 1 test method marked as, <code>@EnabledOnJre(JRE.JAVA_9)</code> is skipped for execution. It will execute when tests are run on Java 9 runtime environment.