Introduction to mocking with Mockito

In this exercise you are going to implement a service that, given an Acronym[1], can find the original phrase. For example, if we provide the service with the acronym NATO, it should return "North Atlantic Treaty Organization". Eventually the service should find most (if not all) known acronyms, but initially it must as a minimum find the value for NATO.

1) Create a new (Maven) java project and add this interface to the project:

```
public interface AcronymInterface {
    String getInitialPhrase(String Acronym) throws NoAcronymFoundException;
}
```

2) Add a package *exceptions*, and create the `NoAcronymFoundException` used above.

3) Create a simple class that implement the interface above, but don't implement the method body, just throw an `UnsupportedOperationException` (we will do test-first, so we would like to see the test fail initially).

4) Use the NetBeans wizard to implement a new Unit Test and write two test's to test the converter:

- Write a test to verify we can find and the value for an existing acronym (NATO)
- Write a test to verify that `NoAcronymFoundException` is thrown for acronyms not found

Verify that both test fails, since the implementation is not yet done.

5) Eventually we are going to implement the code to make the test pass, but to simulate a larger system where things are developed by more than one team, lets create a class that will use our service.

Add the class below to your project. This will be the class we will test, using mocks since the implementation for the interface is not yet completed.

```
public class AcronoymUser {
    AcronymInterface acr;
    public void setAcronoymUser(AcronymInterface acr) {
        this.acr = acr;
    }
    public String getInitialPhrase(String Acronym) throws NoAcronymFoundException
    {
        return acr.getInitialPhrase(Acronym);
    }
}
```

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[1] https://en.wikipedia.org/wiki/Acronym

6) We will use Mockito to mock the interface, so include Mockito to your project as using the pom-dependency sketched below:

```
<dependency>
        <groupId>org.mockito</groupId>
        <artifactId>mockito-core</artifactId>
        <version>2.1.0-beta.120</version>
        <scope>test</scope>
</dependency>
```

7) Use Mockito and example in the slides and/or suggested readings to implement a mocked test that verifies the two scenarios:

- Write a test to verify we can find a value for an existing acronym (NATO)
- Write a test to verify that `NoAcronymFoundException` is thrown for acronyms not found