# JUnit 5

## Some nice new features

**Matthias** 

Code without test is not clean.

## Disclaimer

- tried to show differences to JUnit4
- get impression of some new stuff
- no guarantee on completeness
- guaranteed totally stupid examples :-)

## Sources

- junit.org
- blog.scottlogic.com
- Baeldung

## Switch from JUnit4 to JUnit5

### changed Annotations

JUnit4	JUnit5
@Before / @After	@BeforeEach and @AfterEach
@BeforeClass / @AfterClass	@BeforeAll / @AfterAll
@lgnore	@Disabled
@Category	@Tag
@RunWith,@Rule and @ClassRule	"superseded" by @ExtendWith

## Switch from JUnit4 to JUnit5

#### new Annotations

Annotation	Description
@DisplayName("descriptive name")	descriptive name instead of Methodname
@Nested	nesting classes to structure tests
@RepeatedTest(count)	repeat a test (but what for)
@ParameterizedTest	more to come :-)

#### @ParameterizedTest

- separation of test code and test cases
- different sources for test cases
  - @ValueSource
  - @EmptySource/@NullSource/@NullAndEmptySource
  - @EnumSource
  - @CsvSource/@CsvFileSource
  - @MethodSource

## Interesting Stuff

#### Testing exceptions

Exception assertThrows (ExceptionClass, Executable)

#### Testing multiply asserts at once

void assertAll(Executable ...);

#### Testing runtime

void assertTimeout(Duration, Executable);

In more detail :-)

## Testing Exceptions