

# JUnit 5

Some nice new features

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*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](https://junit.org)
- [blog.scottlogic.com](https://blog.scottlogic.com)
- Baeldung

# Switch from JUnit4 to JUnit5

## changed Annotations

JUnit4	JUnit5
@Before / @After	@BeforeEach and @AfterEach
@BeforeClass / @AfterClass	@BeforeAll / @AfterAll
@Ignore	@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@RunWith, @Rule and @ClassRule	"superseded" by @ExtendWith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);
```