**Mocking and Stubbing**

Pom.xml:

<?xml version="1.0" encoding="UTF-8"?>

<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>com.example</groupId>

  <artifactId>mockitomockingandstubbing</artifactId>

  <version>1.0-SNAPSHOT</version>

  <name>mockitomockingandstubbing</name>

  <!-- FIXME change it to the project's website -->

  <url>http://www.example.com</url>

  <properties>

    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>

    <maven.compiler.source>1.8</maven.compiler.source>

    <maven.compiler.target>1.8</maven.compiler.target>

  </properties>

  <dependencies>

    <dependency>

      <groupId>junit</groupId>

      <artifactId>junit</artifactId>

      <version>4.11</version>

      <scope>test</scope>

    </dependency>

     <dependency>

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

        <artifactId>junit-jupiter</artifactId>

        <version>5.10.0</version>

        <scope>test</scope>

    </dependency>

    <dependency>

        <groupId>org.mockito</groupId>

        <artifactId>mockito-core</artifactId>

        <version>5.7.0</version>

        <scope>test</scope>

    </dependency>

  </dependencies>

**ExternalApi.java**

package com.example;

public interface ExternalApi {

    String getData();

}

**MyService.java**

package com.example;

public class MyService {

    private ExternalApi api;

    public MyService(ExternalApi api) {

        this.api = api;

    }

    public String fetchData() {

        return api.getData();

    }

}

**MyServiceTest.java**

package com.example;

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

import static org.mockito.Mockito.\*;

import org.junit.jupiter.api.Test;

public class MyServiceTest {

    @Test

    public void testExternalApi() {

        ExternalApi mockApi = mock(ExternalApi.class);

        when(mockApi.getData()).thenReturn("Mock Data");

        MyService service = new MyService(mockApi);

        String result = service.fetchData();

        assertEquals("Mock Data", result);

    }

}

**Output:**

