

# 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](http://junit.org)
- [blog.scottlogic.com](http://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| @RunWith , @Rule and @ClassRule | "superseded" by @ExtendWith |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