





Introduction to JUnit 5

JUnit 5

- Started as a project called JUnit Lambda
- Crowdfunding campaign in 2015 raised €54,000
- Corporate Sponsors include Pivotal and American Express
- First GA Release September 10th, 2017

Why JUnit 5?

- JUnit 4 Originally Released in February 2006
 - Java 6 Released in December 2006
- ~12 Minor Releases since 2006
- Significant changes to Java Language
- Still the de facto standard for Java unit testing

Why JUnit 5?

- JUnit 5 leverages new features of Java 8
 - Lambda Expressions
 - Streams
 - Java 8 or Higher is required
- Designed for better integration and extensibility

JUnit Vintage

- Optional JUnit 5 Library
- Provides a test runner for JUnit 3 and 4 tests using JUnit 5
- Allows easy migration to JUnit 5

Key Differences from JUnit 4

JUnit 4	JUnit 5
<code>@Test(expected = Foo.class)</code>	<code>Assertions.assertThrows(Foo.class...</code>
<code>@Test(timeout = 1)</code>	<code>Assertions.assertTimeout(Duration...</code>
<code>@RunWith(SpringJUnit4ClassRunner.class)</code>	<code>@ExtendWith(SpringExtension.class)</code>

New Annotations

JUnit 4	JUnit 5
@Before	@BeforeEach
@After	@AfterEach
@BeforeClass	@BeforeAll
@AfterClass	@AfterAll
@Ignored	@Disabled
@Category	@Tag

JUnit in this Course

- Most of the Spring Framework 5: Beginner to Guru course was developed using JUnit 4
 - JUnit 4 is still highly popular
 - TON of legacy code using JUnit 4
- JUnit 5 is introduced in the Spring Pet Clinic Project
- For the foreseeable future, you can expect both to be used

Specialized Testing Spring Course

- Currently considering a deep dive course on Testing Spring
- Cover In-depth:
 - JUnit 4 & 5, Mockito
 - Spock
 - Test Containers
- Please comment if interested!

