

“Whenever you find yourself on the side of the majority, it’s time to pause and reflect.”

Mark Twain

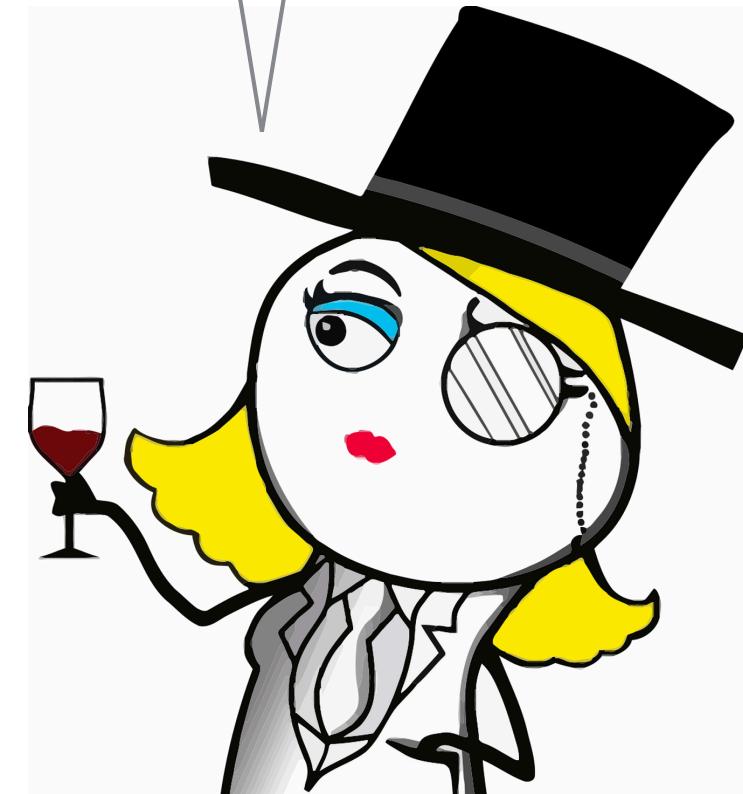
# Aplicações web que permanecem: uma abordagem arquitetural Java que vai além do último framework JS da moda

Eder Ignatowicz  
Sr. Software Engineer Red Hat



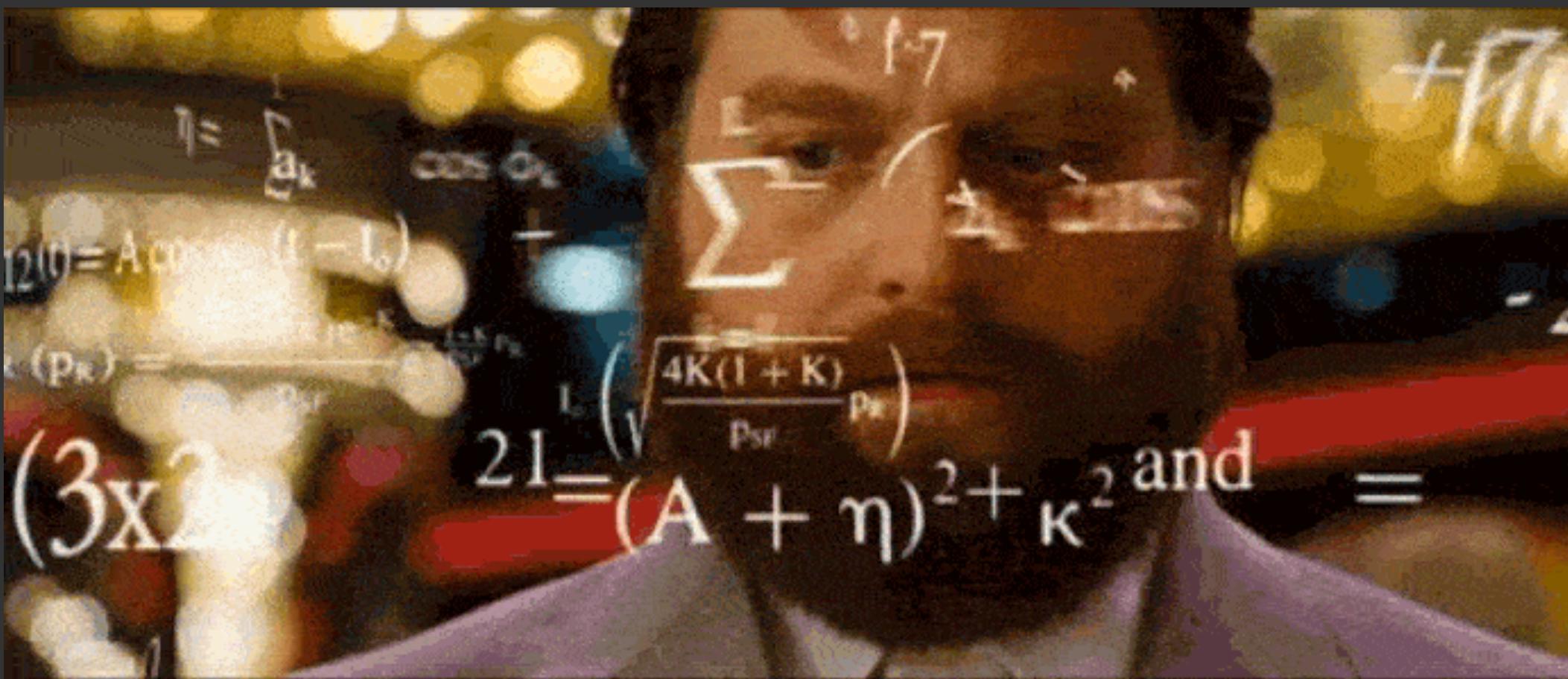
Qual arquitetura  
e frameworks para o backend?

Java 9 modular, Reactive,  
Microservices, Vert.x  
Drools, Spring Boot,  
Zookeeper, Spark



E o front-end?







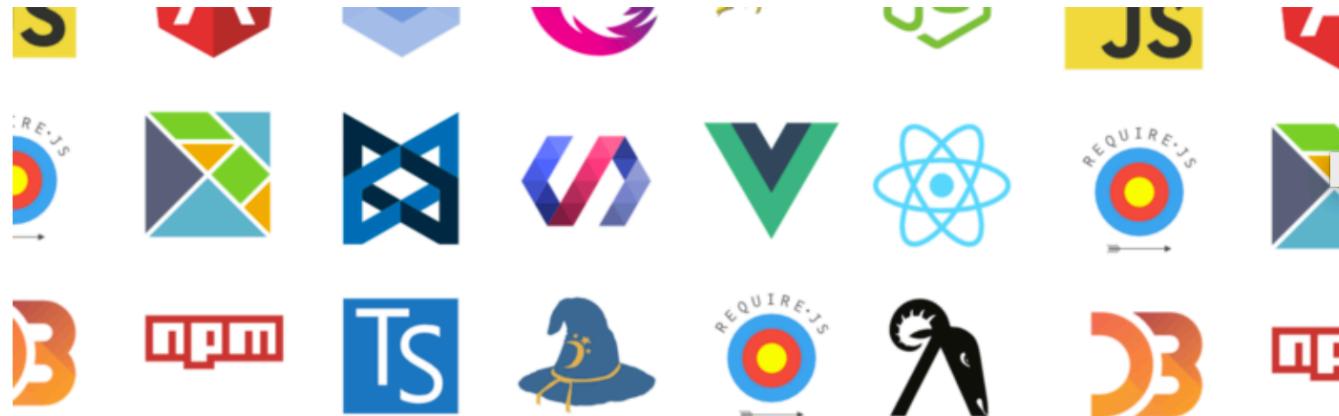
**KEEP  
CALM  
AND  
JUST KEEP  
RANTING**

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Web Engineer. Previously @numbrs, @plaidhq, currently @getflynt. Javascript, #people, startups, fin..

Oct 3, 2016 · 12 min read

# How it feels to learn JavaScript in 2016



Desenvolvimento JavaScript  
é complexo

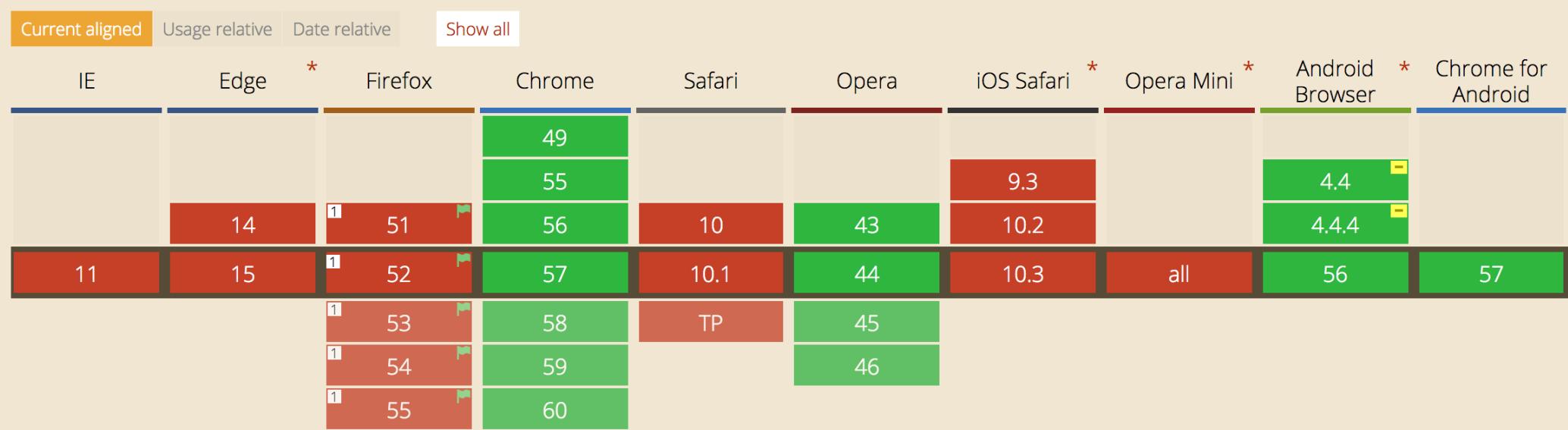
Desenvolvimento JavaScript  
Web é complexo

Desenvolvimento Web vai  
continuar sendo complexo

## Shadow DOM v0 - WD

Global 69.05%  
unprefixed: 63.57%

Method of establishing and maintaining functional boundaries between DOM trees and how these trees interact with each other within a document, thus enabling better functional encapsulation within the DOM.





# KIE Group

Open source projects for business systems automation and management.



Drools 5 introduces the **Business Logic integration Platform** which provides a unified and integrated platform for **Rules, Workflow and Event Processing**. It's been designed from the ground up so that each aspect is a first class citizen, with no compromises.

[Drools team](#)



**jBPM is a flexible Business Process Management (BPM) Suite.** A business process allows you to model your business goals by describing the steps that need to be executed to achieve those goals, and the order of those goals are depicted using a flow chart...

[jBPM team](#)

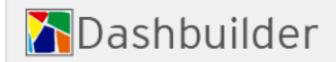


**OptaPlanner** optimizes business resource usage. Every organization faces planning problems: provide products or services with a limited set of constrained resources. OptaPlanner optimizes such planning to do more business with less resources...

[Optaplanner team](#)



**UberFire is a web based workbench framework inspired by Eclipse Rich Client Platform.** This is a very strategic project for Drools & jBPM team, once this is the base technology for our next generation of web tooling.



**Dashbuilder is a full featured web application for the visual composition of custom business dashboards.** Data comes from heterogeneous sources of information such as JDBC databases or regular text files and can be displayed using different charting libraries.

# Qual stack web escolher?

Qual a arquitetura  
mais viável para este problema?

**5 pilares**

**Aplicação de Larga Escala**

**Desenvolvedores full stack**

**Integração com UX**

**Life-Span de 5~10 anos**

**Interoperabilidade**

# **Aplicação de Larga Escala**

**Desenvolvedores full stack**

**Integração com UX**

**Life-Span de 5~10 anos**

**Interoperabilidade**

**5 pilares**

**1mi+ de linhas código web**

**5 produtos**

**~150 sub-projetos**

**~30 devs**

**7+ anos de base de código**

# Static Typing

**Aplicação de Larga Escala**

# Refactoring

PlaceManager.java - jkf342 - [~/ideas/jkf342]

uberfire > uberfire-extensions > uberfire-apps > uberfire-apps-client > src > main > java > org > uberfire > ext > apps > client > home > AppsHomePresenter

Project Structure

PlaceManager.java

```
41  /**
42   * A Workbench-centric abstraction over the browser's history mechanism. Allows the application to initiate
43   * to any displayable thing: a {@link WorkbenchPerspective}, a {@link WorkbenchScreen}, a {@link WorkbenchPortlet},
44   * {@link WorkbenchEditor}, a {@link WorkbenchPart} within a screen or editor, or the editor associated with
45   * located at a particular {@link Path}.
46  */
47 @JsType
48 public interface PlaceManager {
49
50     @JsMethod(name = "goToId")
51     void goTo(final String identifier);
52
53     @JsMethod(name = "goToPlace")
54     void goTo(final PlaceRequest place);
55
56     @JsMethod(name = "goToPath")
57     void goTo(final Path path);
58
59     @JsMethod(name = "goToPathAndPlace")
60     void goTo(final Path path,
```

Find Usages of goTo(String) in Project Files

Method goTo(String)

Found usages (4 usages)

- Unclassified usage (4 usages)
  - uberfire-apps-client (1 usage)
    - org.uberfire.ext.apps.client.home (1 usage)
      - AppsHomePresenter (1 usage)
        - generateComponentViewCommand() (1 usage)
          - (162: 30) placeManager.goTo(parameter);

Java Enterprise Version Control Terminal Find Run TODO Event Log

Compilation completed successfully with 20 warnings in 16s 389ms (today 15:34)

4 chars 51:12 LF UTF-8 Git: master

PlaceManagerImpl.java - jkf342 - [~/ideas/jkf342]

uberfire > uberfire-workbench > uberfire-workbench-client > src > main > java > org > uberfire > client > mvp > PlaceManagerImpl

Project Structure

Class 'PlaceManagerImpl' must either be declared abstract or implement abstract method 'goTo1(String)' in 'PlaceManager'

```
16 package org.uberfire.client.mvp;
17
18 import ...
19
20 @SharedSingleton
21 @EnabledByProperty(value = "uberfire.plugin.mode.active", negated = true)
22 public class PlaceManagerImpl
23     implements PlaceManager {
24
25     /**
26      * Activities that have been created by us but not destroyed (TODO: move this state tracking to ActivityManager)
27      */
28     private final Map<PlaceRequest, Activity> existingWorkbenchActivities = new HashMap<~>();
29
30     /**
31      * Places that are currently open in the current perspective.
32      */
33     private final Map<PlaceRequest, PartDefinition> visibleWorkbenchParts = new HashMap<~>();
34
35 }
```

Find: Usages of goTo(String) in Project Files Refactoring Preview

Occurrences found in comments, strings and non-code files (2 occurrences in 2 files) (2 usages)

- Usage in comments (2 usages)
  - uberfire-simple-docks-client (1 usage)
    - org.uberfire.client.docks.view.bars (1 usage)
      - DocksExpandedBar (1 usage)
        - setupDockContentSize() (1 usage)

(144: 13) // goTo( PlaceRequest place, HasWidgets addTo ) lost widget size

uberfire-workbench-client (1 usage)

References in code to method goTo(String) (4 references in 4 files) (4 usages)

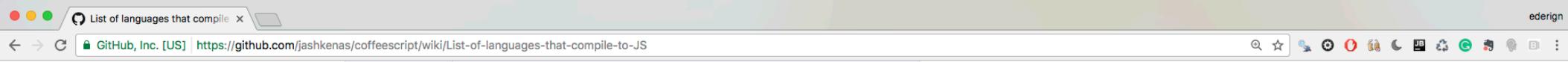
Cancel Do Refactor

0: Messages 1: Java Enterprise 2: Version Control 3: Find 4: Run 5: TODO 6: Event Log

Class 'PlaceManagerImpl' must either be declared abstract or implement abstract method 'goTo1(String)' in 'PlaceManager'

**Aplicação de Larga Escala**

# **Transpilers para JS**



A screenshot of a web browser window. The title bar says "List of languages that compile". The address bar shows "GitHub, Inc. [US] | https://github.com/jashkenas/coffeescript/wiki>List-of-languages-that-compile-to-JS". The page content includes a header "Dojo Secure" and "Framework for building secure mashups." Below this is a section titled "Static typing" with a note about projects like mobl, GWT, JSIL, NS Basic, and Haxe. A large red arrow points from the right edge of the browser towards the table of static typing languages.

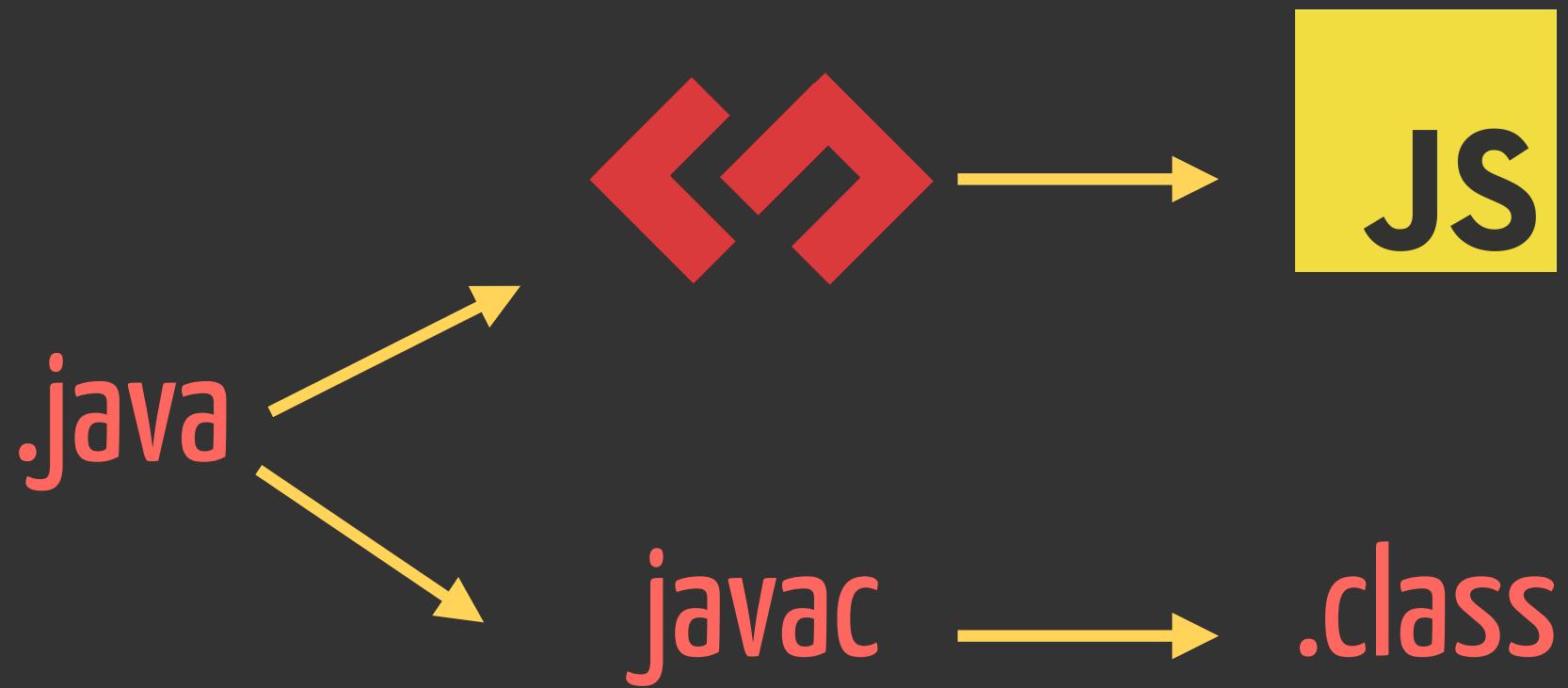
### Static typing

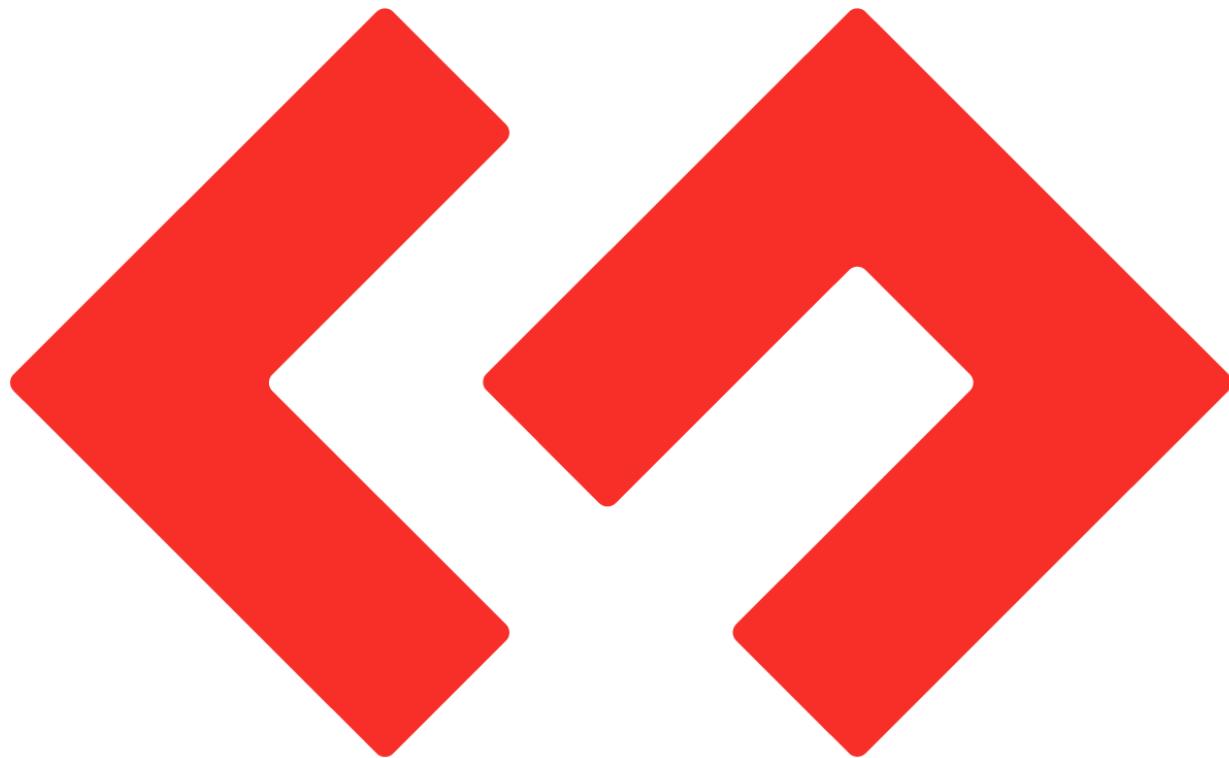
NOTE: Some of the projects listed below are also statically typed, such as mobl, GWT, JSIL, NS Basic, and Haxe.

Name	Description
Dart	C/Java-like syntax with optional typing by Google.
TypeScript	Typed superset of JavaScript by Microsoft.
TeJaS	From Brown PLT. Types for JavaScript (itself).
asm.js	Subset of JavaScript that can be used as a low-level, efficient target language for compilers. Now included in Firefox.
JavaScript++	JavaScript superset with classes, type checking, among other features
Mascara	[commercial] Enhances JavaScript with powerful features like classes, namespaces and type-checking.
Roy	Tries to meld JavaScript semantics with some features common in static functional languages
Elm	Type-safe functional language that compiles to HTML, CSS, and JavaScript.
Swym	Statically typed, with type inference and generics
Typecast.js	JavaScript platform for statically typed variables without a custom compiler.
PureScript	A small, strongly typed programming language that compiles to JavaScript and C++, featuring extensible records and effects, and type classes.
Flow	Static type checker for JavaScript, supports optional types and null checks by Facebook.
ActionScript	With Apache FlexJS - Based on ECMAScript 4, ActionScript provides typing and can be compiled to JavaScript.

### Synchronous to Asynchronous JavaScript Compilers (CPS)

Name	Description
Streamline.js	Uses underscore (_) to stand for callbacks. This <a href="#">fork</a> preserves line numbers for debugging.





**GWT**



Google Web Toolkit especialmente para o QC

Presented by Errai Uberfire App Former

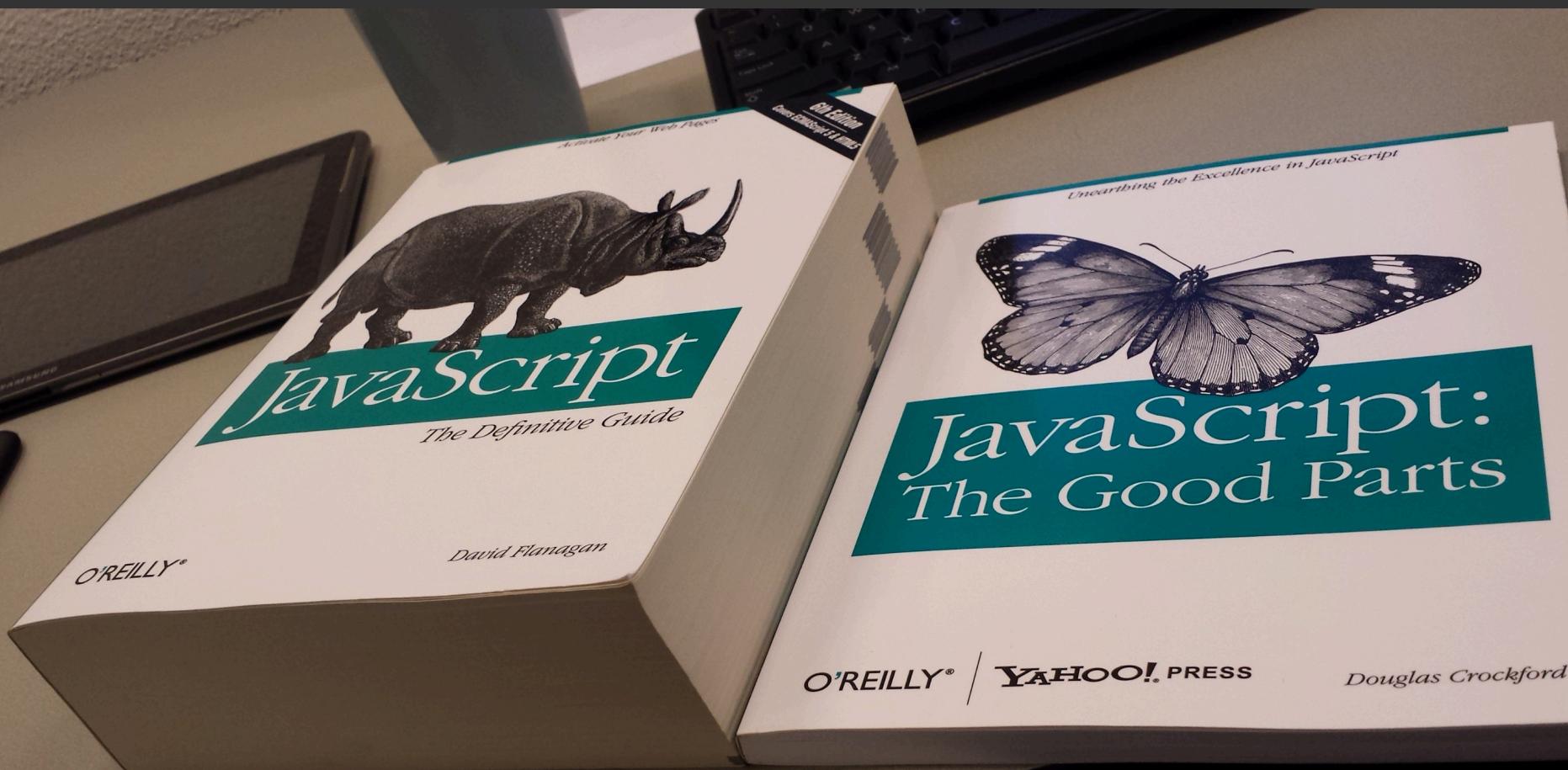
<http://redhat.com>

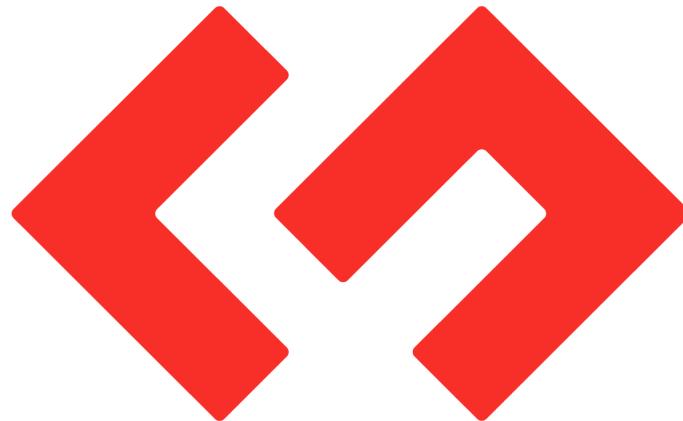
Some pages may work very slowly or not at all. Many webapps are just too advanced for GWT.

Created by [Eder Ignatowicz](#)

Have a problem? [Contact us](#)







# GWT

# The Good Parts

**GWT GOOD PARTS**

# **Java to JavaScript**

GWTT GOOD PARTS

java.\* emulation

GWT GOOD PARTS

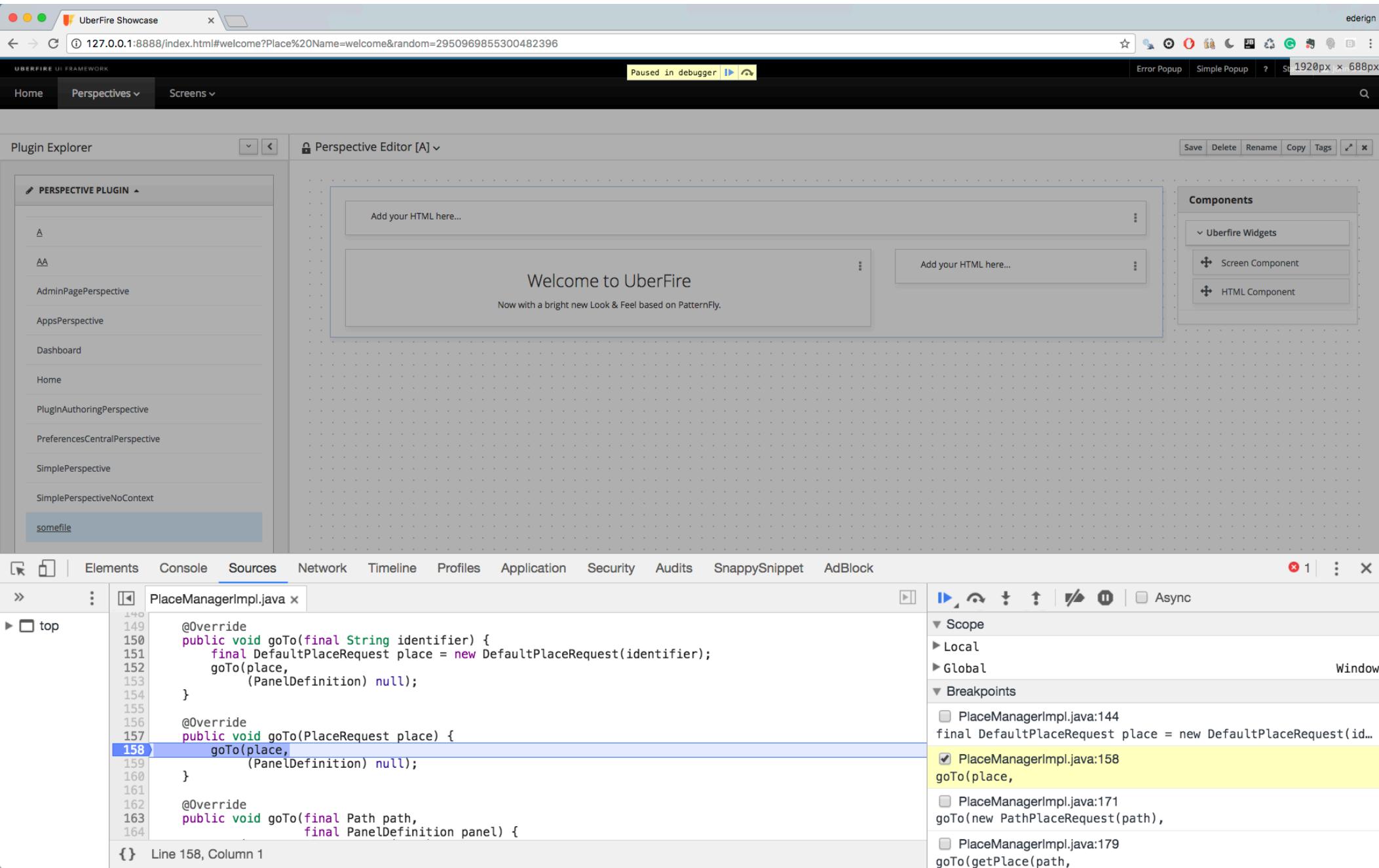
**DOM APis**

**GWT GOOD PARTS**

**Java 8  
“client side”**

GWT GOOD PARTS

# Dev Tools



GWT GOOD PARTS

JS Interop

## Java

```
@JsType(isNative = true)
public abstract class JQuery {

    @JsMethod(namespace=GLOBAL)
    public native static JQuery $(String selector);

    public native JQuery css(String prop, String val);

    public native JQuery attr(String name, String val);

}
```

## Java

```
import static jquery.JQuery.$;
// ...
$("ul > li").css("color", "red").attr("data-level", "first");
```

# JS INTEROP - EXPOSE

## Java

```
package foo;

@jsType
public class Dora {
    public boolean late = true;
    public Dora() {}
    public String auAu() { return "Hello QCon!"; }
}
```

## JavaScript

```
var dora = new foo.Dora();
if (dora.late) {
    alert(dora.auAu());
}
```

**Aplicação de Larga Escala**

# Refactoring

5 pilares

Aplicação de Larga Escala

Desenvolvedores full stack

Integração com UX

Life-Span de 5~10 anos

Interoperabilidade

**Devs Full Stack**

**Desenvolvedores “end-to-end”**

**Devs Full Stack**

# **Shared Codebase**

Devs Full Stack

**"Java EE" no browser**

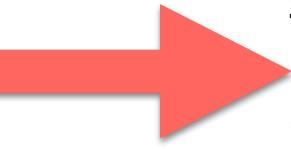


ERRAI

CDI no Browser

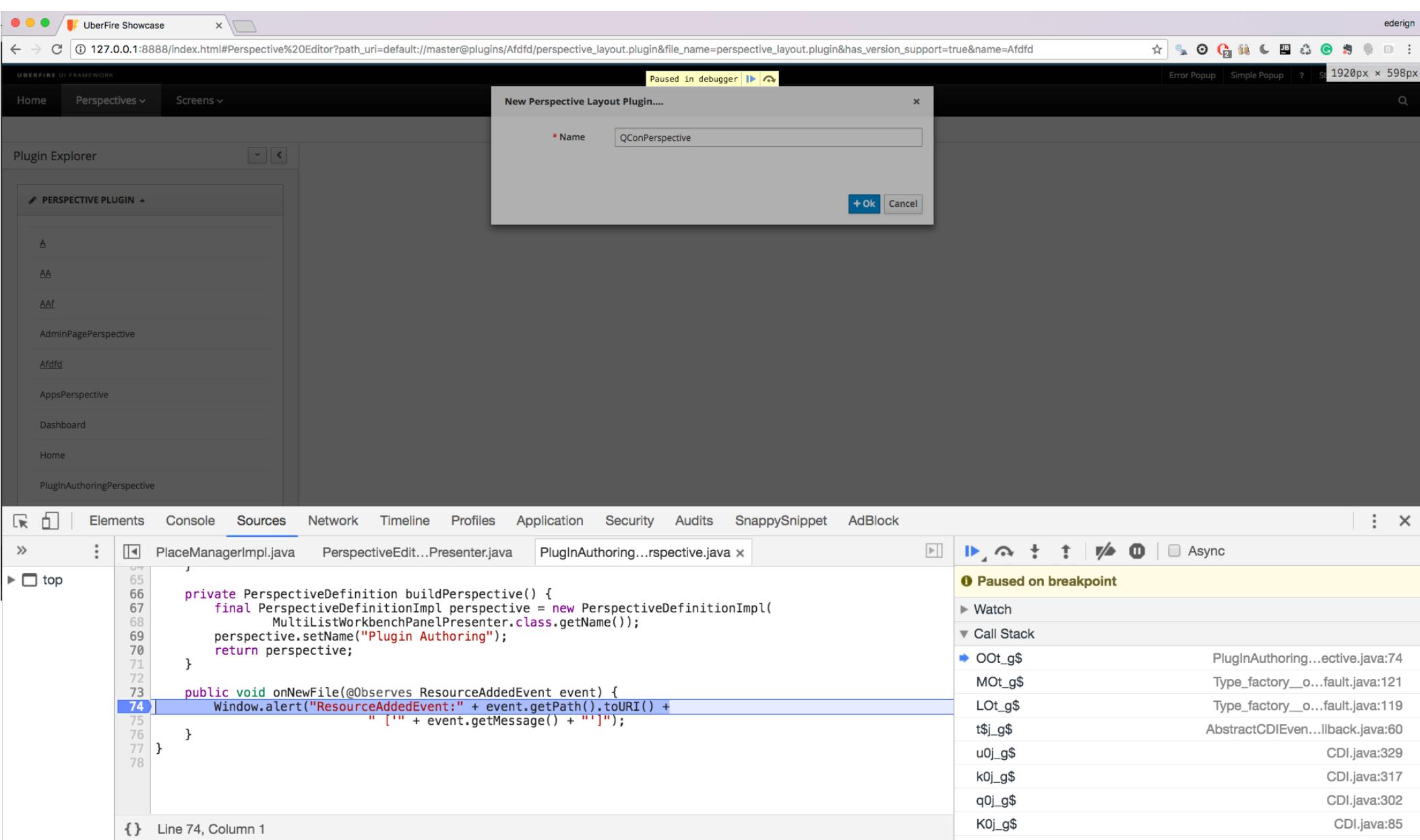
# CDI NO BROWSER

```
@Dependent  
public class ProjectsView {  
  
    @Inject  
    Document document;  
  
    @Inject  
    @DataField( "projects-view" )  
    Div view;  
  
    @Inject  
    @DataField( "new-project" )  
    Button newProject;  
  
    @Inject  
    @DataField( "projects-list" )  
    UnorderedList projectsList;  
  
    @Inject  
    Instance<ProjectItem> projects;
```

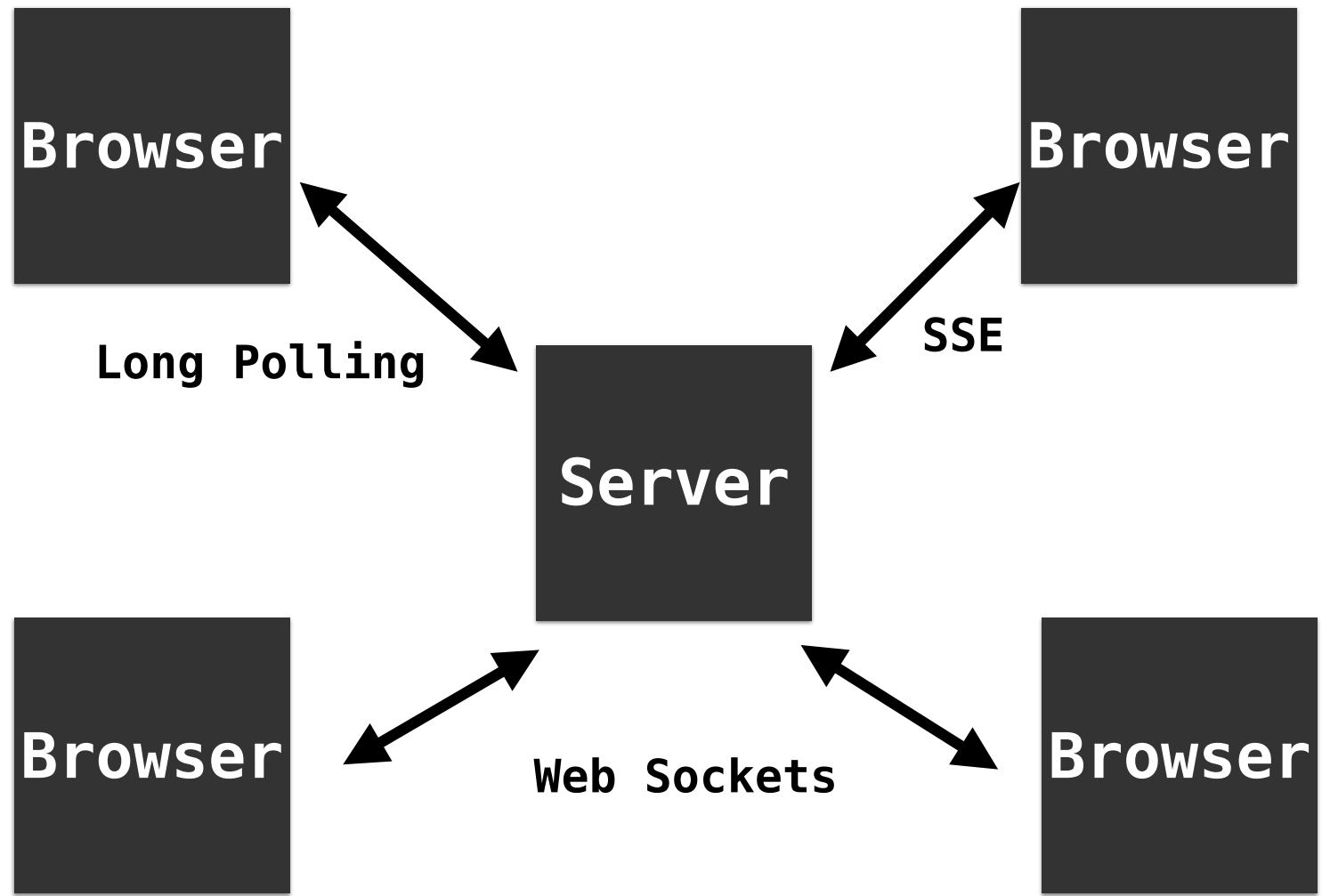


```
if (!filter.doFilter(event)) {  
    if (event.kind().equals(StandardWatchEventKind.ENTRY_ADD)) {  
        resourceAddedEvent.fire(buildEvent(ResourceAddedEvent.class,  
                                         event).getK2());  
    }  
}  
...  
}
```

```
public void onNewFile(@Observes ResourceAddedEvent event)
{
    Window.alert(
        "ResourceAddedEvent:" +
        event.getPath().toURI() +
        " [" + event.getMessage() + "]");
}
```



# ERAI BUS



**Devs Full Stack**

# **Shared Programming Model**

5 pilares

Aplicação de Larga Escala

Desenvolvedores full stack

Integração com UX

Life-Span de 5~10 anos

Interoperabilidade

```

<form action="orderResult.jsp" method="POST">
    <h3>Pizza Types</h3>
    <div>
        <ul>
            <% for ( Pizza pizza : pizzaTypes ) { %>
                <li>
                    <input type="radio" name="pizzaTypeOptions" value="<%=pizza.getName()%>" checked />
                    <span class="pizzaType"><%=pizza.getName()%></span>
                    <span class="pizzaPrice"><%=pizza.getPrice()%>$</span>
                </li>
            <% } %>
        </ul>
    </div>
    <h3>Size</h3>
    <ul>
        <li id="li_1">
            <input id="pizza_size1" type="radio" name="pizzaSizeOptions" value="Small" checked/>
            <span class="pizzaSize">Small</span>
            <input id="pizza_size2" type="radio" name="pizzaSizeOptions" value="Medium"/>
            <span class="pizzaSize">Medium ( + 2$ )</span>
            <input id="pizza_size3" type="radio" name="pizzaSizeOptions" value="Large"/>
            <span class="pizzaSize">Large ( + 3$ )</span>
        </li>
    </ul>
    <h3>Extra Toppings</h3>
    <div class="section group">
        <% for ( int j = 0; j < 3; j++ ) { %>
            <div class="col span 1 of 3">
                <ul class="ul_2">
                    <% for ( int i = sliceSize * j; i < ( j + 1 ) * sliceSize; i++ ) { %>
                        <li class="li_2">
                            <input type="checkbox" name="pizzaToppings" value="<%=pizzaToppings.get( i )%>" />
                            <%=pizzaToppings.get( i )%>
                        </li>
                    <% } %>
                    <if ( j == 0 && remainder > 0 ) { %>
                        <li class="li_2">
                            <input type="checkbox" name="pizzaToppings" value="<%=pizzaToppings.get( pizzaToppings.size() - 2 )%>" />
                            <%=pizzaToppings.get( pizzaToppings.size() - 2 )%>
                        </li>
                    <% } else if ( j == 1 && remainder > 1 ) { %>
                        <li class="li_2">
                            <input type="checkbox" name="pizzaToppings" value="<%=pizzaToppings.get( pizzaToppings.size() - 1 )%>" />
                            <%=pizzaToppings.get( pizzaToppings.size() - 1 )%>
                        </li>
                    <% } %>
                </ul>
            </div>
        <% } %>
    </div>
    <h4>Each extra topping is 0.65$</h4>
    <input type="submit" value="Order"/>
</form>
...

```

```
<h1>{{title}}</h1>
<h2>My favorite hero is: {{myHero}}</h2>
<p>Heroes:</p>
<ul>
  <li *ngFor="let hero of heroes">
    {{ hero }}
  </li>
</ul>
```

```
<div>

  <ul class="list-group" data-field="projects-list">

    </ul>

    <button type="button" class="btn"
      data-field="new-project">

      <i class="fa fa-plus"></i> New Project

    </button>

</div>
```

```
@Dependent  
@Templated  
public class ProjectsView {  
  
    @Inject  
    @DataField( "projects-view" )  
    Div view;  
  
    @Inject  
    @DataField( "new-project" )  
    Button newProject;  
  
    @Inject  
    @DataField( "projects-list" )  
    UnorderedList projectsList;  
}
```

Drools Workbench

127.0.0.1:8888/drools-wb.html#org.kie.workbench.common.screens.home.client.HomePresenter

Red hat MOT TO READ BW SCIP Future Book jacobin-abcs.pdf Must Reads from h...

Drools Workbench

Home Admin - Preferences Perspectives Search admin

## The KIE Knowledge Development Cycle

**Discover and Author:**

Author

**Deploy:**

Manage and Deploy Your Assets  
Assets Repository

Author

Formalize your Business Knowledge

```

<!-- Masthead -->
<nav class="navbar navbar-default navbar-pf ">
  <div class="navbar-header ">
    <button type="button" class="navbar-toggle" data-toggle="collapse" data-target=".navbar-collapse-2">
      <span class="sr-only">Toggle navigation</span>
      <span class="icon-bar"></span>
      <span class="icon-bar"></span>
      <span class="icon-bar"></span>
    </button>
    <a href="/" class="navbar-brand">
      
    </a>
  </div>

  <div class="collapse navbar-collapse navbar-collapse-2">
    <ul class="nav navbar-nav "><!-- navbar-iconic -->
      <li class="dropdown">
        <a class="dropdown-toggle nav-item-iconic" id="dropdownMenu2" data-toggle="dropdown" aria-haspopup="true" aria-expanded="true">
          Home
          <span class="caret"></span>
        </a>
        <ul class="dropdown-menu" aria-labelledby="dropdownMenu2">
          <li><a href="#">Design</a></li>
          <li><a href="#">Processes & Tasks</a></li>
          <li><a href="#">Runtime</a></li>
          <li><a href="#">Settings</a></li>
        </ul>
      </li>
    </ul>

    <ul class="nav navbar-nav navbar-right">
      <li class="dropdown">
        <a class="dropdown-toggle nav-item-iconic" id="notifications" data-toggle="dropdown" aria-haspopup="true" aria-expanded="true">
          <span title="Notifications" class="fa pficon-warning-triangle-o"></span>
          Messages: 0
        </a>
        <div class="dropdown-menu infotip bottom-right">
          <div class="arrow"></div>
          <ul class="list-group">
            <li class="list-group-item">
              <span class="i pficon pficon-info"></span> Modified Datasources ExampleDS
            </li>
            <li class="list-group-item">
              <span class="i pficon pficon-info"></span> Error: System Failure
            </li>
          </ul>
          <div class="footer">
            <a>Clear Messages</a>
          </div>
        </div>
      </li>
      <li class="dropdown">
        <a class="dropdown-toggle nav-item-iconic" id="dropdownMenu2" data-toggle="dropdown" aria-haspopup="true" aria-expanded="true">
          <span title="Username" class="fa pficon-user"></span>
          Brian Johnson
          <span class="caret"></span>
        </a>
        <ul class="dropdown-menu" aria-labelledby="dropdownMenu2">
          <li><a href="#">Preferences</a></li>
          <li><a href="#">Logout</a></li>
        </ul>
      </li>
    </ul>
  </div>
</nav>

<div class="container-fluid kie-blank-slate">

  <!-- blank state content -->
  <div class="blank-slate-pf row">
    <div class="col-xs-12 col-lg-9" style="text-align:right;"><a href=""><span class="fa fa-gear"></span> Settings</a></div>
    <h1 id="welcome">
      <!--<div style="float:right;"><a href=""><span class="fa fa-gear"></span> Settings</a></div>-->
      Welcome to <b>BPM Suite</b>
    </h1>
    <p>
      Business Process Management (BPM) Suite offers a set of flexible, process management tools that support the way you need to work. Select a BPM tool below to get started.
    </p>
    <div class="blank-slate-pf-secondary-action">
      <a href="#">JBoss BPM Suite</a>
    </div>
  </div>

```



## Welcome to **BPM Suite**

Business Process Management (BPM) Suite offers a set of flexible, process management tools that support the way you need to work. Select a BPM tool below to get started.



### Design

Model build, and publish.



### Processes & Tasks

Run, assign, and keep track of your business processes.



### Runtime

Monitor and manage servers and active instances.

[Design](#)[Run & Assign](#)[Monitor & Manage](#)[Getting Started](#)[Applications](#)[ABC Loans](#)

Loan Management tool

[Home mortgage](#)

Loan Management tool

[DEF Credit](#)

Loan Management tool

[View All Apps](#)

Integração com UX

**Deixe o HTML/CSS em paz**

5 pilares

Aplicação de Larga Escala

Desenvolvedores full stack

Integração com UX

Life-Span de 5~10 anos

Interoperabilidade



**Arquitetura**

**Hexagonal Architecture - Alistair Cockburn**

**Onion Architecture - Jeffrey Palermo**

**DCI - James Coplien e Trygve Reenskaug.**

**BCE - Ivar Jacobson**

**Clean Architecture - Robert C. Martin**

# **Princípios**

**Independente de Frameworks**

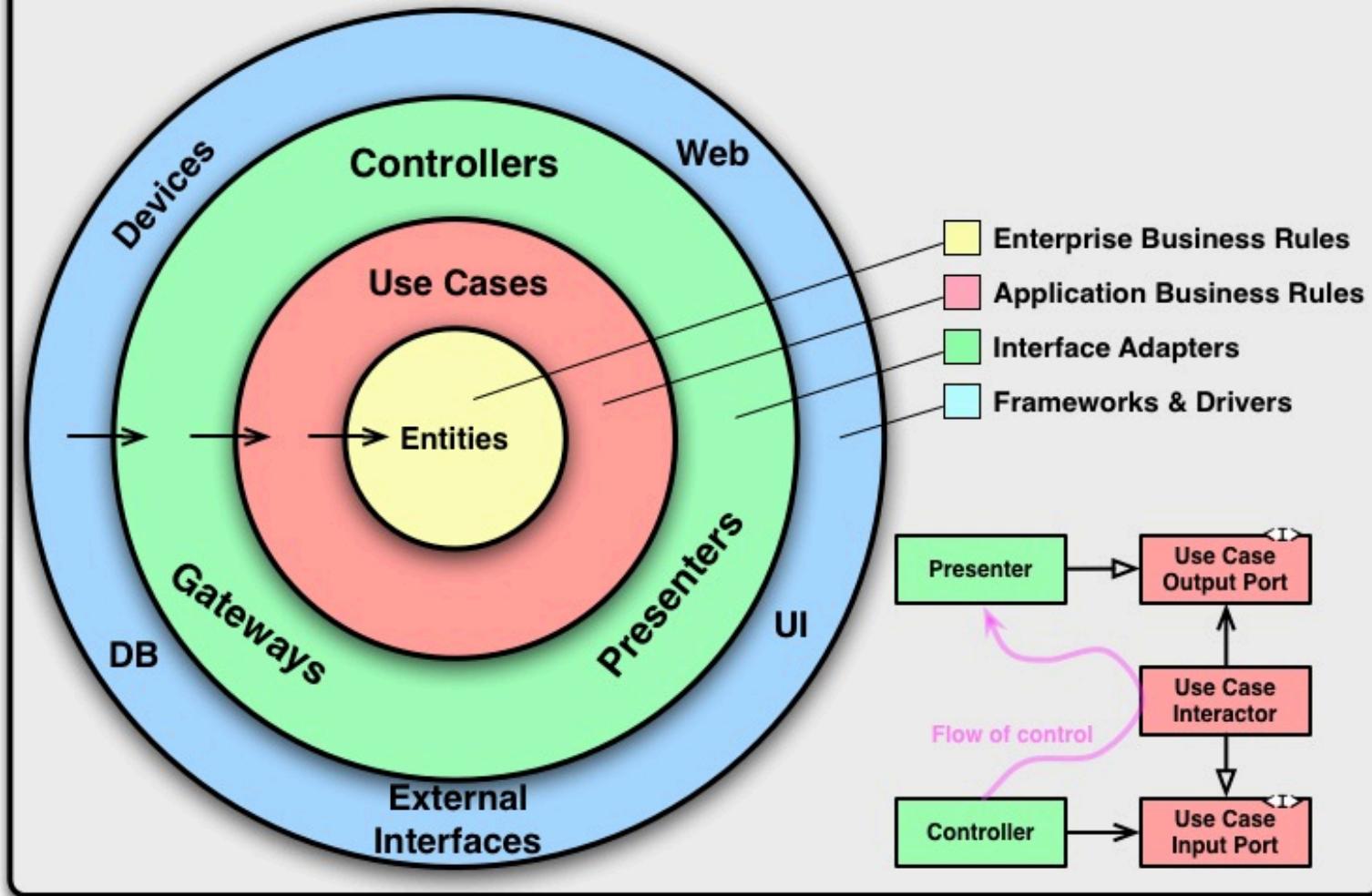
**Testável**

**Independente de UI**

**Independente de Database**

**Independente de Agentes Externos**

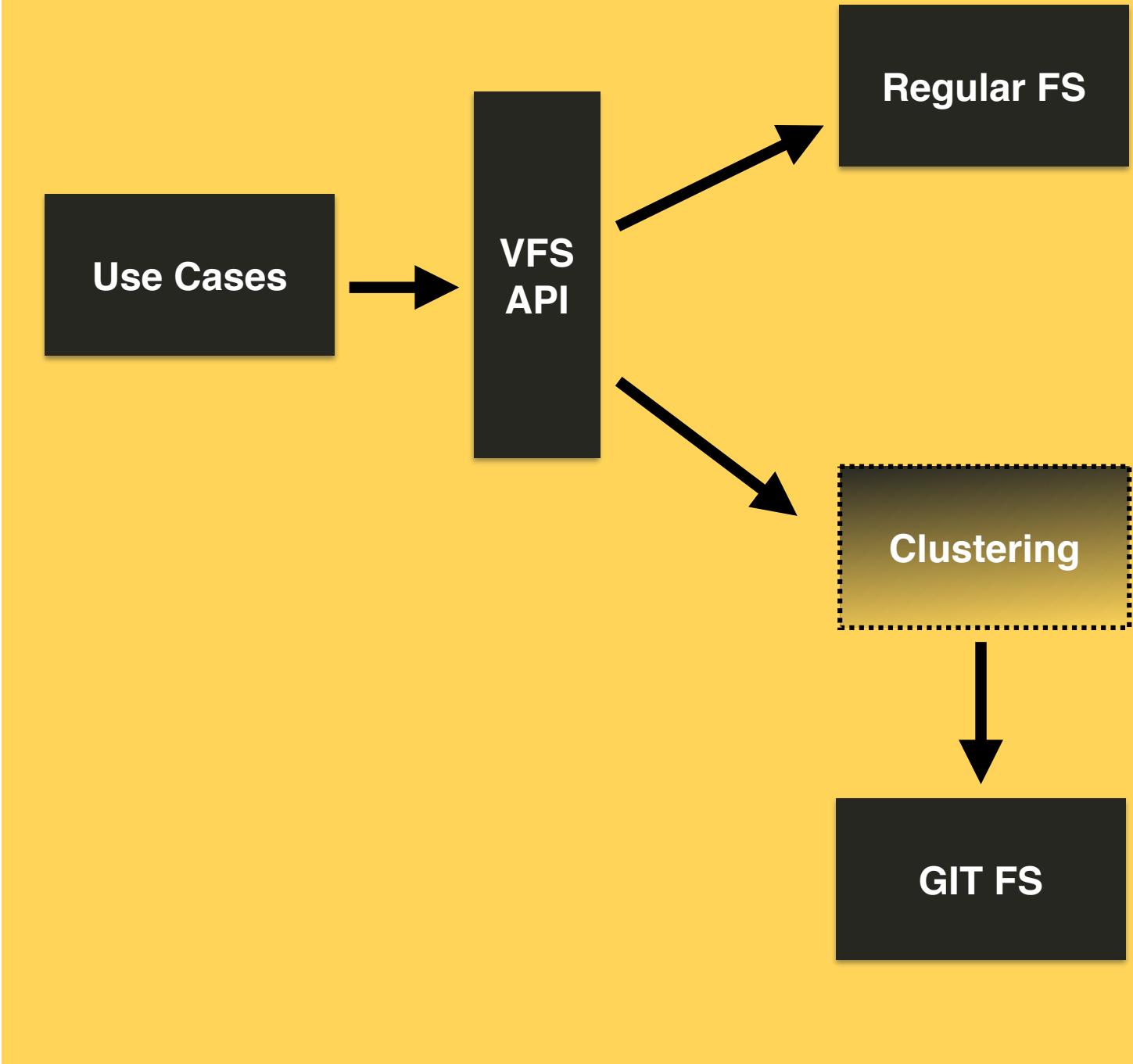
# The Clean Architecture



**"Architecture is about intent.  
We have made it about  
frameworks and details"**

**Robert C. Martin**

# ÜBERFIRE VFS



Drools Workbench

Home Admin - Preferences Perspectives Search

Example Explore New Project Repository Asset Search

**Project Explorer**

- demo > test > mortgages
- DRL
- DATA OBJECTS
- DOMAIN SPECIFIC LANGUAGE DEFINITIONS
- ENUMERATION DEFINITIONS
- GUIDED DECISION TABLES
  - Pricing loans
- GUIDED RULES
- GUIDED RULES (WITH DSL)
- TEST SCENARIOS

**Pricing loans.gdst - Guided Decision Tables**

Editor Overview Source Data Objects

Save Delete Rename Copy Validate Edit View Insert Latest Version

**Analysis**

Analysis complete

3, 4 - Subsumptant rows

- 1 - Missing range  
 - 2 - Missing range  
 - 3 - Missing range  
 - 4 - Missing range

**Subsumptant rows**

Affected rows: 3, 4

Subsumption exists when one row does the same thing as another, with a sub set of the values/facts of an another rule.

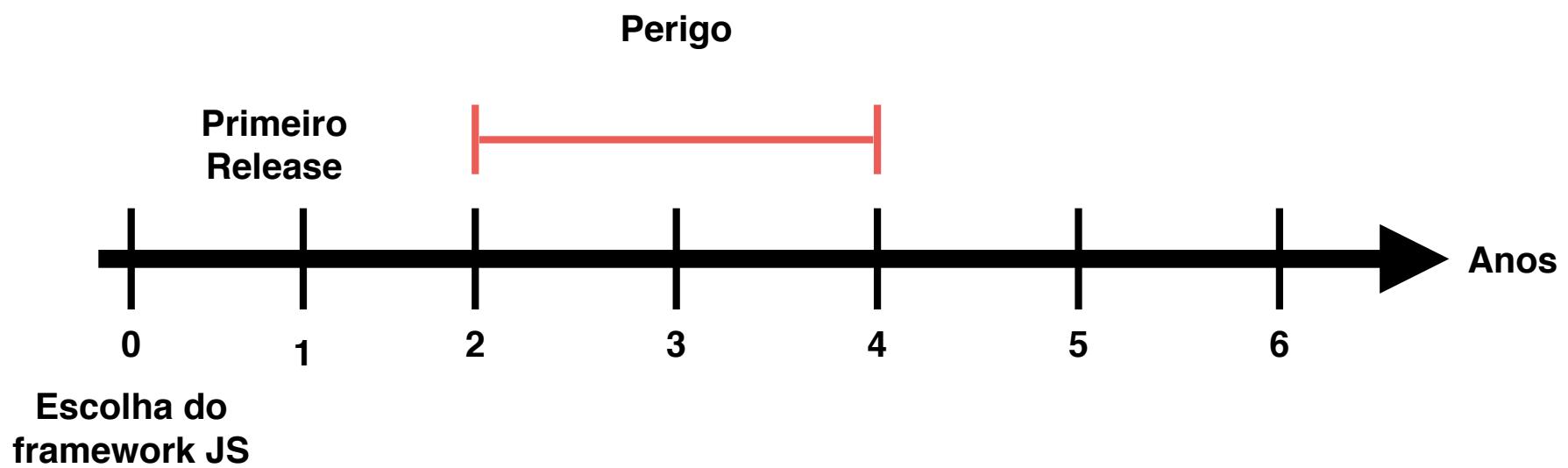
These rules might insert duplicate facts into the working memory or execute functions twice. If this is not expected behaviour please remove the subsumptant row or make it more strict.

Pricing loans		application : LoanApplication				ome : IncomeSou	Loan approved	LMI	rate
#	Description	amount min	amount max	period	deposit max	income			
1		131000	200000	30	20000	Asset	true	0	2
2		10000	100000	20	2000	Job	true	0	4
3		100001	130000	20	3000	Job	false	10	6
4		100001	130000	20	3000	Job	false	10	6

Messages

# Qual framework Web escolher?

# Qual framework JS escolher?



## What's next for Angular 1.x?

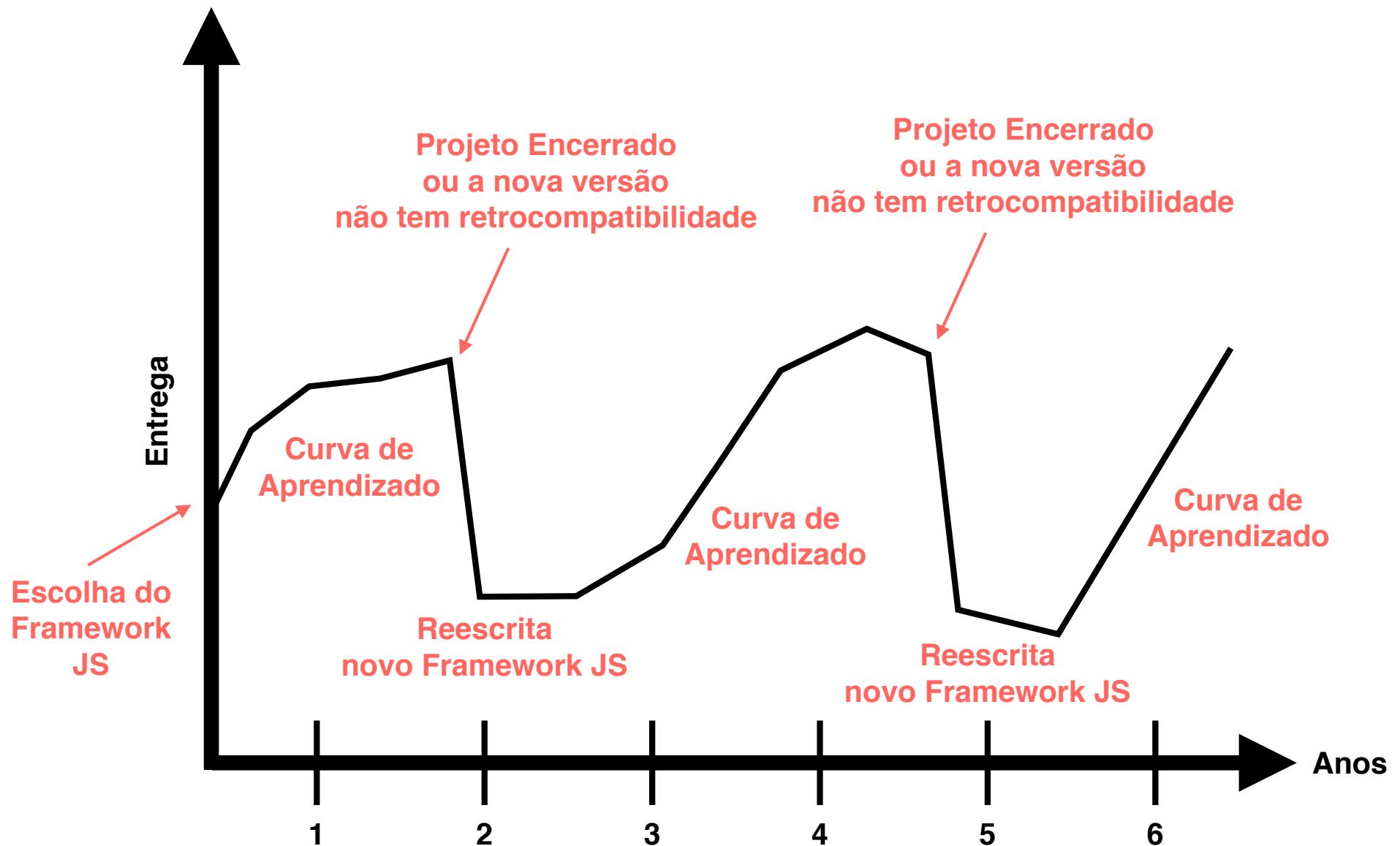
"In all honesty, no one really knows what will happen"



I'm Todd, I teach the world Angular through @UltimateAngular.  
Conference speaker and Developer Expert at Google.

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<https://toddmotto.com/future-of-angular-1-x>



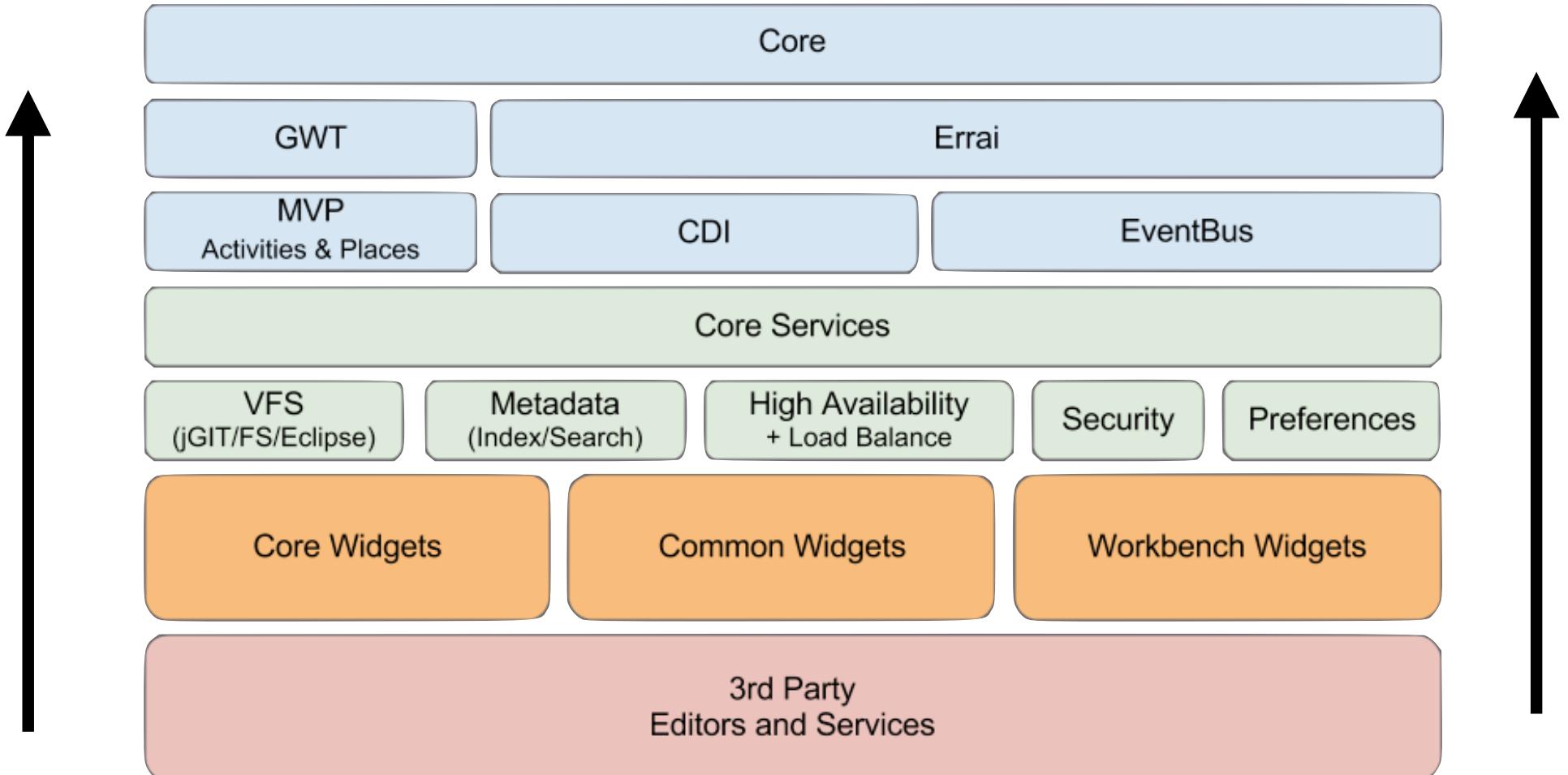
**"A good architecture allows  
volatile decisions to be easily  
changed"**

**Robert C. Martin**

E se eu tratasse a volatilidade dos frameworks JS como fato?



uberfire



# Modelo de Programação

- ## Componentes:
- **Screen**
  - **Editors**
  - **Perspectives**
  - **Popups**

# Modelo de Programação

## LifeCycle:

- **OnStart**
- **OnSave**
- **IsDirty**
- **OnClose**
- **OnFocus**
- **OnLostFocus**
- **OnMayClose**
- **OnReveal**

# Perspective

The Drools Workbench interface is organized into three main vertical sections:

- Left Column (Screen):** Contains the Project Explorer, which lists various project components like DRL, Data Objects, Domain Specific Language Definitions, and more.
- Middle Column (Editor):** Displays the "Pricing loans.gdst - Guided Decision Tables" editor. It shows a "Decision table" named "Pricing loans" with columns for #, Description, application : LoanApplication, income : IncomeSource, Loan approved, LMI, and rate. The table has four rows, with rows 3 and 4 highlighted in yellow to indicate they are subsumptant rows. The "Messages" section at the bottom is currently empty.
- Right Column (Screen):** Shows the "Analysis" results for the current table. It indicates that the analysis is complete and lists four subsumptant rows: row 3 and row 4. A detailed explanation follows, stating that subsumption exists when one row does the same thing as another with a subset of values/facts of another rule. It also notes that these rules might insert duplicate facts or execute functions twice if not expected behavior.

**Screen**      **Editor**      **Screen**

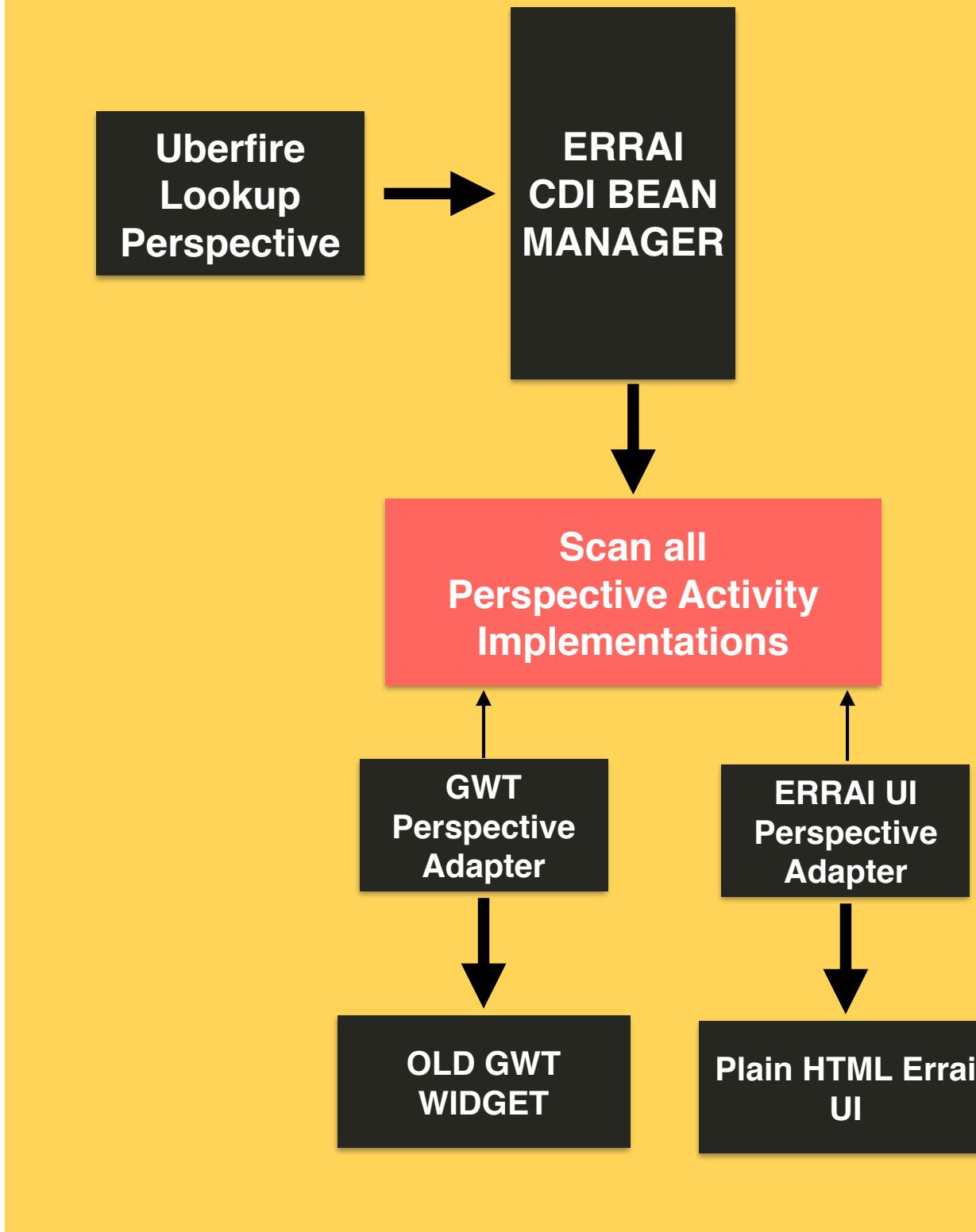
**Baseado em Contratos**

**Screen -> Interface WorkbenchScreenActivity**

**Editor -> Interface WorkbenchEditorActivity**

**Perspective -> Interface PerspectiveActivity**

# Perspectives



Project Explorer Guided Decision Tables

<default> > mortgages > mortgages

DRL DATA OBJECTS DOMAIN SPECIFIC LANGUAGE DEFINITIONS ENUMERATION DEFINITIONS GUIDED DECISION TABLES ▾ Empty Pricing loans GUIDED RULES GUIDED RULES (WITH DSL) TEST SCENARIOS ▾

Pricing loans.gdst

Add Column Edit Columns

All the rules inherit: None selected ▾

Código de 7 anos atrás com GWT “old school”

Messages

Level	Text	File	Column	Line
-------	------	------	--------	------

Chrome File Edit View History Bookmarks People Window Help 25:00 100% Thu 20 Apr 2:42 AM Guiherme

Drools Workbench 127.0.0.1:8888/drools-wb.html#GuidedDecisionTableEditor?path\_uri=default://master@demo/mortgages/src/main/resources/mortgages/Pricing%252520loans.gdst&file\_name=Pricing%2520loans.gdst&has...

Drools Workbench ? admin

Home Perspectives Search x

Example Explore v New v Project v Repository v Asset Search

Project Explorer Open Project Editor <

<default> > mortgages > mortgages

DRL DATA OBJECTS DOMAIN SPECIFIC LANGUAGE DEFINITIONS ENUMERATION DEFINITIONS GUIDED DECISION TABLES ▾ Empty Pricing loans GUIDED RULES GUIDED RULES (WITH DSL) TEST SCENARIOS ▾

Guided Decision Tables Editor Overview Source Data Objects Save Delete Rename Copy Validate Edit v View v Insert v Latest Version v x

Add Column Edit Columns

Pricing loans.gdst

Pricing loans		application : LoanApplication			ome : IncomeSou			application	
#	Description	amount min	amount max	period	deposit max	income	Loan approved	LMI	rate
1		131000	200000	30	20000	Asset	true	0	2
2		10000	100000	20	2000	Job	true	0	4
3		100001	130000	20	3000	Job	true	10	6

Código da semana passada  
HTML 5 canvas

Messages Clear x

Level	Text	File	Column	Line
-------	------	------	--------	------

**Live-Span de 5~10 anos**

**Trate a arquitetura Web com o  
mesmo respeito que você trata seu  
backend.**

5 pilares

Aplicação de Larga Escala

Desenvolvedores full stack

Integração com UX

Life-Span de 5~10 anos

Interoperabilidade

```
@WorkbenchPerspective(identifier = "HomePerspective",
    isDefault = true)
@Templated
public class HomePerspective implements IsElement {

    @Inject
    @DataField
    @WorkbenchPanel(parts = "MoodScreen?uber=fire&uber1=fire1")
    Div moodScreen;

    @Inject
    @DataField
    @WorkbenchPanel(parts = "HomeScreen?uber=fire")
    Div homeScreen;

    @Inject
    @DataField
    @WorkbenchPanel(parts = "AnotherScreen")
    Div anotherScreen;
}
```



```
@JsType
public interface PerspectiveActivity{

    PerspectiveDefinition getDefaultPerspectiveLayout();

    @Override
    default String getName() {
        return getDefaultPerspectiveLayout().getName();
    }

    boolean isDefault();

    Menus getMenus();

    ToolBar getToolBar();

}
```





```

function TodoCtrl($scope) {
  $scope.placeText = "MiscellaneousFeatures";
  $scope.todos = [
    {text: 'learn angular', done: true},
    {text: 'build an angular app', done: false}
  ];
  $scope.addTodo = function () {
    $scope.todos.push({text: $scope.todoText, done: false});
    $scope.todoText = '';
  };
  $scope.remaining = function () {
    var count = 0;
    angular.forEach($scope.todos, function (todo) {
      count += todo.done ? 0 : 1;
    });
    return count;
  };
  $scope.archive = function () {
    var oldTodos = $scope.todos;
    $scope.todos = [];
    angular.forEach(oldTodos, function (todo) {
      if (!todo.done) {
        $scope.todos.push(todo);
      }
    });
  };
  $scope["goto"] = function () {
    goToPlace($scope.placeText);
  };
}

```

```

<div class="container-fluid" ng-controller="TodoCtrl">
  <div class="row">
    <div class="col-md-12">
      <p class="pull-right" style="margin-top: 10px;">{{remaining()}} of {{todos.length}} remaining [<a href="#" ng-click="archive()">archive</a> ]</p>
      <h4>Todos</h4>
      <ul class="list-group">
        <li class="list-group-item" ng-repeat="todo in todos">
          <span class="done-{{todo.done}}">{{todo.text}}</span>
          <input class="pull-right" type="checkbox" ng-model="todo.done">
        </li>
      </ul>
    </div>
  </div>
  <div class="row">
    <div class="col-md-6">
      <form class="form-inline" ng-submit="goto()">
        <div class="form-group">
          <input type="text" ng-model="placeText" size="30" class="form-control" placeholder="place to go">
        </div>
      </form>
    </div>
    <div class="col-md-6">
      <form class="form-inline pull-right" ng-submit="addTodo()">
        <div class="form-group">
          <input type="text" ng-model="todoText" size="30" class="form-control" placeholder="add new todo here">
          <input class="btn btn-primary" type="submit" value="Add">
        </div>
      </form>
    </div>
  </div>
</div>

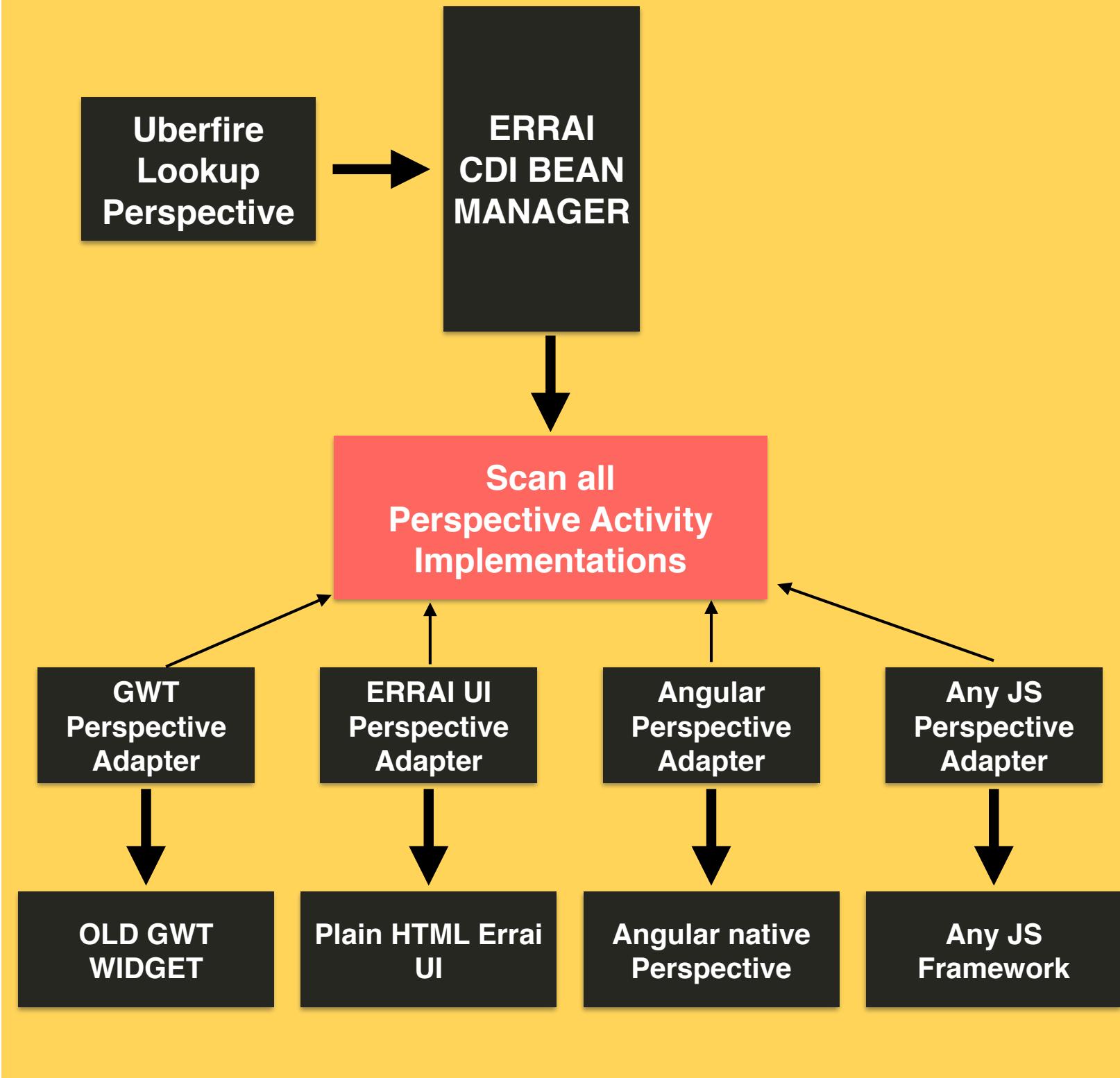
```

```

$registerPlugin({
  id: "my.angular_js",
  type: "angularjs",
  templateUrl: "angular.sample.html",
  title: function () {
    return "angular " + Math.floor(Math.random() * 10);
  },
  on_close: function () {
    alert("this is a pure JS alert!");
  }
});

```

# Perspectives



## Quick Tour

A quick tour that shows UberFire cool features.



## Sample App

Here a good example of an application build on top of UberFire.



### angular 2

Todos 1 of 3 remaining [ archive ]

- learn angular
- build an angular app
- Talk at QCon

MiscellaneousFeatures [GoTo](#) [add new todo here](#) [Add](#)

# Angular JS Screen

## Todo List ▾

[Save](#) [Delete](#) [Edit ▾](#)

## UberFire Todo List

UberFire is an amazing project, with a bright future, but as an Alpha version we know that it needs **some** improvements. Here are some things in our todo list:

- Improve Look & Feel
- Implement Themes
- Grid/Tile layout manager
- ...

## Links

- [Source @ GitHub](#)
- [UberFire User List](#)
- [UberFire Dev List](#)
- [Drools Project](#)
- [JBPM Project](#)

## Contribution

If you were looking for a fun project, to get involved with some cool tech. It doesn't get much better than contribute to UberFire :).

# Criação de Componentes em Runtime

**Dashbuilder**

Administration Dashboards Test

Perspectives Navigation

Test > Expenses

Sales

Menu bar

- Administration
  - Datasets
  - Security
  - Content manager
- Dashboards
  - Sales dashboard
  - Sales reports
- Test
  - Expenses
  - 
  - Sales



## Content Management

From here you can create & customize both the application content and its navigation menus. You can start by creating a new Perspective

New Perspective

**KIE Workbench**

- Home
- Authoring
- Deploy
- Process Management
- Tasks
- Dashboard

Example New Item Repository

Project Explorer Save Delete Rename Copy Latest Version

default-ou > playground > online-shop

**BUSINESS PROCESS (PREVIEW)**

**DATA OBJECTS**

- Client
- Order
- OrderLine

**FORM DEFINITIONS (PREVIEW)**

- Client
- Order
- OrderLine

**Form Modeler [Order]**

**Editor Overview**

**Field properties**

**Field Type**: MultipleSubForm

**Label**: Lines

**Create Form**: OrderLine

**Edit Form**: OrderLine

Required

Readonly

Validate on Value Change

**Table Columns**

+ New Instance			
Property	Caption		
product	Product	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
amount	Amount	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

**Field binding**: lines

**Components**

- Tools
- order
  - id
  - client

**Messages**

Level	Text
File	Column Line

**5 pilares**

**Aplicação de Larga Escala**

**Desenvolvedores full stack**

**Integração com UX**

**Life-Span de 5~10 anos**

**Interoperabilidade**

Desenvolvimento Web  
é complexo

Aplicações Web são parte da  
nossa arquitetura

# Princípios

**Independente de Frameworks**

**Testável**

**Independente de UI**

**Independente de Database**

**Independente de Agentes Externos**

Arquitetura de software é  
exercício de trade-offs

**5 pilares**

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**Interoperabilidade**

**<http://bit.ly/5-pilares-web>**



Eder Ignatowicz  
@ederign



**redhat.**<sup>®</sup>