

Boite à outils - Living Documentation

Me

 @binout  <https://github.com/binout>



Il y un an ...

Living Documentation : vous allez aimer la documentation !

Cyril Martraire, BDX/IO 2015

Et aussi le livre

970 READERS 362 PAGES 98,489 WORDS

Living Documentation by design, with Domain-Driven Design

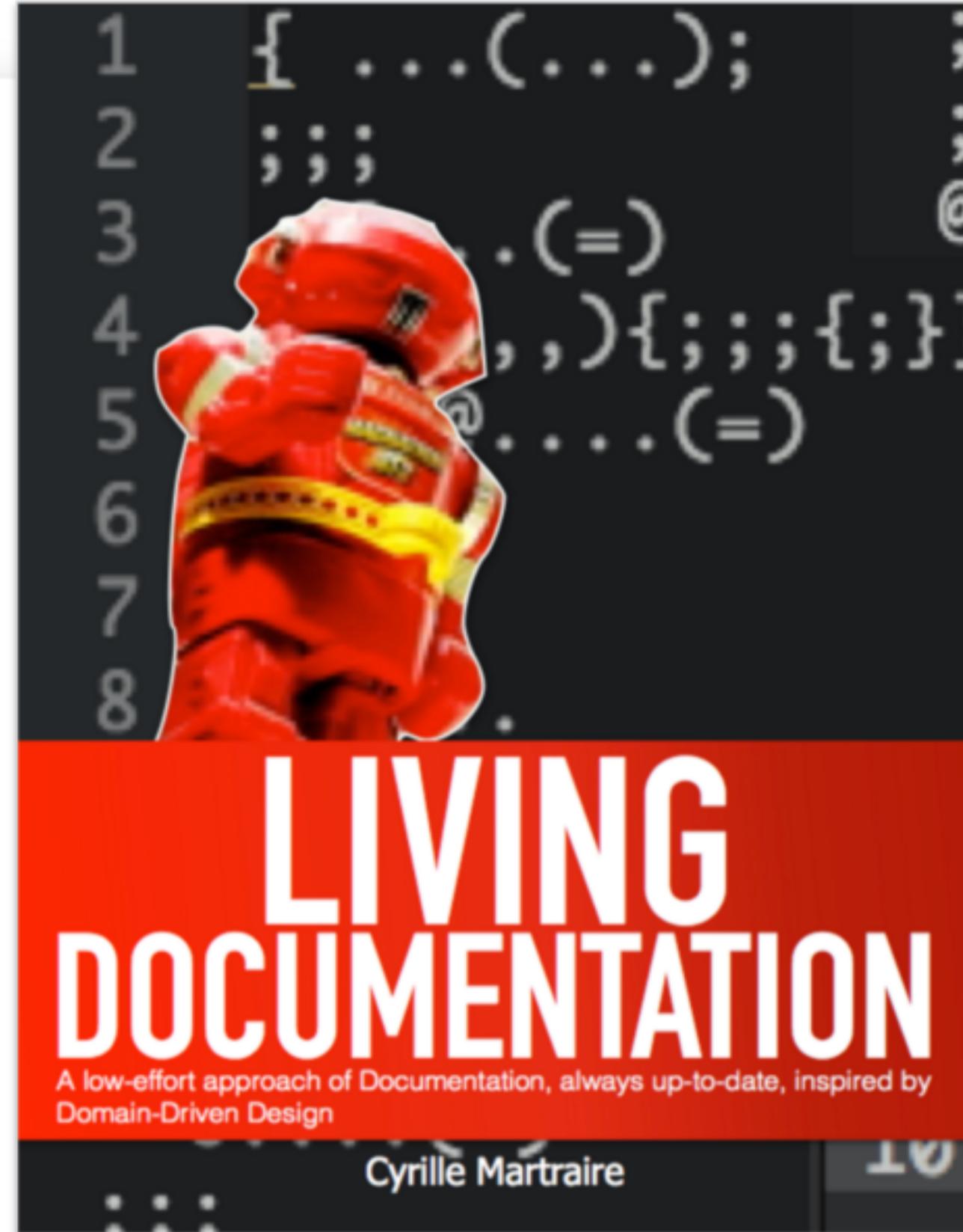
Accelerate Delivery Through Continuous Investment on Knowledge



Cyrille Martraire

You don't necessarily have to chose between Working Software and Extensive Documentation! Discover how a Living Documentation can help you in all aspects of your projects, from the business goals to the business domain knowledge, architecture and design, processes and deployment, even if you hate writing documentation.

FREE SAMPLE



Documentation 2.0

DOCUMENTATION
is
the
new
CODE

- La *documentation* est avec le *code*
- La *documentation* se build avec le *code*
- La *documentation* se teste comme le *code*

Mais...

- La documentation doit rester **vivante** !
- La **maintenance** reste l'enjeu majeur.



Mais...

- La documentation doit rester **vivante** !
- La **maintenance** reste l'enjeu majeur.

Le code doit être la source de la documentation !



Ma boîte à outils



Documentation Technique

README

- description d'un projet, du contexte
- outils de build

TUTORIAL

- getting started
- exemples de codes

API REST

- documentation des ressources

Asciidoc et Asciidoctor !

Asciidoc

langage de **balisage** (aka Markdown mais en mieux)

Asciidoctor

toolchain pour convertir l'asciidoc en html, pdf, epub, ...

Pourquoi ?

1. on se concentre plus sur le fond que sur la forme
2. c'est du texte, donc un éditeur classique suffit
3. on peut gérer l'historique avec un SCM
4. on a un peu l'impression de coder 



Macro include pour du code

```
= Tutorial  
  
== Code examples  
  
[source,java]  
---  
include:{basedir}/src/main/java/io/github/binout/Geek.java[]  
---
```

La documentation présente le code à jour et sans erreur !

Macro include pour un morceau code

```
= Tutorial  
  
== Code examples  
  
[source,java]  
---  
include:{basedir}/src/main/java/io/github/binout/Geek.java[tags=hype]  
---
```

```
public class Geek {  
  
    String getName();  
  
    //tag::hype[]  
    Hype computeHype(int age, String language);  
    //end::hype[]  
}
```

Macro include pour un morceau code

```
= Tutorial  
== Code examples  
  
[source,java]  
---  
include:{basedir}/src/main/java/io/github/binout/Geek.java[tags=hype]  
---
```

Tutorial

Code examples

```
Hype computeHype(int age, String language);
```

Macro include pour un fichier de test

```
== Body  
  
[source,asciidoc]  
---  
include:{basedir}/src/test/resources/io/github/binout/geek.json[]  
---
```

geek.json

```
{  
  "name" : "binout",  
  "language" : "java",  
  "hype" : 100  
}
```

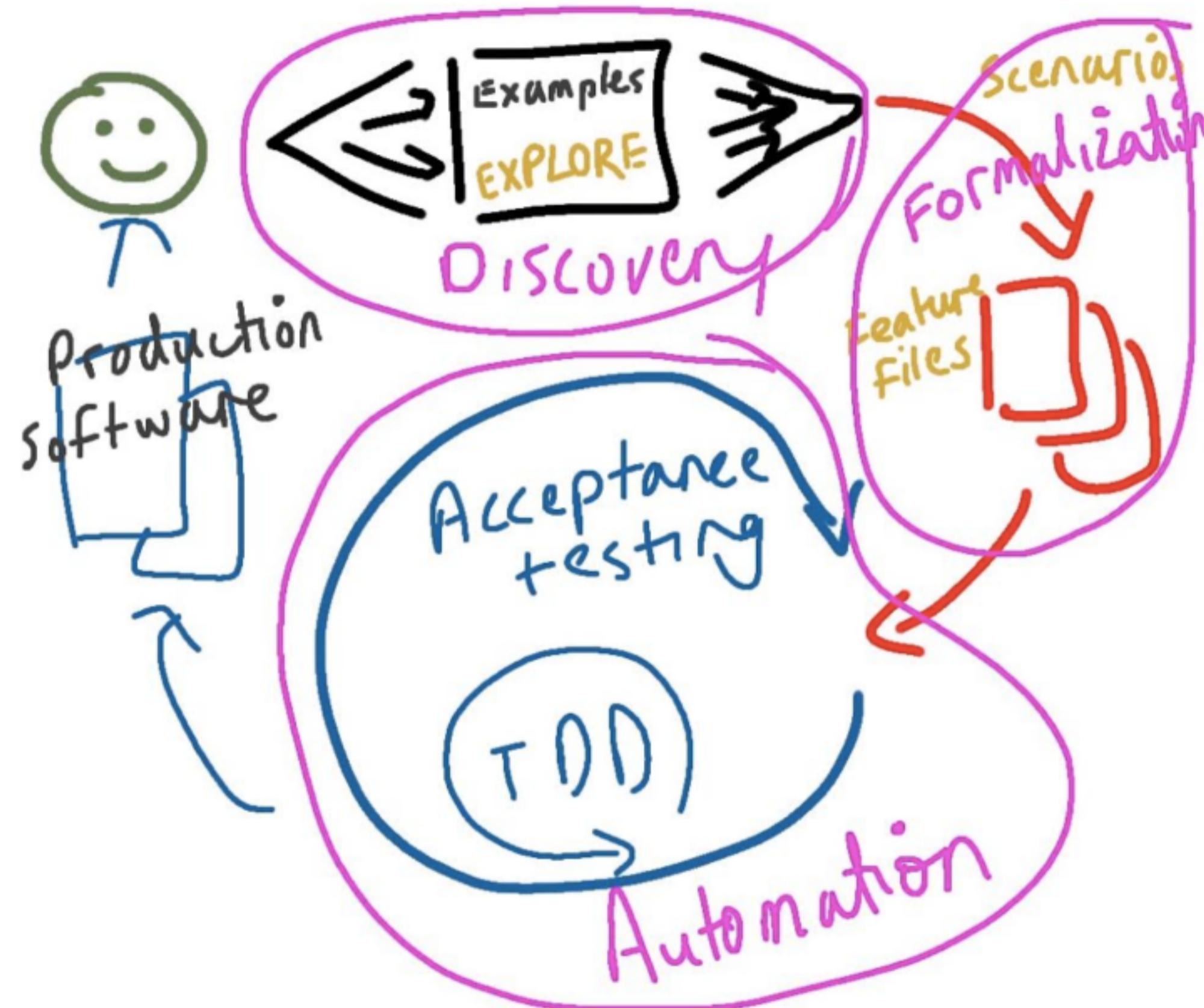
Documentation Métier

BDD (Behavior Driven Development)

- Utilisation du langage naturel et du domaine métier pour décrire les spécifications
- Les spécifications permettent de créer des tests automatisés

Cucumber

<https://cucumber.io/>



cucumber-java en 4 temps

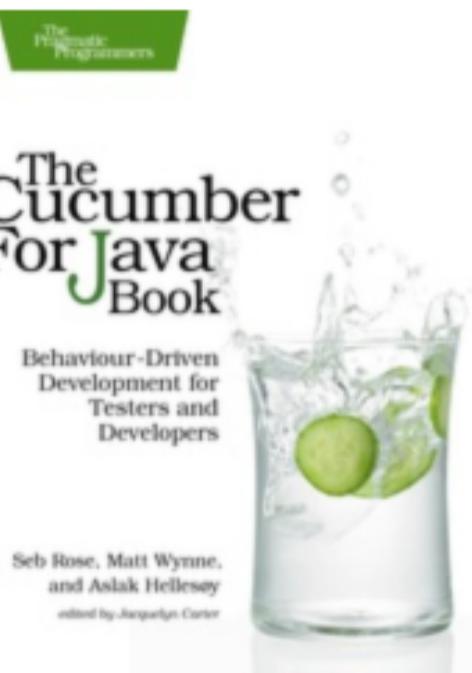
1. Ajouter les dépendances cucumber :

- info.cukes:cucumber-java
- info.cukes:cucumber-junit

2. Ecrire un fichier .feature en Gherkin

3. Coder une classe Java faisant la **glue** entre les **features** et les assertions de test

4. Coder une classe Java pour ajouter le runner Cucumber Junit



Fichier feature

Syntaxe gherkin

Feature: Features of dropbox command line

Scenario: Command whoami

Given a dropbox api key

When i type "**whoami**"

Then it should **return** my name

Scenario: Command ls

Given a dropbox api key

When i type "**ls**"

Then it should **return** a list of path

Fichier Steps

```
@Given("^a dropbox api key$")
    public void a_dropbox_api_key() throws Throwable {
        assertThat(Dropbox.apiKey()).isNotNull();
    }

@When("i type \"([^\"]*)\"")
    public void i_type_a_command(String command) throws Throwable {
        this.result = executeCommand(command);
    }

@Then("it should return my name$")
    public void it_should_return_my_name() throws Throwable {
        assertThat(result).contains("Benoît Prioux");
    }

@Then("it should return a list of path$")
    public void it_should_return_a_list_of_path() throws Throwable {
        Arrays.stream(result.split(System.lineSeparator())).forEach(p ->
        assertThat(p).startsWith("/"));
    }
}
```

Fichier Runner

```
package io.github.binout.dropboxbdd;

import cucumber.api.CucumberOptions;
import cucumber.api.junit.Cucumber;
import org.junit.runner.RunWith;

@RunWith(Cucumber.class)
@CucumberOptions(strict=true, plugin = {"json:target/cucumber.json"})
public class DropboxCliTest {
}
```

Cukedoctor - Living Documentation

<http://rmpestano.github.io/cukedoctor/>

Features of dropbox command line

“In order to manage my Dropbox account,
As a Dropbox user
I want to use a CLI.



You need to retrieve a API key for [Dropbox API v2](#)

Scenario: Command whoami

Given

a dropbox api key

(099ms)

When

i type "whoami"

(02s 837ms)

Then

it should return my name

(000ms)

Autre exemple de doc métier

Glossaire

- vocabulaire métier de l'application
- est utilisé par les experts métier

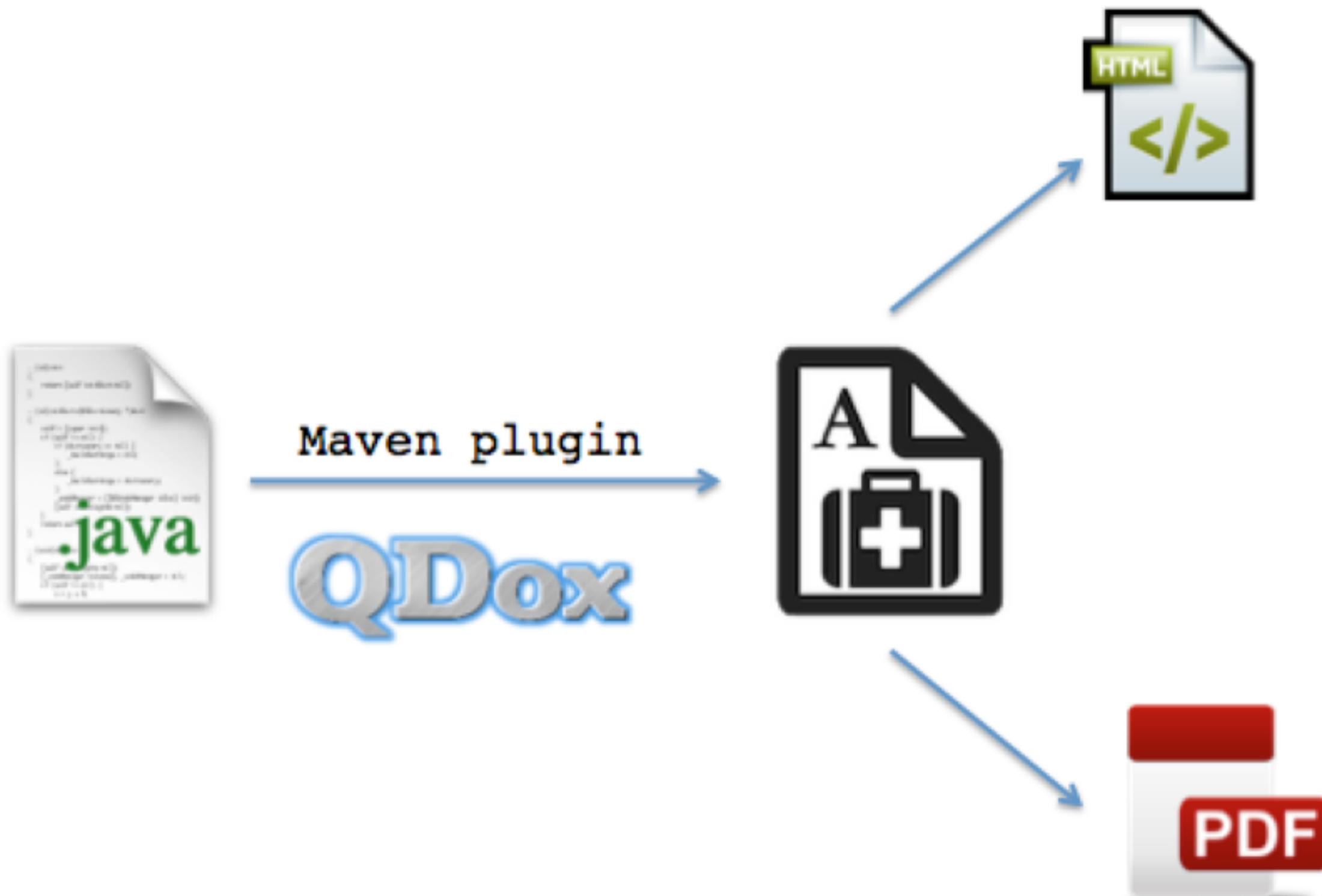
On doit retrouver le même vocabulaire dans le code !

Ajouter la documentation dans le code

Annotation *marqueur*

```
@Glossary
/*
A peculiar person, especially one who is perceived to be overly
intellectual, unfashionable, or socially awkward
*/
public class Geek {
    ...
}
```

Génération à partir du code



- <https://github.com/paul-hammant/qdox>

Un joli glossaire à chaque build

Glossary

Geek

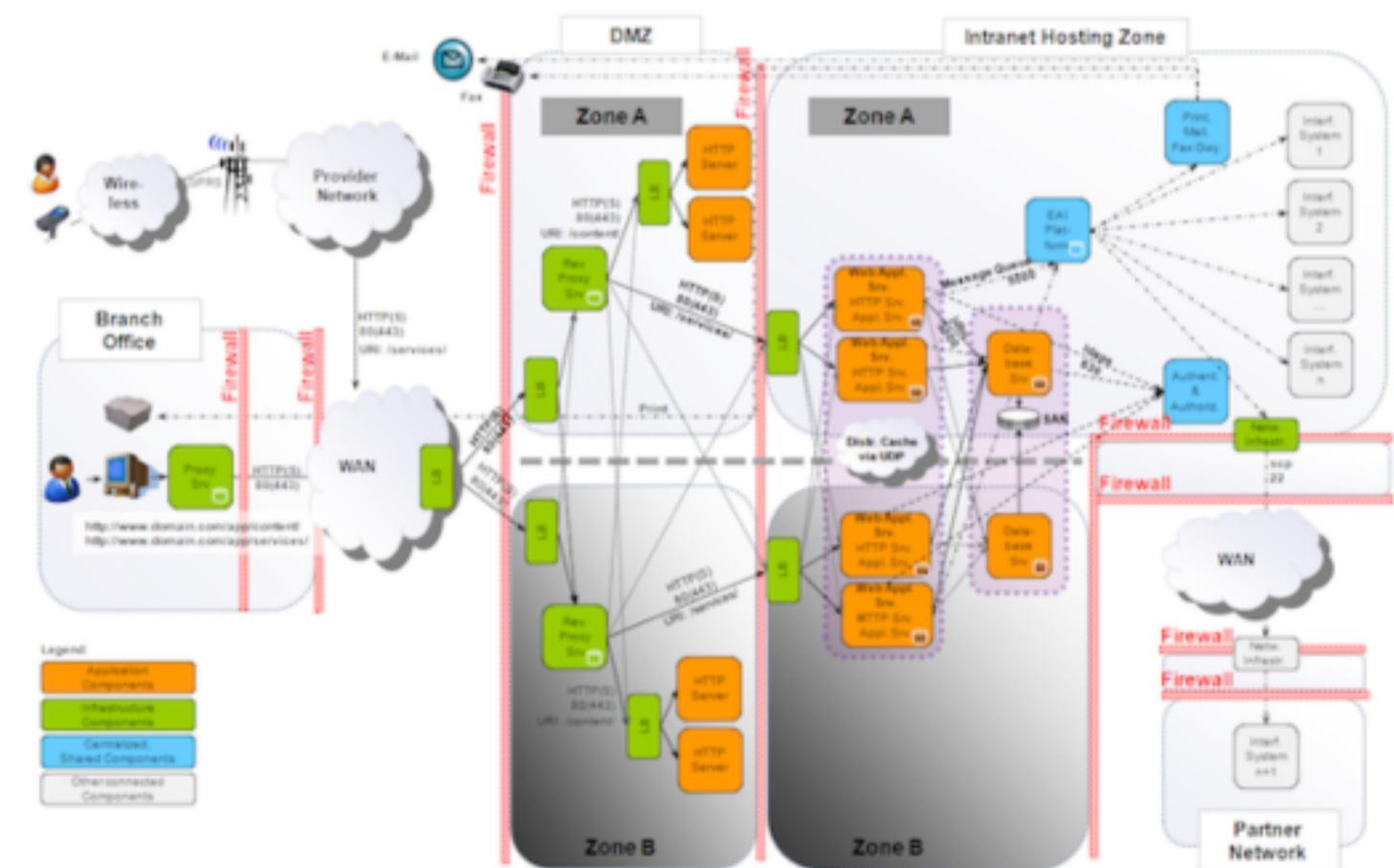
A peculiar person, especially one who is perceived to be overly intellectual, unfashionable, or socially awkward

Legacy

Surviving computer systems, hardware, or software

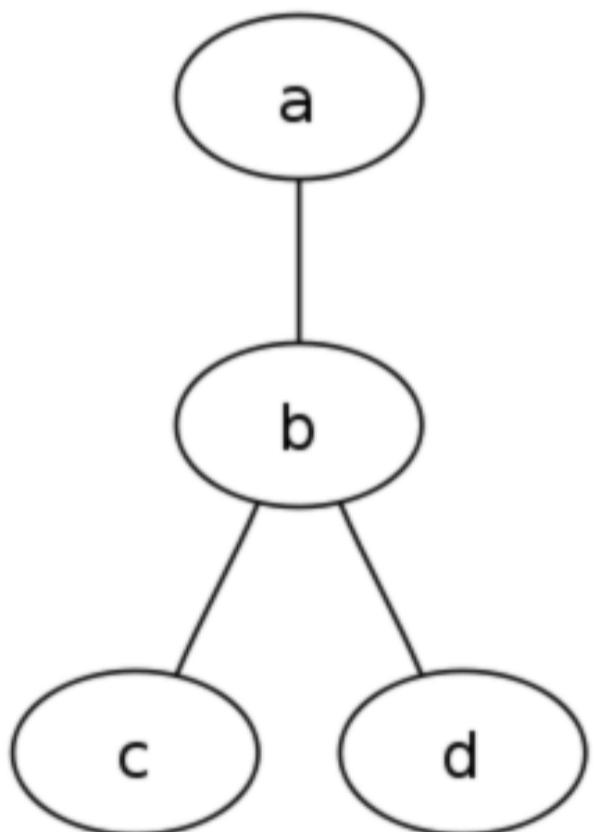
Documentation Architecture

L'architecte, c'est celui qui fait les diagrammes !

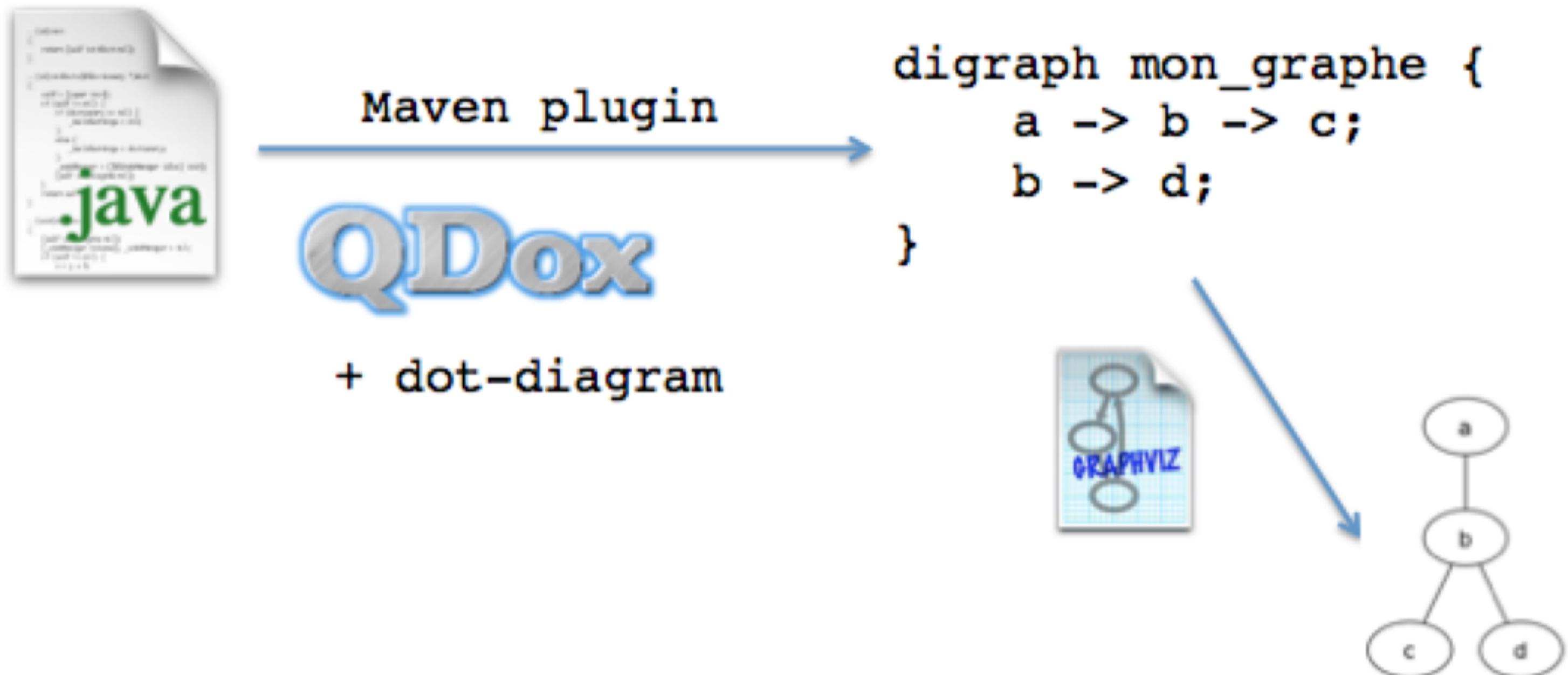


Syntaxe dot

```
digraph mon_graphe {  
    a -> b -> c;  
    b -> d;  
}
```



Génération depuis le code



- <https://github.com/cyriux/dot-diagram>

Visualisation du graphe

- <http://www.graphviz.org/>
- <https://vincenthee.github.io/DotEditor/>
- Plantuml supporte dot

```
@startdot  
...  
@enddot
```

Plugins Google Chrome et atom

Diagramme du domaine

- marquer avec des annotations vos entités du domaine
- représenter avec un graphe les interactions entre entités

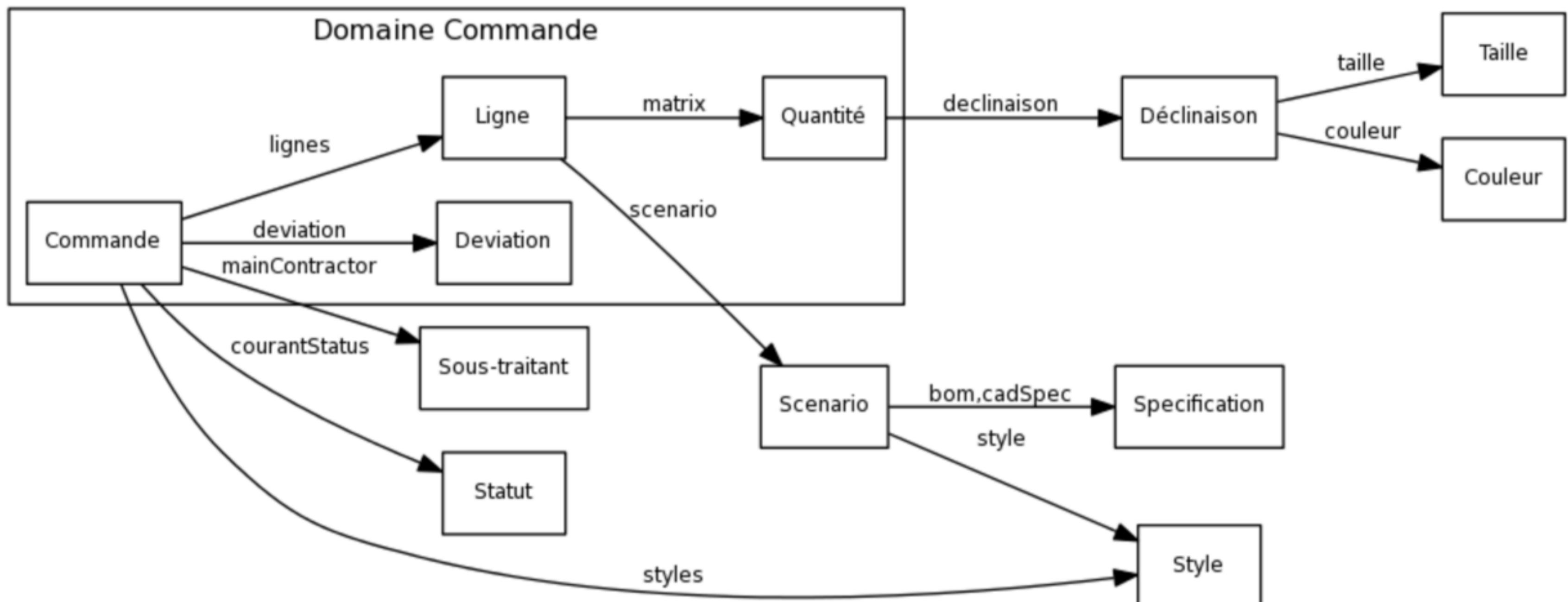
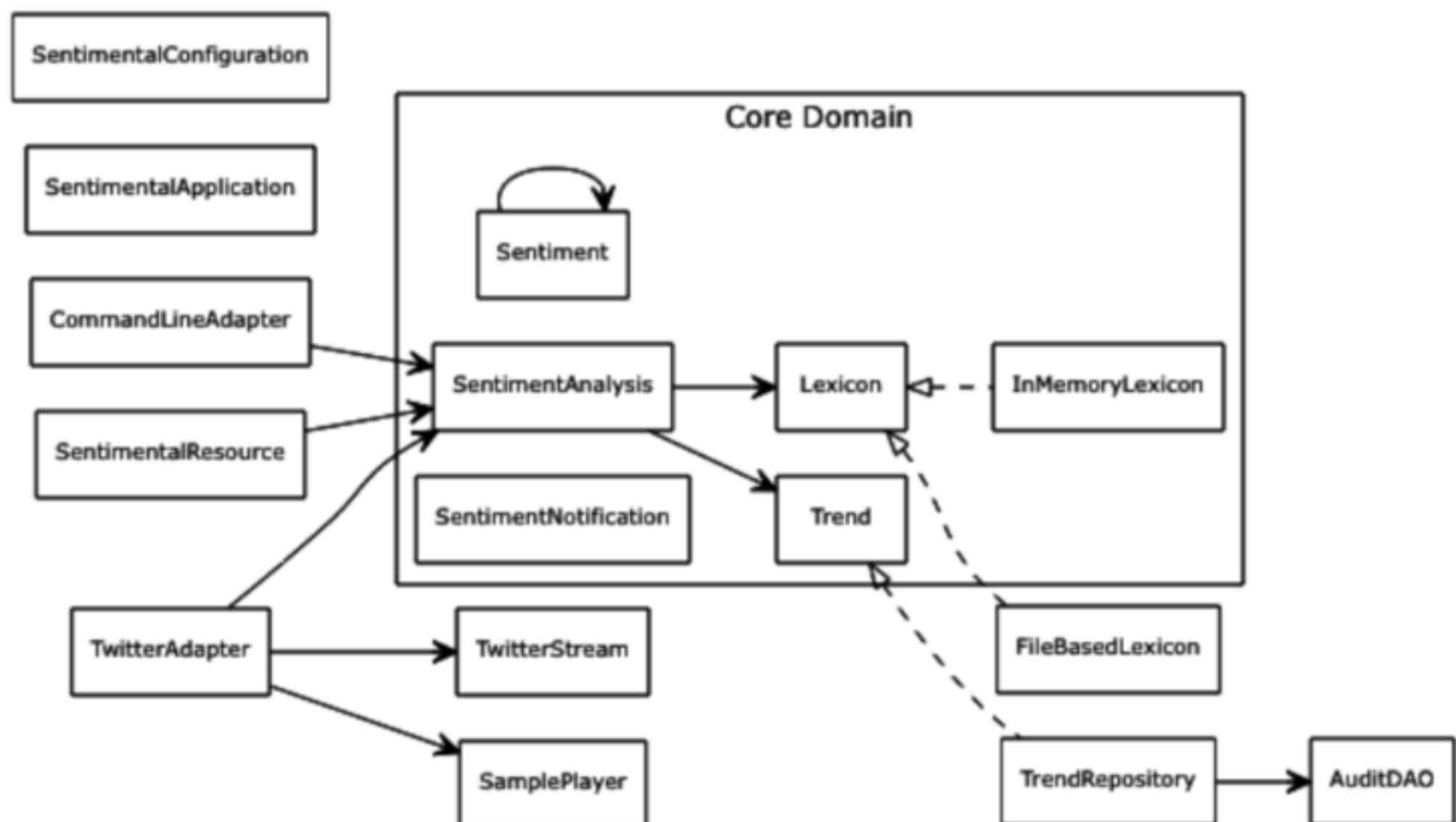


Diagramme d'architecture

- Peut permettre de *visualiser* les choix de design
 - "mon domaine ne doit pas dépendre de mon infrastructure"

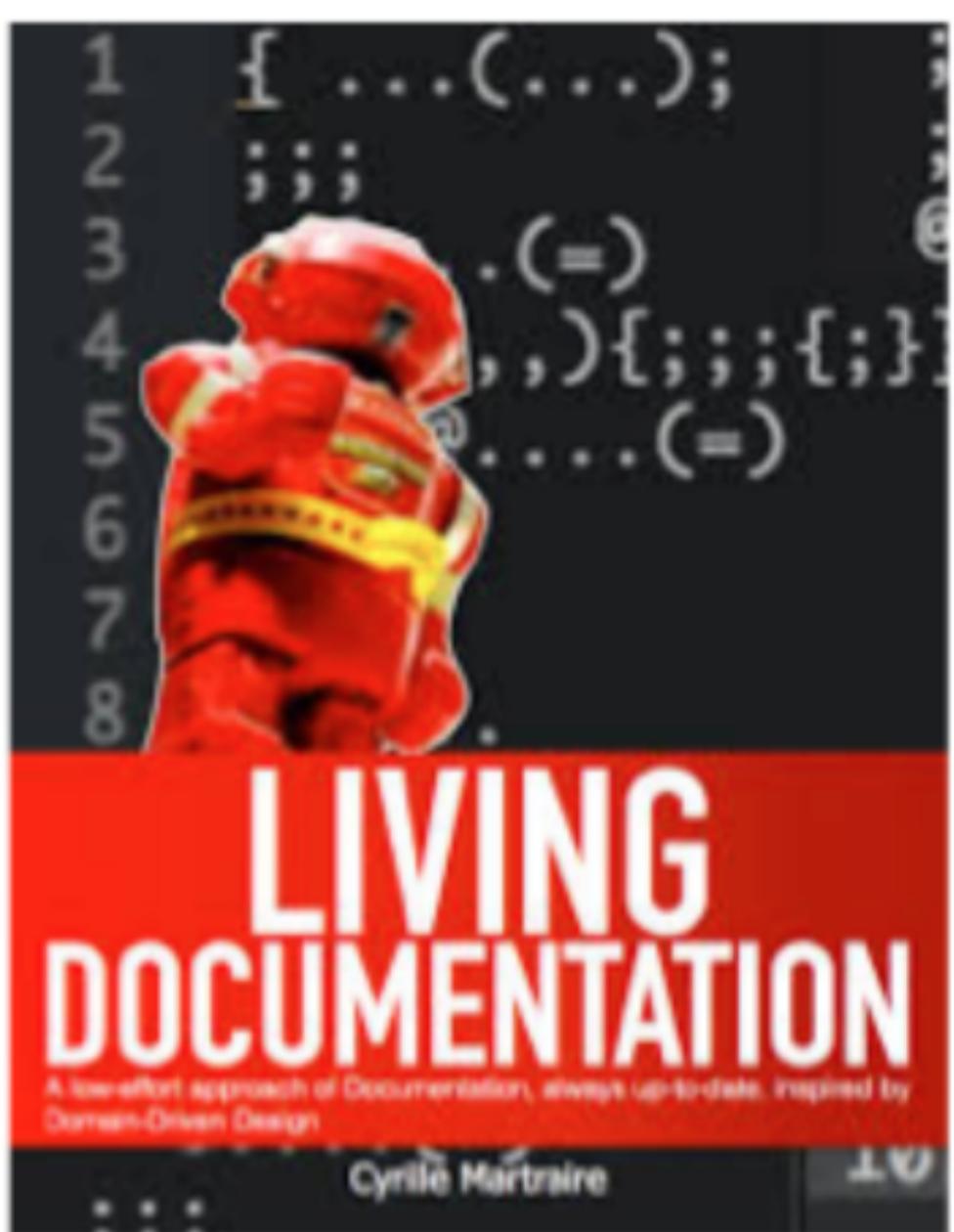


Hexagonal Architecture Living Diagram generated from the source code



Cukedoctor

 Java
@annotations



QDox

Overview

cucumber



Maven™ 31 / 32

Organisation Github

The screenshot shows a GitHub organization page. At the top left is a logo featuring a red cartoon character and the text 'LIVING DOCUMENTATION'. The main title 'Living Documentation' is displayed in large bold letters, followed by a subtitle 'An organization to gather all contributions about Living Documentation'. Below the title are navigation links for 'Repositories' (selected), 'People 1', 'Teams 0', and 'Settings'. A search bar with 'Find a repository...' placeholder text and a 'New repository' button are also visible.

The screenshot shows a GitHub repository page for 'awesome-living-documentation'. The repository name is at the top left, followed by a star icon and '0' for stars. Below the name is a description: 'A curated list of stuff about Awesome Living Documentation' and an 'Updated 38 minutes ago' message.