|  |  |
| --- | --- |
| **3. Mockito exercises** | **Exercise 1: Mocking and Stubbing** |

**ExternalApi.java:**

package com.example;

public interface ExternalApi {

String getData(); // Method to simulate an external call

}

**2. MyService.java:**

package com.example;

public class MyService {

private ExternalApi api;

// Constructor injection of the external dependency

public MyService(ExternalApi api) {

this.api = api;

}

// Method under test

public String fetchData() {

return api.getData();

}

}

**3. MyServiceTest.java:**

package com.example;

import org.junit.jupiter.api.Test;

import static org.mockito.Mockito.\*;

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

public class MyServiceTest {

@Test

public void testExternalApi() {

// Step 1: Create a mock of the ExternalApi

ExternalApi mockApi = mock(ExternalApi.class);

// Step 2: Stub the method to return "Mock Data"

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

// Step 3: Inject mock into MyService

MyService service = new MyService(mockApi);

// Step 4: Call the method under test

String result = service.fetchData();

// Step 5: Verify result

assertEquals("Mock Data", result);

}

}

**Pom.xml:**

<dependencies>

<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>5.12.0</version>

<scope>test</scope>

</dependency>

</dependencies>

**OUTPUT:**

A screenshot of a computer

AI-generated content may be incorrect.