

Demoiselle Framework, Process and Environment



07/05/2010



DemoiselleFRAMEWORK

Abstract

This presentation is about Demoiselle, a free and **open software project** to help developing **e-gouvernement solutions** .

Its goal is to **improve the quality** of software development through **reuse** of components, platform **standardization** and application of **agile methods**.



Challenges:

- ▶ How to improve **reuse** of components in a large number of organizational units (or government entities) geographically separated?
- ▶ How to create services to be **maintained** by different teams?
- ▶ How to reduce costs and to increase the **quality** of the final product as well?





Demoiselle FRAMEWORK

Open Source Business Model

Strategic Choice

Free software is a strategic option of the Brazilian Federal Government since 2003 because it may reduce costs, increase competition, create jobs and develop the knowledge and intelligence in this area.

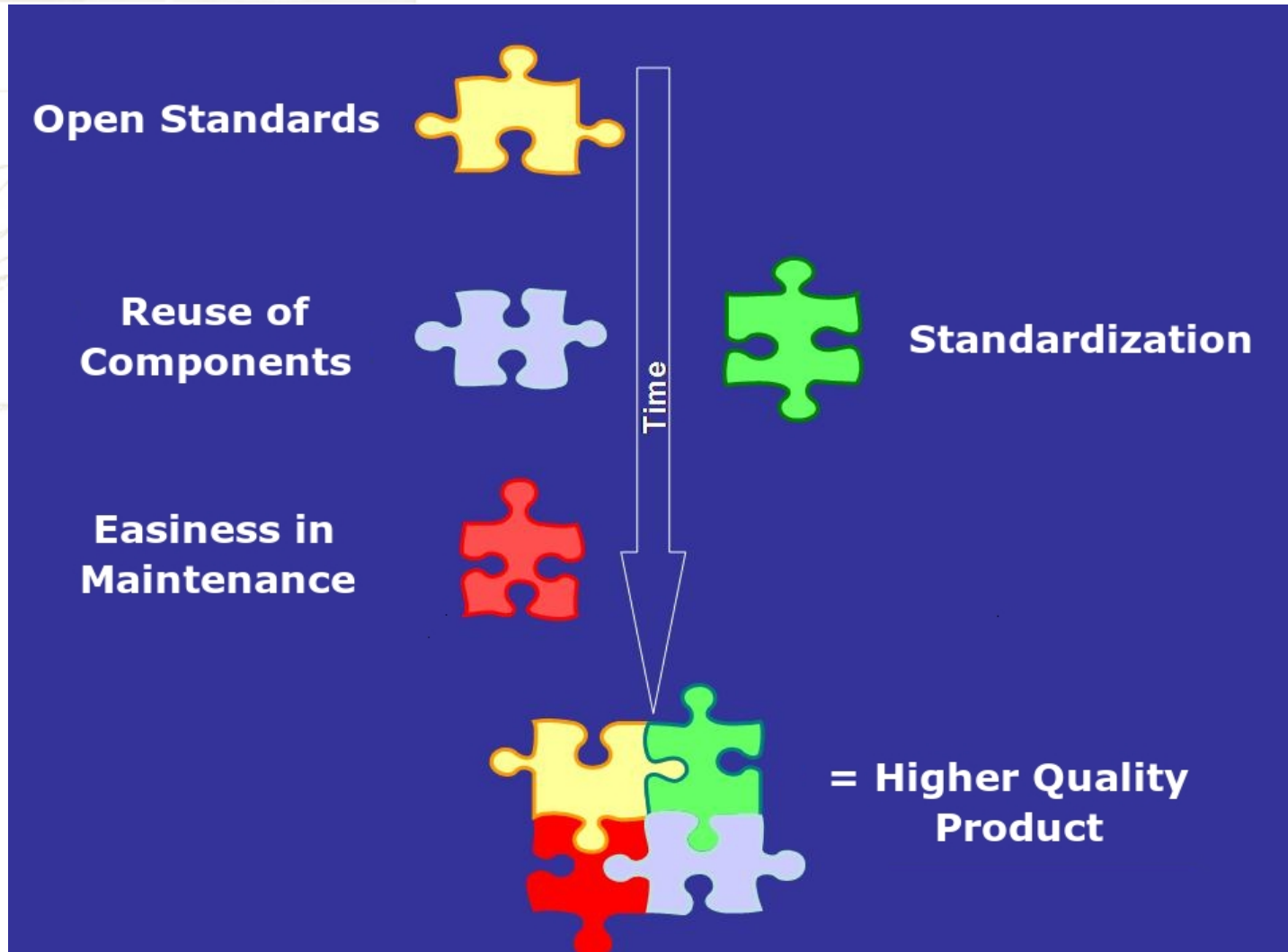
Preference for free software is motivated not only by economic aspects, but by possibilities that it creates, such as:

- ▶ Knowledge sharing and construction;
- ▶ Access to new technologies;
- ▶ Stimulus to software development in collaborative environments.



Introduction

Relationship among standards, reuse, maintenance and quality





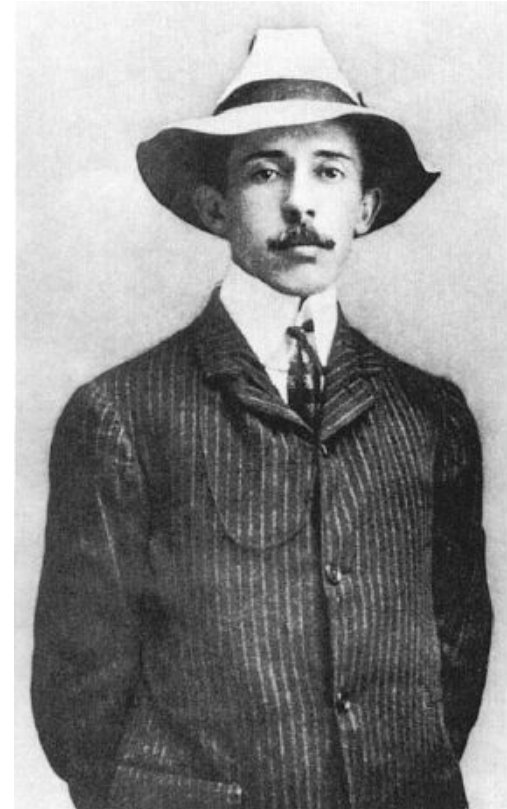
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Demoiselle

Inspiration

Santos Dumont invented a series of aircraft called Demoiselle. At that time, he contributed to the society by publishing his complete project in a technical magazine. So, everybody could freely reproduce his invention.

Demoiselle Project uses the same philosophy of the Father of Aviation, publishing its source code at no charge, through free software license – LGPL version 3.





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Solution

Standardize framework, process and development environment

3 subprojects:

▶ **Demoiselle Framework**

An integration of several software technologies and a reference architecture.

▶ **Demoiselle Process**

An agile development process, tailored to work with Demoiselle Framework.

▶ **Demoiselle Infra**

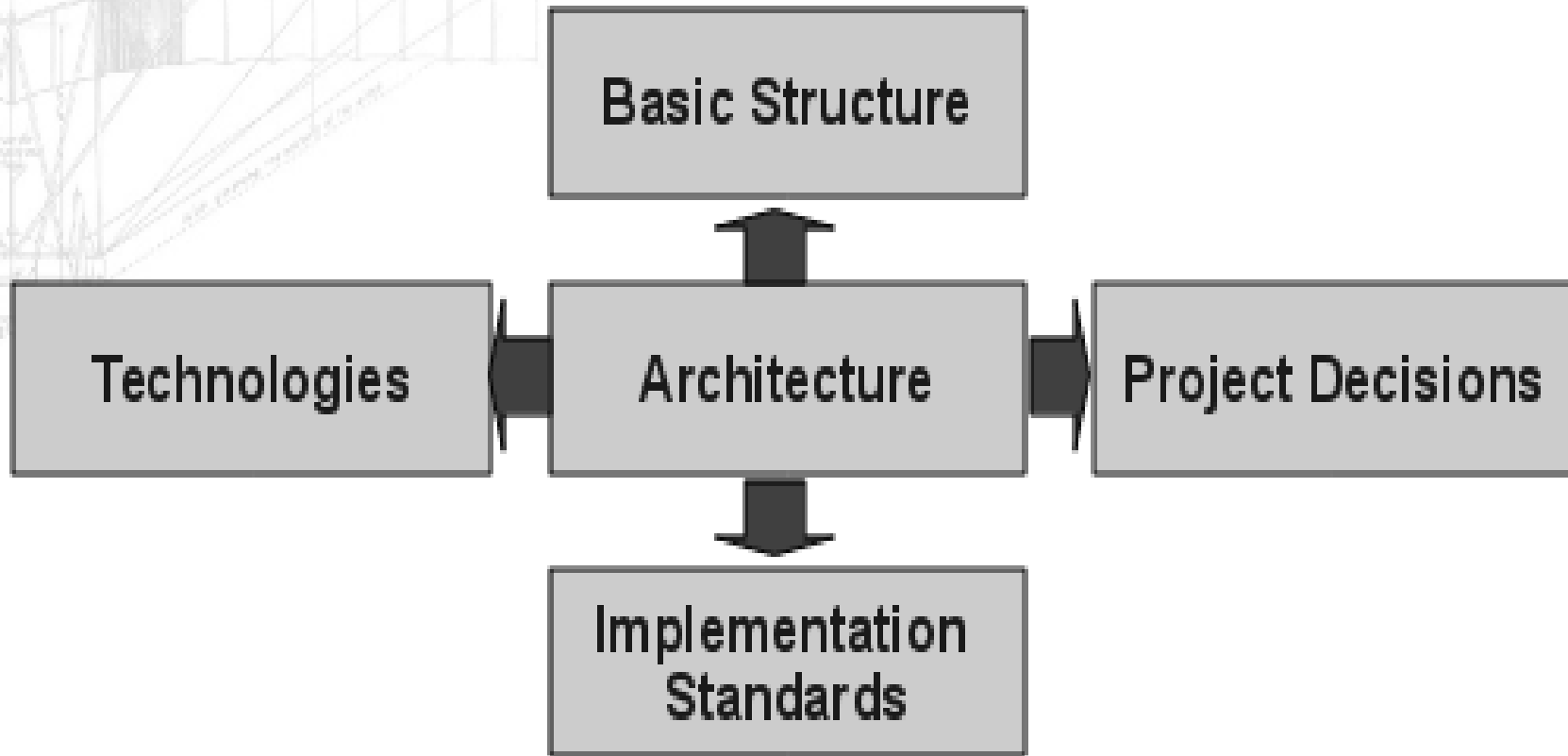
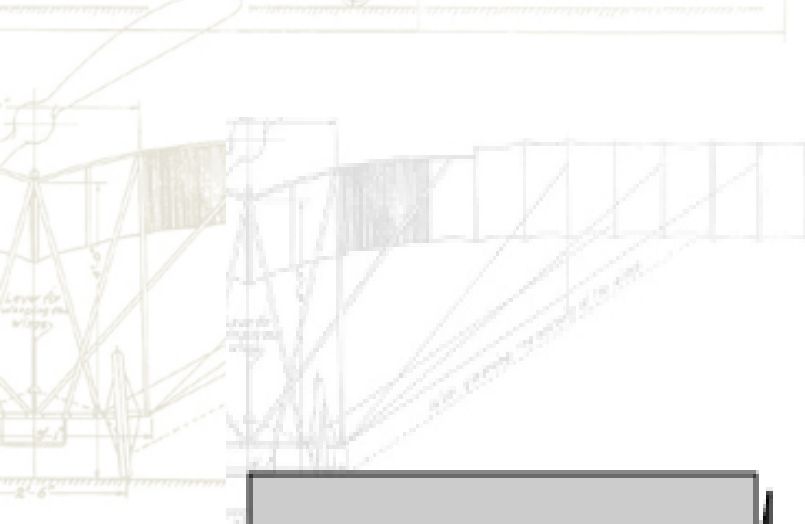
Standard environments to develop and produce applications made with Demoiselle Framework.



DemoiselleFRAMEWORK

Demoiselle Framework

A basic architecture solves several problems





Demoiselle Framework

DEMOISELLE FRAMEWORK

CORE

PERSISTENCE

UTIL

VIEW

WEB

EJB

SPECIFIC PRODUCTS

BASE FRAMEWORKS

JAAS

JCA

TECHNOLOGY SPECIFICATIONS

JSF

JTA

Servlet

PLATFORM WEB

VIRTUAL MACHINE PORTABILITY

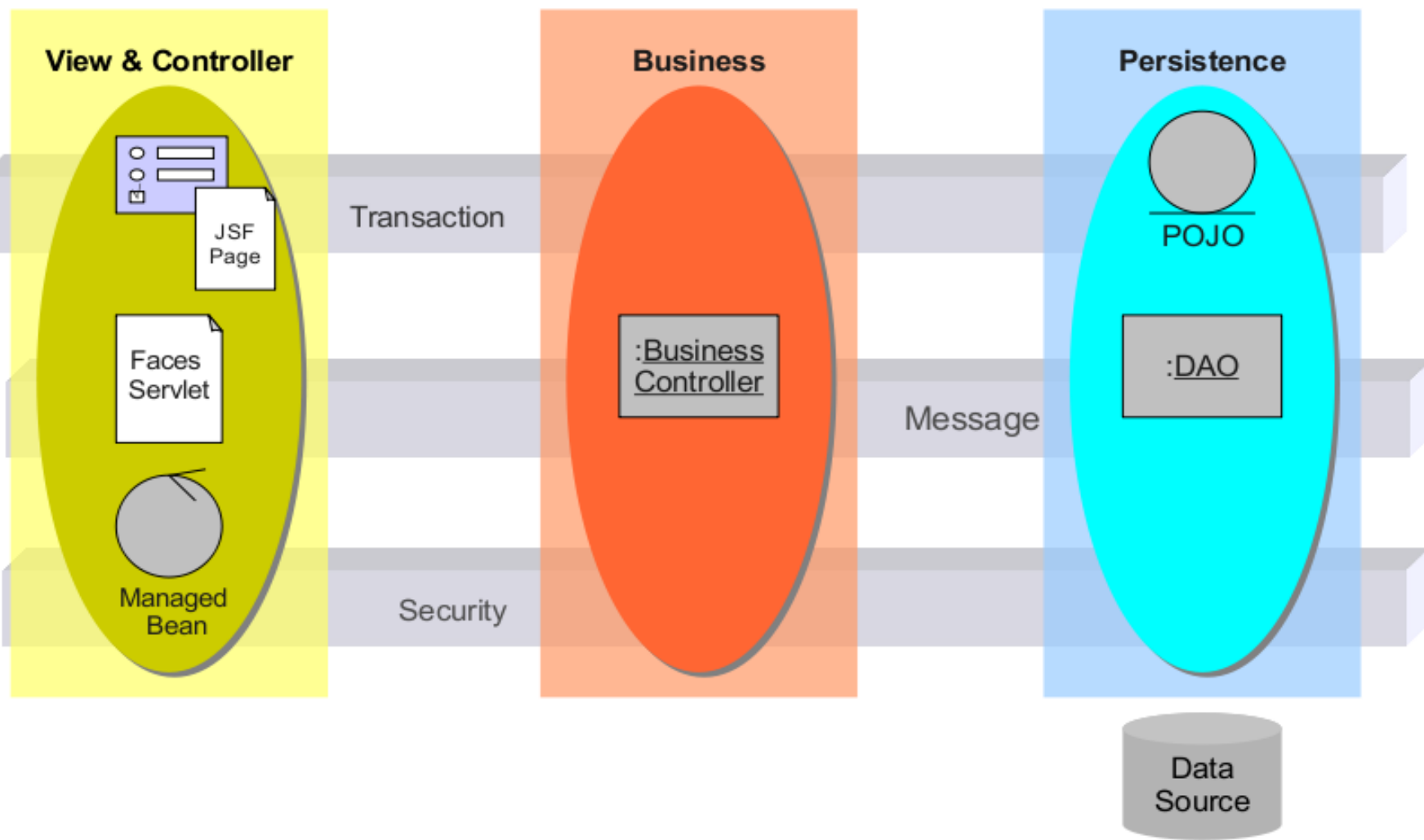
OS



Demoiselle Framework

Demoise

Demoiselle Framework

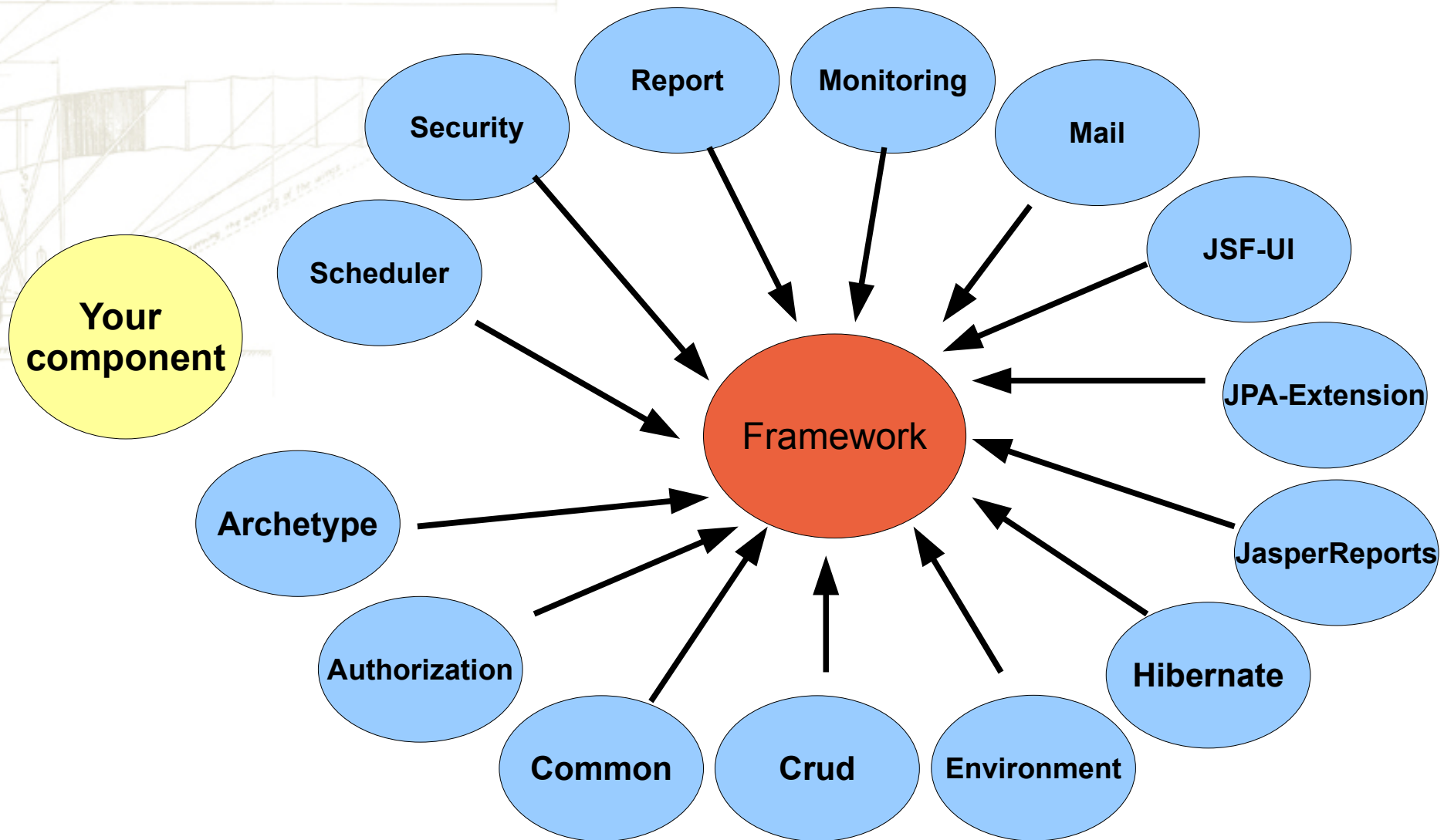




DemosielleFRAMEWORK

Demosielle Framework

Reuse with Component Oriented Development

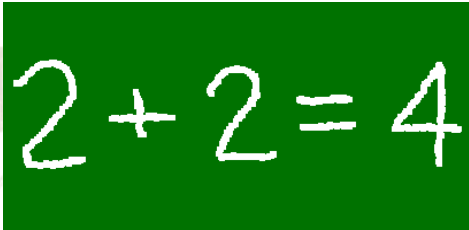




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Demoiselle Process

A development process...



simple



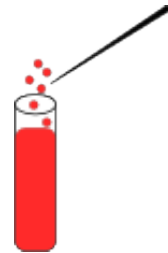
free



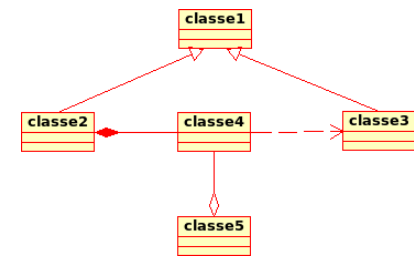
iterative



agile



focused on testing



focused on architecture

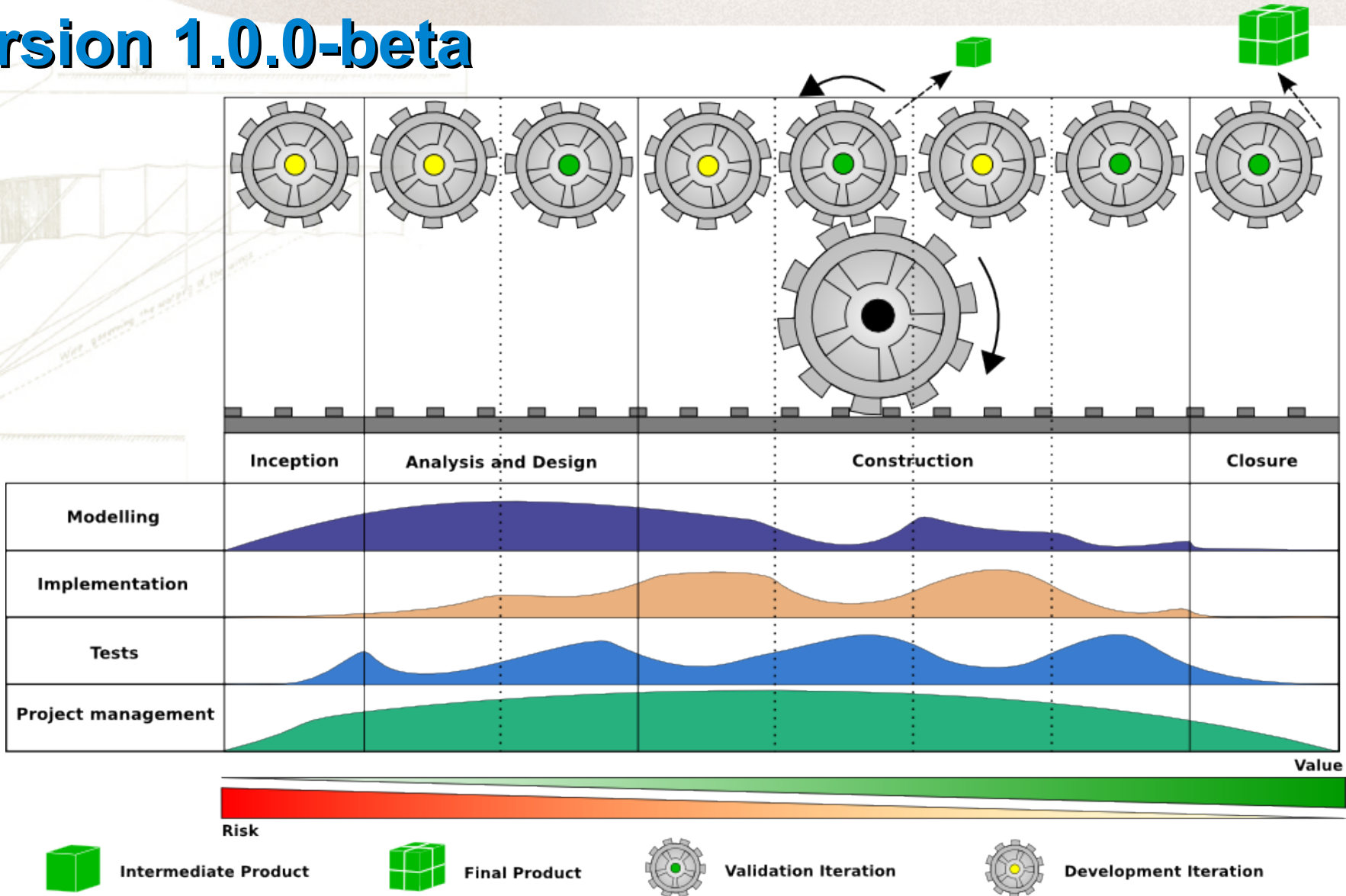
...for Demoiselle Framework users



Demoiselle Process

Demoiselle FRAMEWORK

Version 1.0.0-beta





DemoiselleFRAMEWORK

Demoiselle Infra

Development and Production Environment

Aims at helping developers install and configure development environment and supporting technicians in creating and maintaining a production environment.



aspectj.org



maven





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Demoiselle Infra

First Step

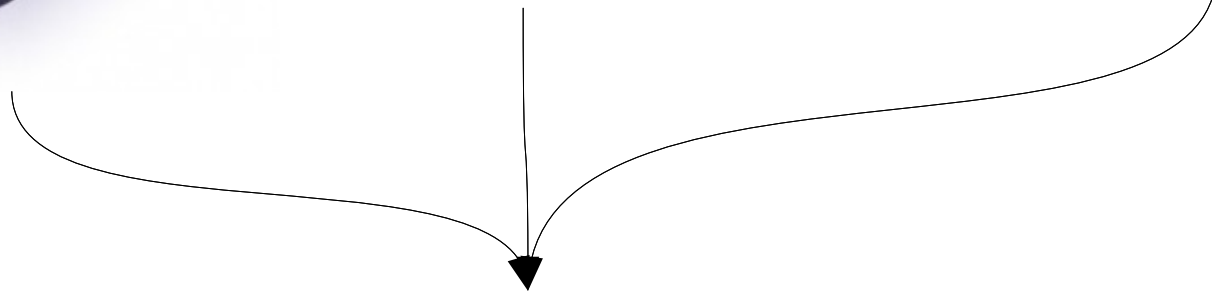
Create a Debian package with Eclipse and plugins that Demoiselle needs (AspectJ and M2)



maven

aspectj.org

debian



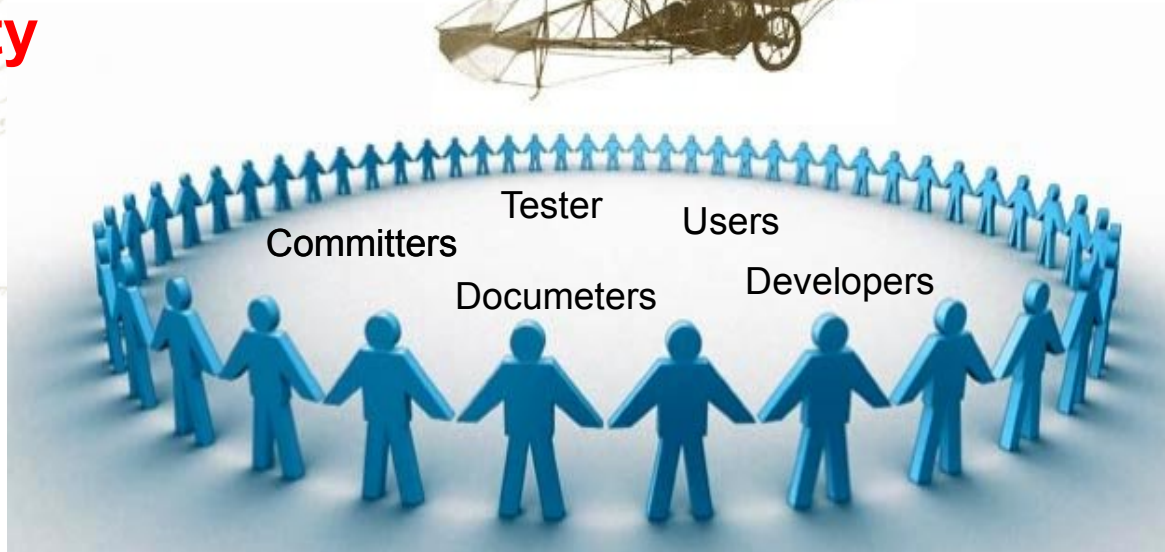


DemoiselleFRAMEWORK

Community



Community



Government

Companies

Universities



DemoiselleFRAMEWORK

Some numbers

- ▶ More than 40 private companies are using and interacting with the project
- ▶ Around 3,500 downloads
- ▶ 65 people interacting in the discussion
- ▶ 25 projects using the framework



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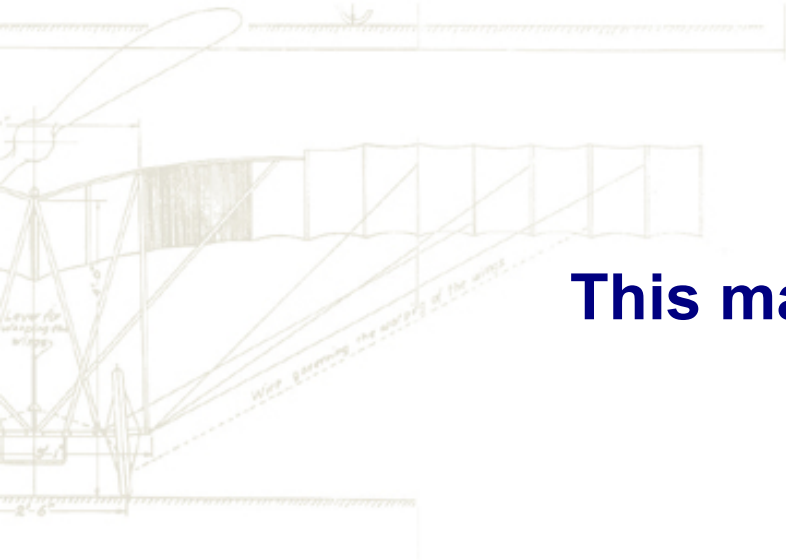
More Information

www.frameworkdemoiselle.gov.br

<http://sourceforge.net/projects/demoiselle>



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