Alfresco Koans

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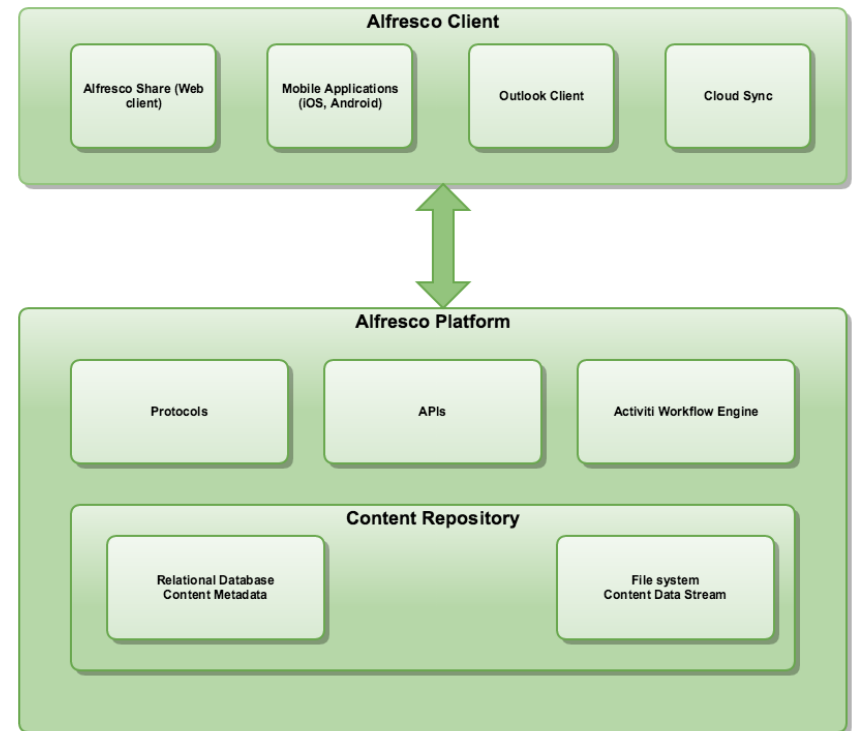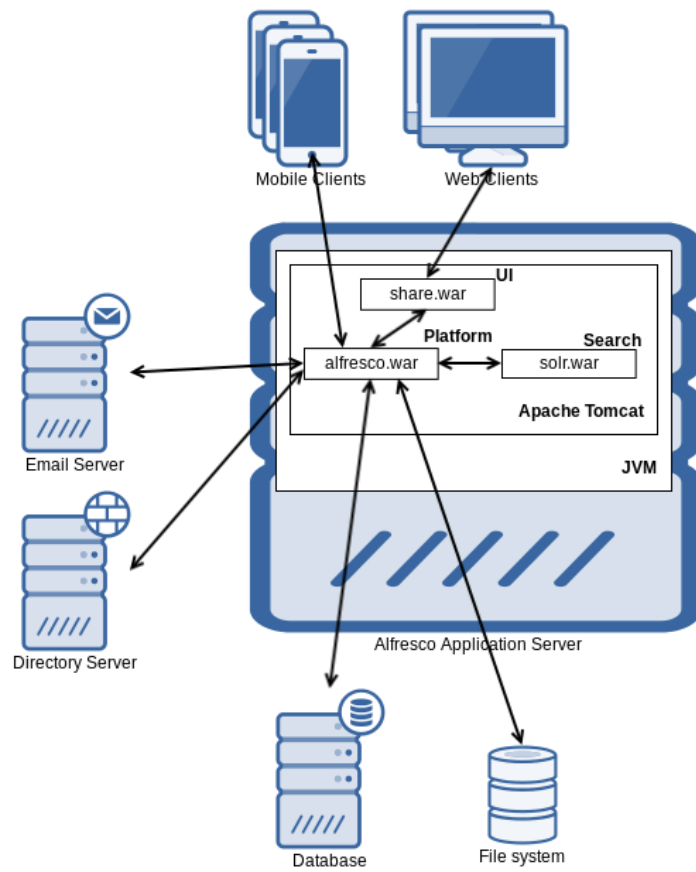# Learning is a journey

Where to start?

Self-guided learning

Through code…

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Zen and the art of software learning

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Zen Buddhist Practice

- A Zen Buddhist Koan can be a dialogue or question, story or statement

- Designed to test a student's progress

- "What is the sound of one hand clapping?"

Where to start?

Alfresco Repository

Content Files

Tree, Metadata, ACLs etc.

Search Indices
Apache Solr

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Where to start?

- Other fundamental Alfresco concepts:
    - Nodes
    - Stores
    - Types
    - Aspects

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Progressive learning

Store   ...   Rules   Web Scripts

Node   Actions   ...
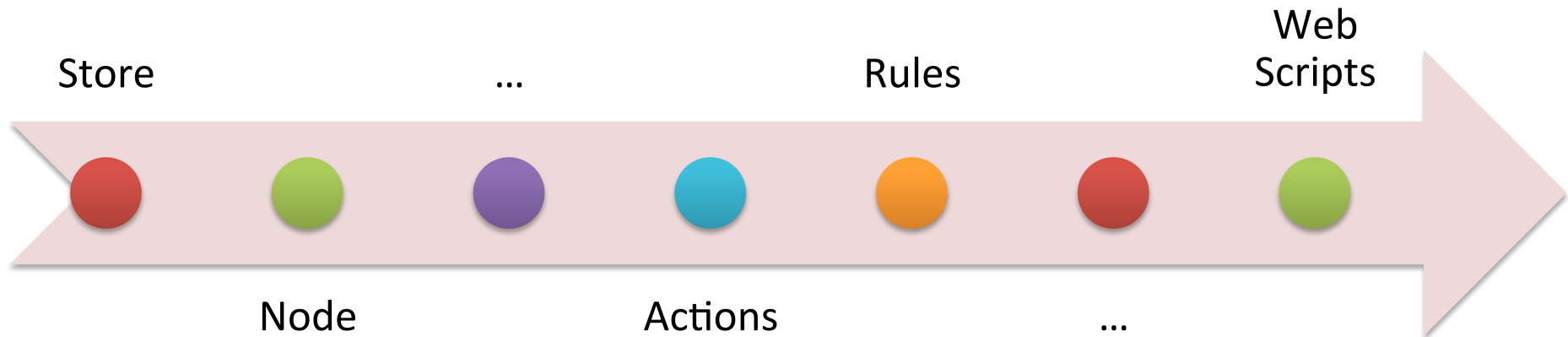
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Self contained lessons*

- The aim is to ensure that each test class helps a student learn part of the API

- Each test case should be encapsulated

* Well they might need to read the JavaDoc

Executable lesson

- BDD Given-When-Then stories would be ideal
  - E.g. EasyB

```
given "a store identifier", {
    storeRef = new StoreRef("foo://bar")
}
when "the store is created", {
    // your code goes here

}
then "the store should exist", {
    nodeService.exists(storeRef).shouldBe true
}
```

- Opted for JUnit tests

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Why JUnit?

- Familiarity
  - Teaching Alfresco
  - Without requiring them to learn Groovy / EasyB
- Lower barrier of entry
  - For students
  - And contributors

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Execution

- Students clone the repository
- Complete the test case by adding their code between the markers
- Execute '`mvn test`'
- Sit back and bask in the glory
  - Or learn from the failure and correct the code

```
-----------------------------------------------------------
 T E S T S
-----------------------------------------------------------
Running com.ixxus.koans.alfresco.cmr.repository.Koan1Test
Tests run: 3, Failures: 3, Errors: 0, Skipped: 0, Time
elapsed: 0.114 sec <<< FAILURE!


Results :


Failed tests:
testWellKnownStore(com.ixxus.koans.alfresco.cmr.repository.
Koan1Test): Ref mustn't be null, have you implemented your
code snippet yet?


testCafeBabeStoreRefString(com.ixxus.koans.alfresco.cmr.rep
ository.Koan1Test): Have you set the store string?


testFooBarStoreRef2Strings(com.ixxus.koans.alfresco.cmr.rep
ository.Koan1Test): Have you set the protocol?
```

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Starting with the StoreRef

```java
@Test
public void testFooBarStoreRef2Strings() {
    StoreRef ref = null;

    // You can construct a StoreRef with two Strings
    String protocol = null;
    String identifier = null;

    // YOUR CODE STARTS HERE


    // YOUR CODE FINISHES HERE

    assertNotNull("Have you set the protocol?", protocol);
    assertNotNull("have you set the identifier?", identifier);
    ref = new StoreRef(protocol, identifier);
    assertEquals("The store ref is wrong", "foo://bar", ref.toString());
}
```

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Get involved!

Contributions welcome

- Model solutions

- More test cases

- Documentation

- ...

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Get involved!

https://github.com/rbramley/Alfresco-Koans

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Alfresco Koans

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