**Week 2\_Mockito\_Hands-On-Exercises**

**Exercise 1:** Mocking and Stubbing

**Code:**

import static org.mockito.Mockito.\*;

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

import org.junit.jupiter.api.Test;

import org.mockito.Mockito;

interface ExternalApi {

String getData();

}

class MyService {

private ExternalApi api;

public MyService(ExternalApi api) {

this.api = api;

}

public String fetchData() {

return api.getData();

}

}

public class MyServiceTest {

@Test

public void testExternalApi() {

ExternalApi mockApi = Mockito.mock(ExternalApi.class);

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

MyService service = new MyService(mockApi);

String result = service.fetchData();

assertEquals("Mock Data", result);

}

**}**

**Output:**

Tests run: 1, Failures: 0, Errors: 0, Skipped: 0

**Exercise 2:** Verifying Interactions

**Code:**

import static org.mockito.Mockito.\*;

import org.junit.jupiter.api.Test;

import org.mockito.Mockito;

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

public class MyServiceTest {

@Test

public void testVerifyInteraction() {

ExternalApi mockApi = Mockito.mock(ExternalApi.class);

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

MyService service = new MyService(mockApi);

String result = service.fetchData();

assertEquals("Mock Data", result);

verify(mockApi).getData();

}

}

**Output:**

Tests run: 1, Failures: 0, Errors: 0, Skipped: 0