

JUnit

- [JUnit 5](#)

JUnit 5

Installation

La mise en place de JUnit5 passe par les dépendances maven suivante:

```
<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-
4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>

  <groupId>be.etnic</groupId>
  <artifactId>money</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <packaging>jar</packaging>

  <name>money</name>
  <url>http://maven.apache.org</url>

  <properties>
    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
    <junit.version>4.12</junit.version>
    <junit.jupiter.version>5.0.0</junit.jupiter.version>
    <junit.vintage.version>${junit.version}.0</junit.vintage.version>
    <junit.platform.version>1.0.0</junit.platform.version>
  </properties>

  <dependencies>
<dependency>
    <groupId>org.junit.jupiter</groupId>
    <artifactId>junit-jupiter-api</artifactId>
    <version>${junit.jupiter.version}</version>
    <scope>test</scope>
  </dependency>
<dependency>
```

```
<groupId>org. junit. jupiter</groupId>
<artifactId>junit- jupiter- params</artifactId>
<version>${junit. jupiter. version}</version>
<scope>test</scope>
</dependency>
<!-- Pour executer des tests ecrits avec un IDE
      qui ne supporte que les versions precedentes de JUnit -->
<dependency>
  <groupId>junit</groupId>
  <artifactId>junit</artifactId>
  <version>${junit. version}</version>
  <scope>test</scope>
</dependency>
<dependency>
  <groupId>org. junit. platform</groupId>
  <artifactId>junit- platform- runner</artifactId>
  <version>${junit. platform. version}</version>
  <scope>test</scope>
</dependency>
<dependency>
  <groupId>org. junit. jupiter</groupId>
  <artifactId>junit- jupiter- engine</artifactId>
  <version>${junit. jupiter. version}</version>
</dependency>
<dependency>
  <groupId>org. junit. vintage</groupId>
  <artifactId>junit- vintage- engine</artifactId>
  <version>${junit. vintage. version}</version>
</dependency>
<dependency>
  <groupId>org. mockito</groupId>
  <artifactId>mockito- core</artifactId>
  <version>2. 21. 0</version>
  <scope>test</scope>
</dependency>
<dependency>
  <groupId>org. mockito</groupId>
  <artifactId>mockito- junit- jupiter</artifactId>
  <version>2. 23. 0</version>
  <scope>test</scope>
```

```
</dependency>
</dependencies>
<build><plugins>
  <plugin>

  <groupId>org.apache.maven.plugins</groupId>

  <artifactId>maven-surefire-plugin</artifactId>

  <version>2.19.1</version>

  <dependencies>

    <dependency>

      <groupId>org.junit.platform</groupId>

      <artifactId>junit-platform-surefire-provider</artifactId>

      <version>1.1.0</version>

    </dependency>

    <dependency>

      <groupId>org.junit.jupiter</groupId>

      <artifactId>junit-jupiter-engine</artifactId>

      <version>5.1.0</version>

    </dependency>

  </dependencies>

</plugin>
</plugins></build>
</project>
```

Ce fichier XML va installer JUnit 5 et Mockito pour faire les test.

Création de la testsuite

La création de la testsuite se fait via le positionnement du package que l'on souhaite executer

```
package be. etnic;

import org. junit. jupiter. api. extension. ExtendWith;
import org. junit. platform. runner. JUnitPlatform;
import org. junit. platform. suite. api. SelectPackages;
import org. junit. runner. RunWith;
import org. mockito. junit. jupiter. MockitoExtension;

@RunWith( JUnitPlatform. class)
@SelectPackages( "be. etnic. money" )
@ExtendWith( MockitoExtension. class)
public class TestSuite {

}
```

Création d'un test

```
import static org. junit. jupiter. api. Assertions. *;

import java. util. LinkedList;
import java. util. List;

import org. junit. jupiter. api. AfterEach;
import org. junit. jupiter. api. BeforeEach;
import org. junit. jupiter. api. Disabled;
import org. junit. jupiter. api. Test;
import org. mockito. Mock;
import org. mockito. Mockito;
```

```
public class TestMoney {

    Money toTest;

    @BeforeEach
    public void init() {
        toTest=Mockito.mock(Money.class);

        org.mockito.Mockito.when(toTest.getAmount()).thenReturn(10);
    }

    @AfterEach
    public void tearDown() throws Exception {

    }

    @Test
    public void TestAddMoney() {
        Money un=new Money(5,"euros");
        un.add(toTest);
    }
}
```