# 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
- 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| @RunWith , @Rule and @ClassRule | "superseded" by @ExtendWith |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);
```

# In more detail :-)

# Testing Exceptions