**Exercise 2: Verifying Interactions**

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>org.example</groupId>

<artifactId>demo2</artifactId>

<version>1.0-SNAPSHOT</version>

<properties>

<maven.compiler.source>21</maven.compiler.source>

<maven.compiler.target>21</maven.compiler.target>

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

</properties>

<dependencies>

<dependency>

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

<artifactId>junit-jupiter</artifactId>

<version>5.10.2</version>

<scope>test</scope>

</dependency>

<dependency>

<groupId>org.mockito</groupId>

<artifactId>mockito-core</artifactId>

<version>5.12.0</version>

<scope>test</scope>

</dependency>

</dependencies>

</project>

ExternalApi.java

package org.example;

public interface ExternalApi {

String getData();

}

MyService.java

package org.example;

public class MyService {

private final ExternalApi api;

public MyService(ExternalApi api) {

this.api = api;

}

public String fetchData() {

return api.getData();

}

}

MyServiceTest.java

package org.example;

import org.junit.jupiter.api.Test;

import static org.mockito.Mockito.\*;

public class MyServiceTest {

@Test

public void testVerifyInteraction() {

// Step 1: Create a mock of the ExternalApi

ExternalApi mockApi = mock(ExternalApi.class);

// Step 2: Create the service and inject the mock

MyService service = new MyService(mockApi);

// Step 3: Call the method that should trigger interaction

service.fetchData();

// Step 4: Verify the interaction with specific method

verify(mockApi).getData(); // ✅ Will pass if called once

}

}

**OUTPUT :**

