Exercise 1: Mocking and Stubbing

Code:

ExternalApi.java

package com.example;

public interface ExternalApi {

String getData();

}

MyService.java

package com.example;

public class MyService {

private final ExternalApi api;

public MyService(ExternalApi api) {

this.api = api;

}

public String fetchData() {

return api.getData(); // Interaction we're going to verify

}

}

MyServiceTest.java

package com.example;

import org.junit.jupiter.api.Test;

import static org.mockito.Mockito.\*;

public class MyServiceTest {

@Test

public void testVerifyInteraction() {

// Step 1: Create mock

ExternalApi mockApi = mock(ExternalApi.class);

// Step 2: Use mock in the service

MyService service = new MyService(mockApi);

// Act: Call the method that internally uses the mock

service.fetchData();

// Step 3: Verify the interaction

verify(mockApi).getData(); // Checks that getData() was called

}

}

Output:

