Arquillian - a different kind of testing

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Arquillian - a different kind of testing

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ntroduction

Advantages & Disadvantages

Advantages of testing with Arquillian

vith Arquillian

Examples

Shrinkwrappe

Complete test

Persistence test

Functional test

What is Arquillian

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Introduction

Advantages & Disadvantages

Advantages of testing with Arquillian

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Examples

Unit

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Advantages of testing with Arquillian

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Advantages of testing with Arquillian

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Disadvantages of testing with Arquillian

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Unit test

Shrinkwrapper

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Simple Greeter test

- @Injected Dependency inject objects that are used during the tests, equals as using jUnits @before to set up tests
- @Test defines which methods are tests and should be executed
- Asserts are the same as in jUnit

Disadvantages of test with Arquillian

Examples

Shrinkwrapper

Complete test Persistence test

Functional test

Greeter test Shrinkwrapper

- @Deployment defines which method is run before a test is executed. It need to return the minimal archive which is needed to execute the tests of this class
- JavaArchive a class representing the structure of a jar file
- **ShrinkWrap.create** allows to create an archive of the specified class, in case of a unit test JavaArchive.class

@Deployment

Greeter test Shrinkwrapper

return jar;

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Examples

Shrinkwrapper

Complete test

Functional test

 addClasses allows to add classes, that are needed during the tests, to the jar

public static JavaArchive createDeployment() { JavaArchive jar = $ShrinkWrap.create(\leftarrow)$

 $.\, \texttt{addClasses} \big(\, \texttt{Greeter} \, . \, \, \texttt{class} \,\, , \,\,\, \texttt{PhraseBuilder} \! \hookleftarrow \,\,$

.addAsManifestResource(EmptyAsset. ← INSTANCE, "beans.xml");

JavaArchive. class)

.class)

- addAsManifestResource allows to add a resource, that are needed for the execution e.g. database configuration file, to the jar
- EmptyAsset.INSTANCE creates an empty file

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Advantages of testing with Arquillian

Disadvantages of test with Arquillian

Examples

Unit tost

Shrinkwrapper Complete test

Greeter test

```
@RunWith(Arguillian.class)
public class GreeterTest {
    @Deployment
    public static JavaArchive createDeployment() {
        JavaArchive jar = ShrinkWrap.create(JavaArchive.class)
            .addClasses(Greeter.class. PhraseBuilder.class)
            .addAsManifestResource(EmptvAsset.INSTANCE. "beans.xml"):
        return jar;
    @Inject
    Greeter greeter:
    @Test
    public void should_create_greeting() {
        Assert.assertEquals("Hello, Earthling!",
            greeter.createGreeting("Earthling"));
```

 QRunWith(Arquillian.class) is need for every test class to indicate that this test should be executed with Arquillian

Arquillian persistence test

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Any open issues?

Not all understood?

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Functional test

Questions?

Questions or remarks?

• see http://arquillian.org/guides/