

Exercise 2: Verifying Interactions:

##ExternalApi.java

```
package org.apache.maven.archetypes.maven_archetype_quickstart;
```

```
public interface ExternalApi {  
    String getData();  
}
```

##MyService.java

```
package org.apache.maven.archetypes.maven_archetype_quickstart;
```

```
public class MyService {  
    private ExternalApi api;  
  
    public MyService(ExternalApi api) {  
        this.api = api;  
    }  
  
    public String fetchData() {  
        return api.getData();  
    }  
  
}
```

##MyServiceTest.java

```
package org.apache.maven.archetypes.maven_archetype_quickstart;
```

```
import static org.mockito.Mockito.*;
```

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

```
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);
```

```
    }
```

```
// Exercise 2: Verifying interaction
```

```
@Test
```

```
public void testVerifyInteraction() {
```

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

```
    MyService service = new MyService(mockApi);
```

```
    service.fetchData();
```

```

// Verify that getData() was called exactly once
    verify(mockApi).getData();
}
}

```

OUTPUT:

```

[INFO] -----
[INFO] T E S T S
[INFO] -----
[INFO] Running org.apache.maven.archetypes.maven archetype quickstart.MyServiceTest
WARNING: A Java agent has been loaded dynamically (C:\Users\Dinesh Reddy\.m2\repository\net\bytebuddy\byte-buddy-agent\1.14.8\byte-buddy-agent-1.14.8.jar)
WARNING: If a serviceability tool is in use, please run with -XX:+EnableDynamicAgentLoading to hide this warning
WARNING: If a serviceability tool is not in use, please run with -Djdk.instrument.traceUsage for more information
WARNING: Dynamic loading of agents will be disallowed by default in a future release
OpenJDK 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appended
[INFO] Tests run: 2, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 1.917 s -- in org.apache.maven.archetypes.maven_archetype_quickstart.MyServiceTest
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 2, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 8.095 s
[INFO] Finished at: 2025-06-29T13:16:28+05:30
[INFO] -----

```

Activate Windows
Go to Settings to activate Windows.