

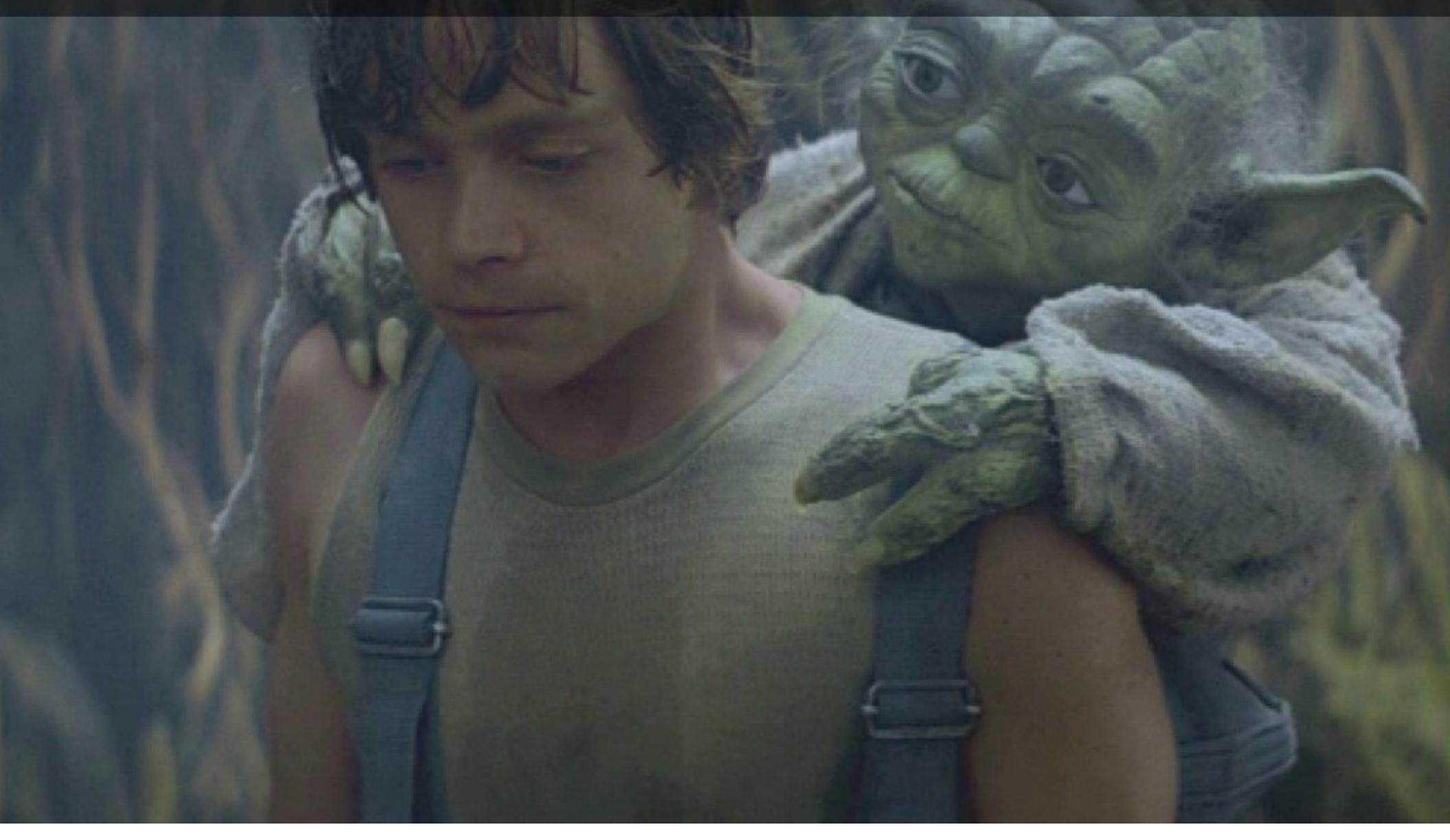
Construindo aplicações HTML5 em Java

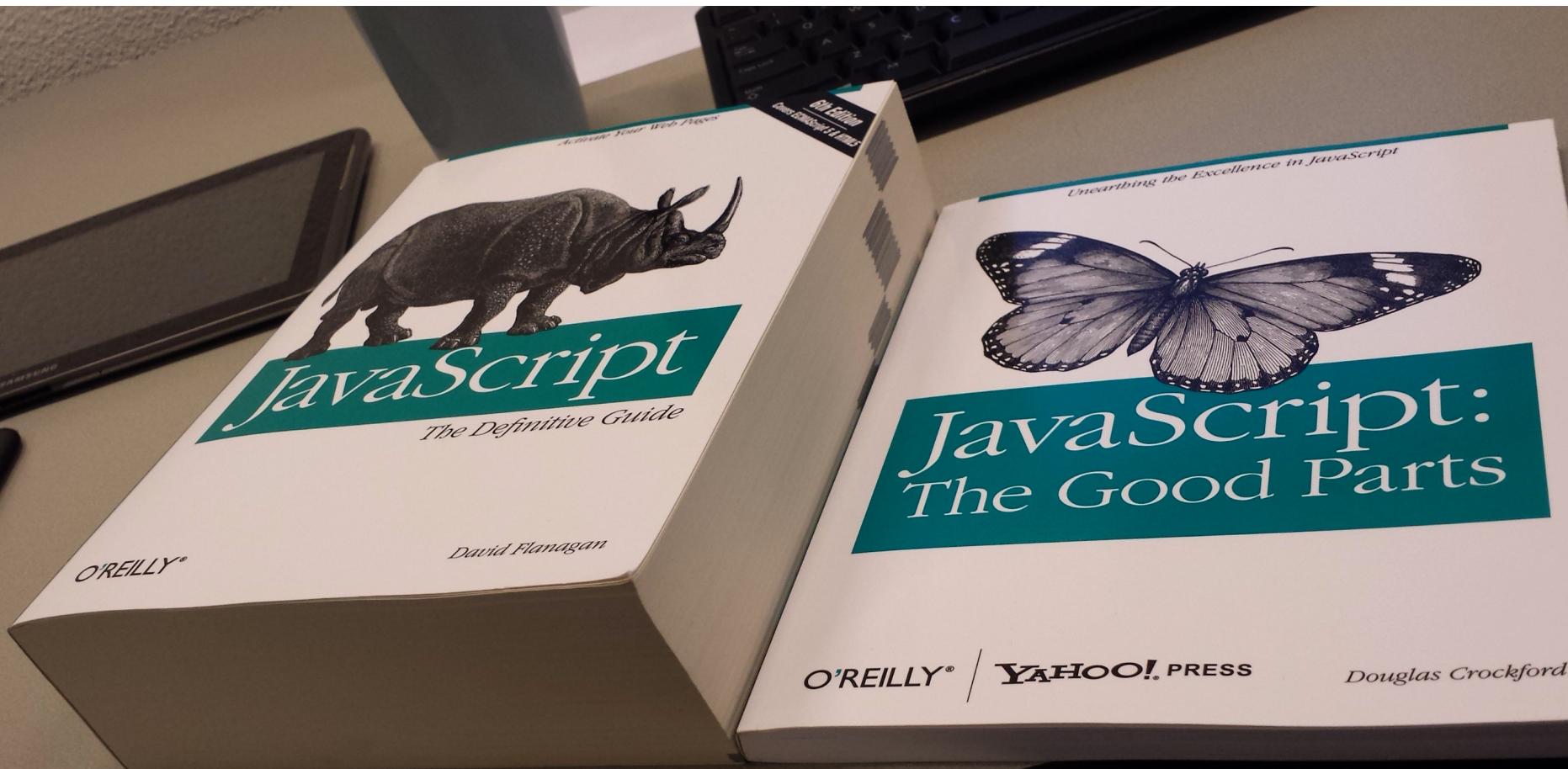
Eder Ignatowicz
Sr. Software Engineer
JBoss by Red Hat

Java <3

GWT <3

YODA SAID,
"YOU MUST UNLEARN, WHAT YOU HAVE LEARNED."





Como construimos os workbenches do Drools e do jBPM

Eder Ignatowicz
Sr. Software Engineer
JBoss by Red Hat



~600k linhas de client code
~20 repositórios



uberfire



UX+ Dev

```
<html>
<head>
<title>First JSP</title>
<link rel="stylesheet" href="number-styles.css">
</head>
<body>
<%
double num = Math.random();
if (num > 0.95) {
%>
<h2 class="response">You'll have a lucky day!</h2>
<p class="number lucky">(<%= num %>)</p>
<%
} else {
%>
<h2 class="response">Well, life goes on ... </h2>
<p class="number unlucky" >(<%= num %>)</p>
<%
}
%>
<a href="<%= request.getRequestURI() %>"><h3>Try Again</h3></a>
</body>
</html>
```

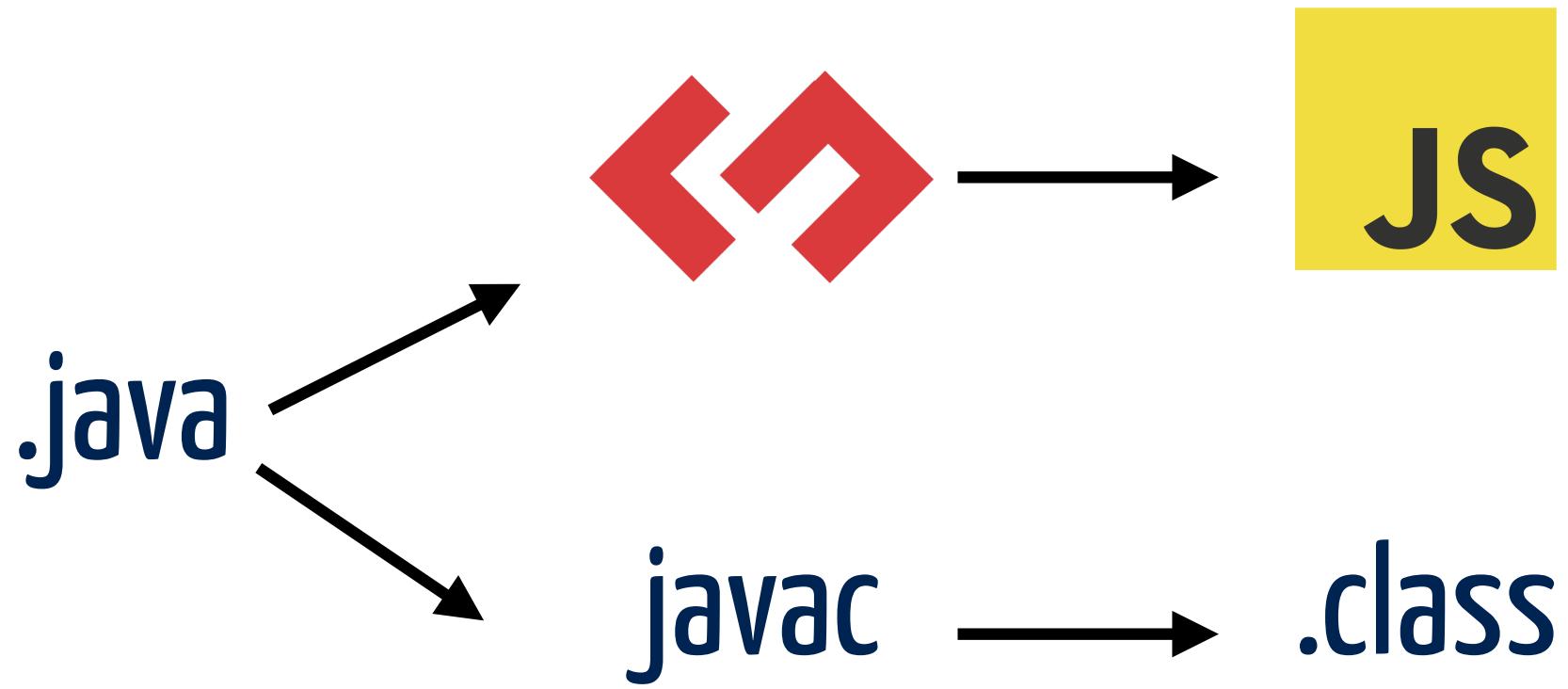
```
<header id="header">
<h1>todos</h1>
<form id="todo-form" ng-submit="addTodo()">
<input id="new-todo" placeholder="What needs to be done?" ng-model="newTodo" autofocus>
</form>
</header>
<section id="main" ng-show="todos.length" ng-cloak>
<input id="toggle-all" type="checkbox" ng-model="allChecked" ng-click="markAll(allChecked)"> <label
for="toggle-all">Mark all as complete</label>
<ul id="todo-list">
<li ng-repeat="todo in todos | filter:statusFilter track by $index"
ng-class="{completed: todo.completed, editing: todo == editedTodo}">
<div class="view">
<input class="toggle" type="checkbox" ng-model="todo.completed"> <label ng-dblclick="editTodo(todo)">{{todo.title}}</label>
<button class="destroy" ng-click="removeTodo(todo)"></button>
</div>
<form ng-submit="doneEditing(todo)">
<input class="edit" ng-trim="false" ng-model="todo.title" todo-escape="revertEditing(todo)"
ng-blur="doneEditing(todo)" todo-focus="todo == editedTodo">
</form>
</li>
</ul>
</section>
<footer id="footer" ng-show="todos.length" ng-cloak>
<span id="todo-count"><strong>{{remainingCount}}</strong> <ng-pluralize count="remainingCount"
when="{ one: 'item left', other: 'items left' }"></ng-pluralize> </span>
<ul id="filters">
<li><a ng-class="{selected: status == ''}" href="#">All</a></li>
<li><a ng-class="{selected: status == 'active'}" href="#/active">Active</a></li>
<li><a ng-class="{selected: status == 'completed'}" href="#/completed">Completed</a></li>
</ul>
<button id="clear-completed" ng-click="clearCompletedTodos()" ng-show="completedCount">Clear completed
({{completedCount}})</button>
</footer>
</section>
<footer id="info">
<p>Double-click to edit a todo</p>
<p>
Part of <a href="http://todomvc.com">TodoMVC</a>
</p>
</footer>
```

```
// https://github.com/facebook/react/blob/master/docs/docs/tutorial.md

var Comment = React.createClass({
  rawMarkup: function() {
    var rawMarkup = marked(this.props.children.toString(), {sanitize: true});
    return { __html: rawMarkup };
  },
  render: function() {
    return (
      <div className="comment">
        <h2 className="commentAuthor">
          {this.props.author}
        </h2>
        <span dangerouslySetInnerHTML={this.rawMarkup()} />
      </div>
    );
  }
});
```

ERRAI UI

```
<form id="login">
  <legend>Log in to your account</legend>
  <label for="username">Username</label>
  <input id="username" type="text" placeholder="Username">
  <label for="pass">Password</label>
  <input id="pass" type="password" placeholder="Password">
  <button id="submit">Log in</button>
  <button>Cancel</button>
</form>
```



```
src/main/java
    HelloWorld.gwt.xml
client
    HelloWorldClient.java
shared
    HelloWorldEntity.java
server
    HelloWorldService.java
src/main/webapp
    HelloWorld.html
    WEB-INF
        web.xml
src/main/resources
    ErraiApp.properties
```

Shared Codebase

```
@Bindable
@Entity
@NamedQuery(
    name = "allComplaints",
    query =
        "SELECT c FROM UserComplaint c ORDER BY c.id" )
public class UserComplaint {

    @Id
    @GeneratedValue( strategy = GenerationType.AUTO )
    private Long id;

    @Version
    private Long version;

    @NotNull
    private String name;

    @Email
    private String email;

    private String text;

    ...
}
```

JPA in the Browser

```
@Templated
@Page
public class ComplaintForm {

    @Inject
    private EntityManager em;

    @EventHandler("submit")
    private void onSubmit(ClickEvent e) {
        em.persist(complaint);
        em.flush();
    }
}
```

Data Binding

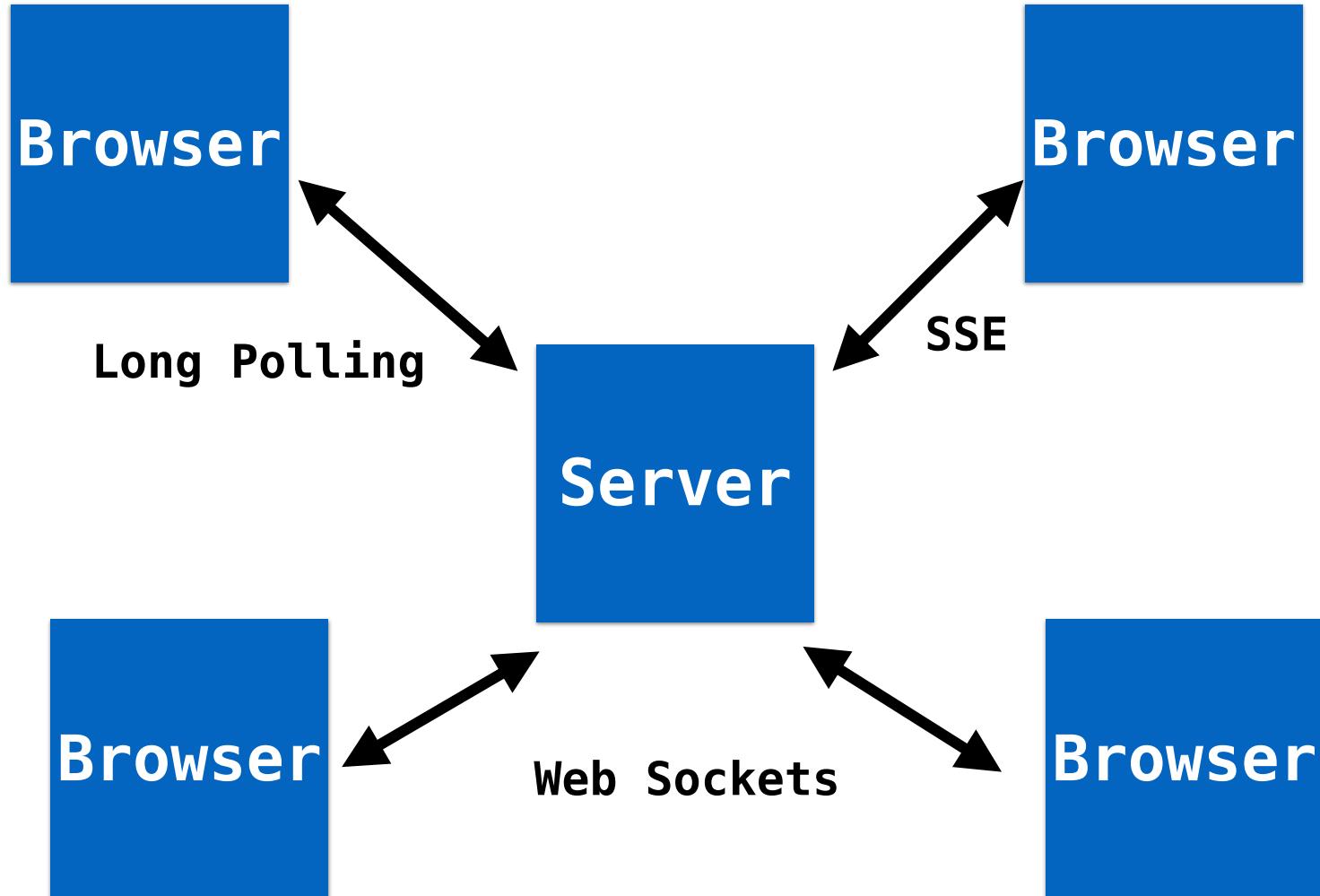
```
@Templated
@Page
public class ComplaintForm {
    @Inject
    @Bound
    @DataField
    private TextBox email;

    @Inject
    @Bound
    @DataField( "name" )
    private TextBox username;

    @Inject
    @Bound
    @DataField
    private TextArea text;

    @Inject
    @Model
    private UserComplaint complaint;

    @EventHandler( "submit" )
    private void onSubmit( ClickEvent e ) {
        sendToServer( complaint );
    }
}
```



JAX-RS

Client

```
@Inject  
private Caller<ContactStorageService> contactService;  
  
contactService.call( List<Contact> contacts)  
-> addAll(contacts) ).getAllContacts();
```

Shared

```
@Path("/contact")  
public interface ContactStorageService {  
  
    @GET  
    @Produces("application/json")  
    List<Contact> getAllContacts();
```

IDE Support

Refactoring

```
@Templated("#main")
@Page(path="share")
public class SharePage extends Composite {
    @Inject private @DataField Label overallErrorMessage;
    @Inject private @DataField TextBox email;
    @Inject private @DataField Button shareButton;
    @Inject private Caller<ShareService> shareService;
    @Inject private TransitionTo<TodoListPage> todoListPageLink;
```

```
@PostConstruct
```

```
private void init() {
```

```
    overallErrorMessage.setVisible(false);
```

```
}
```

overallErrorMessage cannot be resolved

@E 7 quick fixes available:

```
pr
```

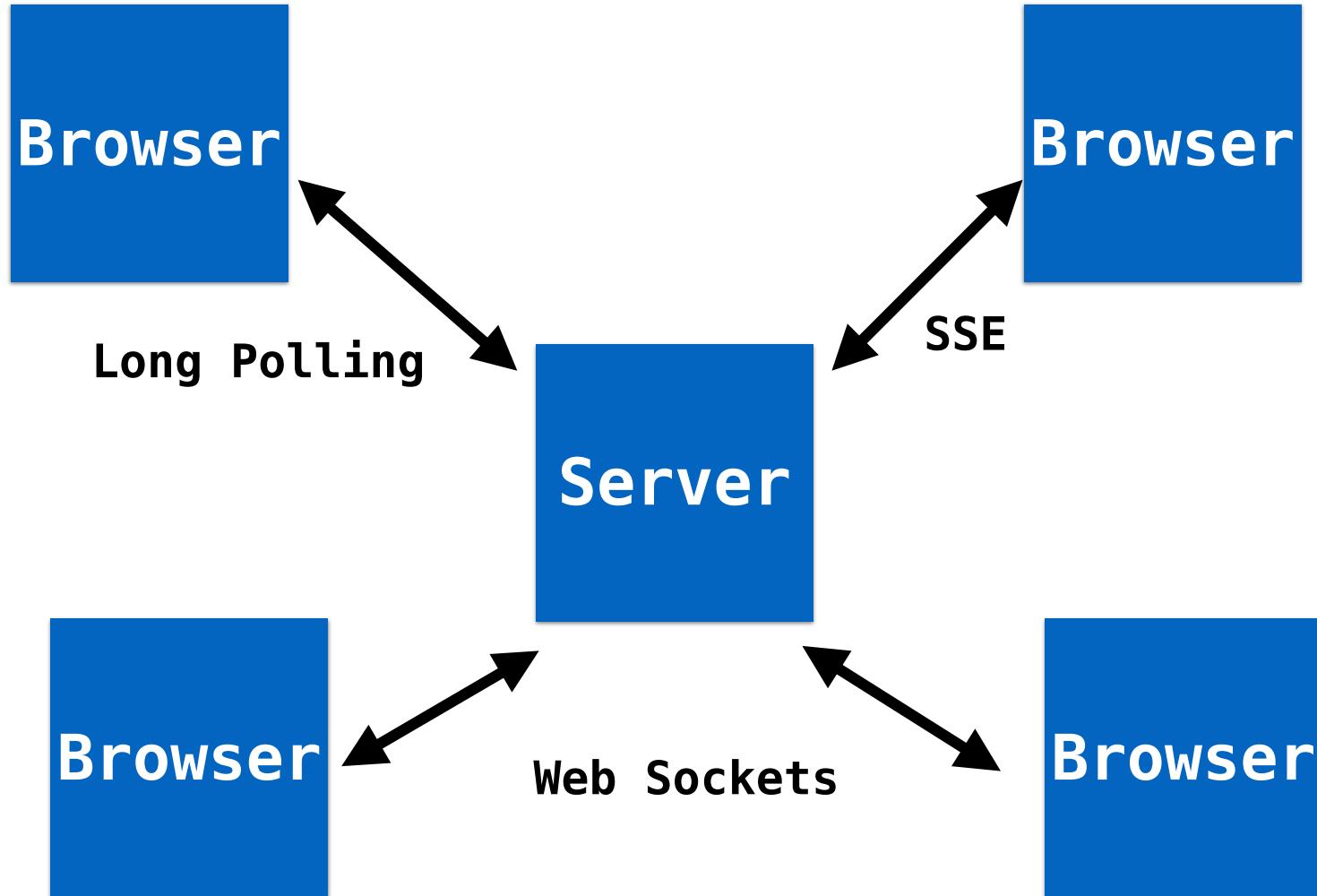
- [Create local variable 'overallErrorMessage'](#)
- [Create field 'overallErrorMessage'](#)
- [Create parameter 'overallErrorMessage'](#)
- [Create class 'overallErrorMessage'](#)
- [Create constant 'overallErrorMessage'](#)
- [Change to 'overallErrorMessage'](#)
- [Fix project setup...](#)

```
se) {
```

CDI

<3

CDI
no browser



```
@Dependent
@Templated
public class ProjectsView implements ProjectsPresenter.View {

    private ProjectsPresenter presenter;

    @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;
```

Observando eventos no
Client
Server
Ambos

```
public void onRemoteCreated(final @Observes  
@Operation(CREATE) ContactOperation contactOperation) {  
  
    if (sourceIsNotThisClient(contactOperation)) {  
        binder.getModel().add(contactOperation.getContact());  
    }  
  
}
```

JSInterop

```
package com.acme;

@JsType
class Foo {
    public int x;
    public int y;

    public int sum() {
        return x + y;
    }
}

var foo = new com.acme.Foo();
foo.x = 40;
foo.y = 2;
foo.sum(); // will return 42!
```

```
// in JavaScript
com = { acme: {} };
    com.acme.Foo = function() {
        this.x = 40;
        this.y = 2;
    };
    com.acme.Foo.prototype.sum = function()
        { return this.x + this.y; };

// in Java
package com.acme;

@JsType(isNative = true)
class Foo {
    public int x;
    public int y;

    public native int sum();
}

class FooMain {
    public static void main() {
        Foo foo = new Foo();
        foo.sum(); // will return 42!
        foo.x = 50;
        foo.y = 5;
        foo.sum(); // will return 55!
    }
}
```



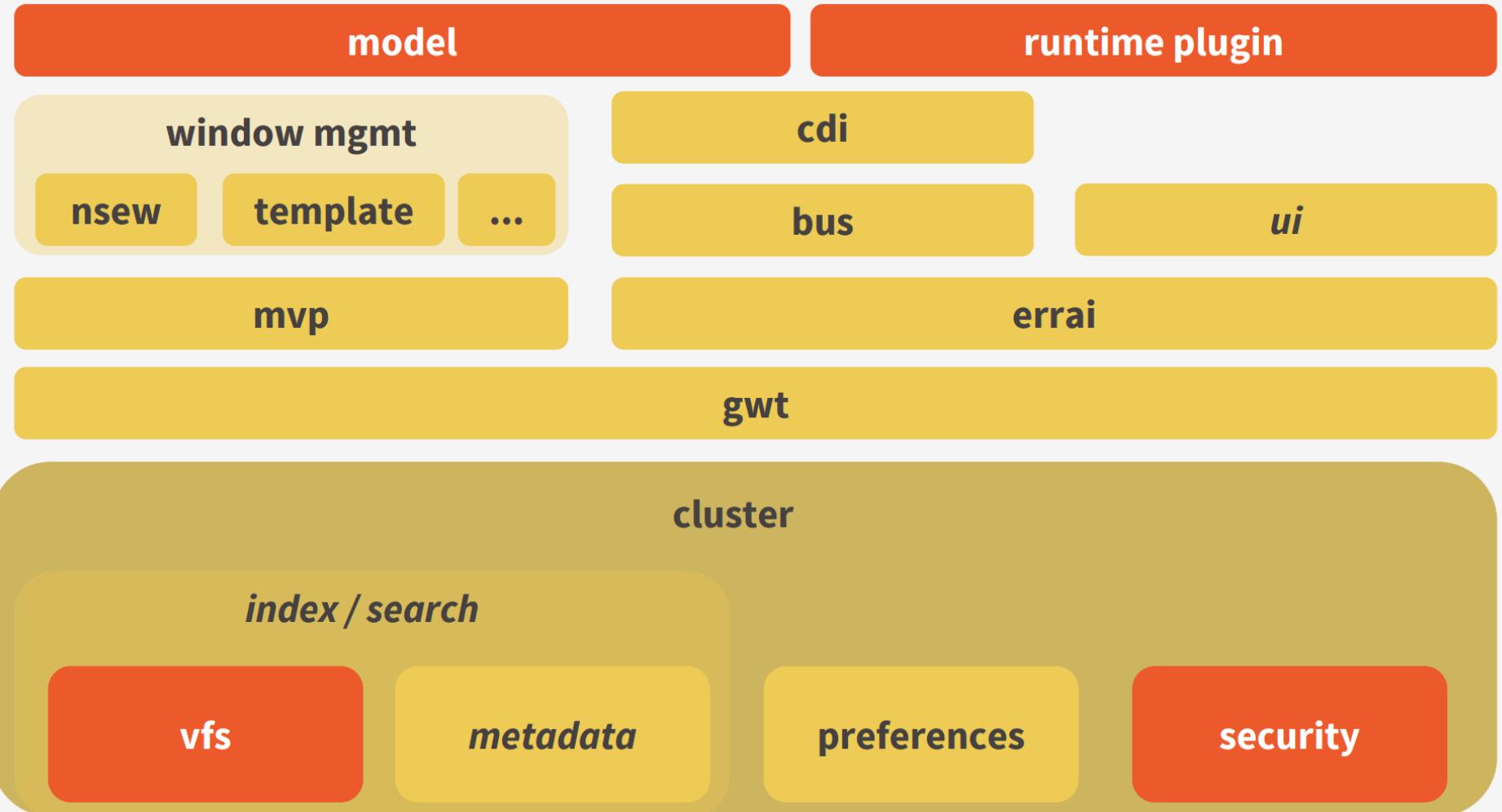
uberfire

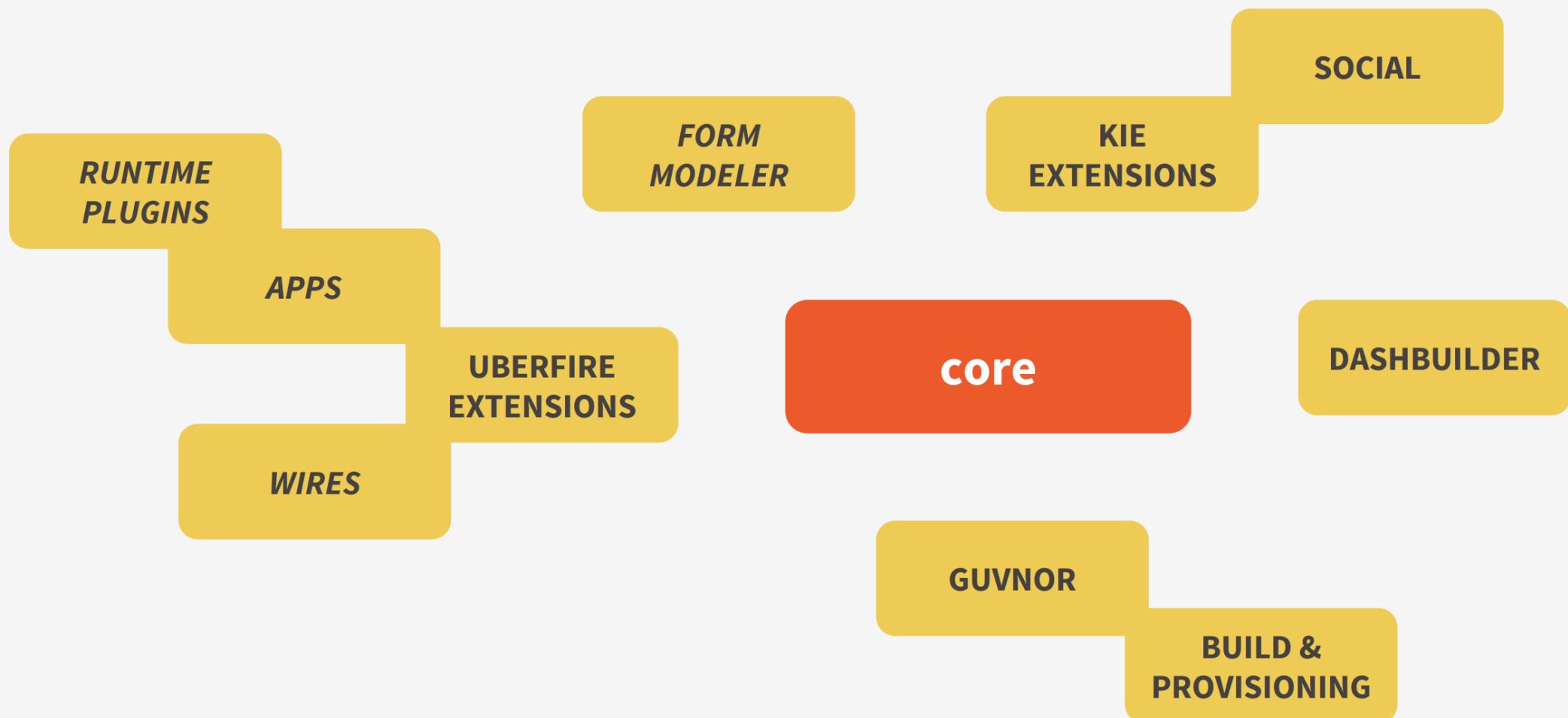


Framework para construção de grandes aplicações
estilo “workbench” e consoles web

“Eclipse Like”

Modelo de Programação "Opinativo"





DEMO

(feature preview)

Java EE + GWT

<3

Open Source

<3



RED HAT
DEVELOPERS

LEARN MORE.

CODE MORE.

SHARE MORE.

Obrigado <3

<http://erraiframework.org>

<http://uberfireframework.org>

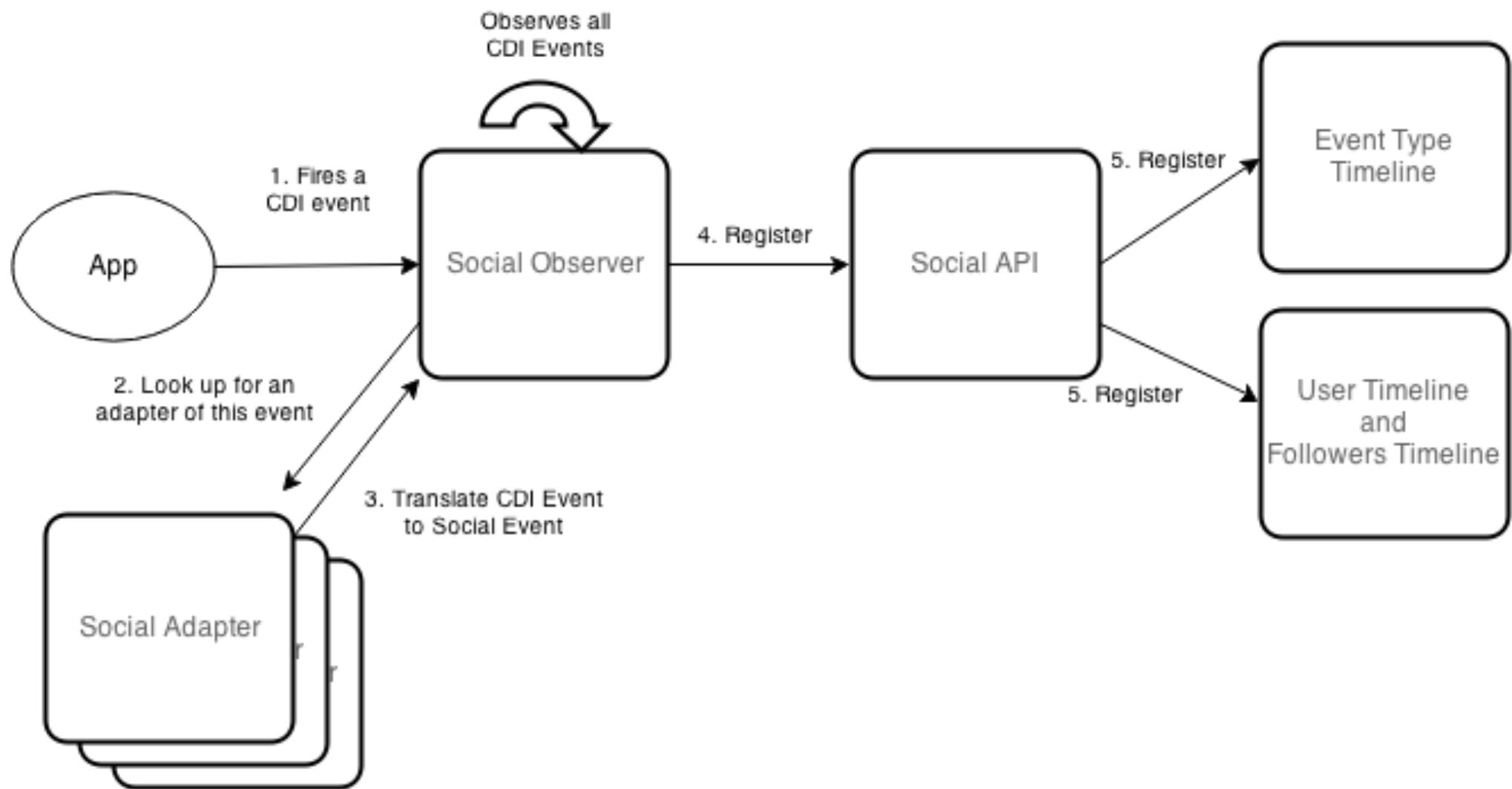
IRC: #errai #uberfire na freenode

Eder Ignatowicz
@ederign



redhat.[®]

Social + CDI



Social Activities Feed

UberFire Showcase Social Activities Feed +

127.0.0.1:8888/org.uberfire.UberfireShowcase/social/NEW_REPOSITORY_EVENT Google

Subscribe to this feed using Live Bookmarks

Always use Live Bookmarks to subscribe to feeds.

Subscribe Now

Social Activities Feed

NEW_REPOSITORY_EVENT
July 16, 2014 at 2:29 PM

```
system SocialActivitiesEvent{timestamp=Wed Jul 16 14:29:36 BRT 2014, user=system, type=NEW_REPOSITORY_EVENT, created repository uf-playground }
```

NEW_REPOSITORY_EVENT
July 16, 2014 at 3:43 PM

```
system SocialActivitiesEvent{timestamp=Wed Jul 16 15:43:47 BRT 2014, user=system, type=NEW_REPOSITORY_EVENT, created repository sample1 }
```

NEW_REPOSITORY_EVENT
July 16, 2014 at 3:44 PM

```
system SocialActivitiesEvent{timestamp=Wed Jul 16 15:44:00 BRT 2014, user=system, type=NEW_REPOSITORY_EVENT, created repository sample2 }
```