

# JAMES

## A Tool for New Generation Collaborative Web Environments

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# Introducing ourselves

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A long time ago, in a Computer Science School not so far away...



# Introducing ourselves



Our project has evolved from a simple site-manager for the ETSII Student Union to what it is today

This presentation aims to give a brief introduction on the main characteristics of our system

# Content Index

## 4 content blocks:

### 1. System Architecture

- Some basic concepts about JAMES

### 2. Case study: Imaginatica Web site

- An example on how to use JAMES as a conference management system

### 3. Other possibilities within JAMES

- Examples of JAMES adapted to several work environments

### 4. The future of JAMES

# Part 1: JAMES Architecture

In this section we should achieve:

- A good understanding of what Web-based collaboration is, and why it can benefit our business
- An introduction to the point of view adopted in the JAMES system in collaboration, users and groups matters
- The idea that JAMES is an extensible system, composed of core functions on top of which we add specific functionality parts (modules) to suit our needs

# Introduction to Collaborative Groups



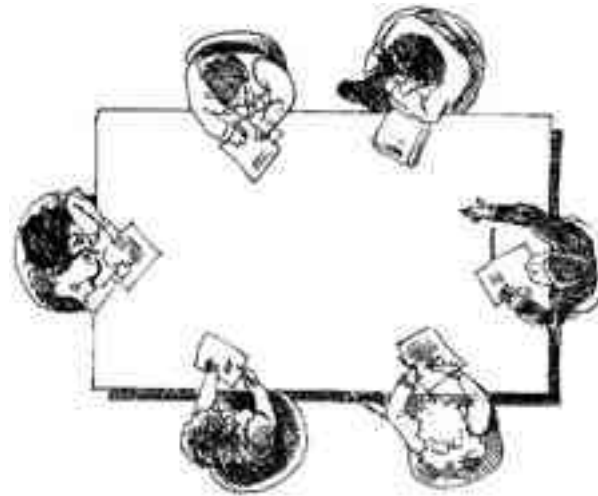
To collaborate: To work with other people, especially in talent-requiring works.

(According to VOX's Advanced Spanish Dictionary)

Let's illustrate this with some samples of collaboration

# Introduction to Collaborative Groups

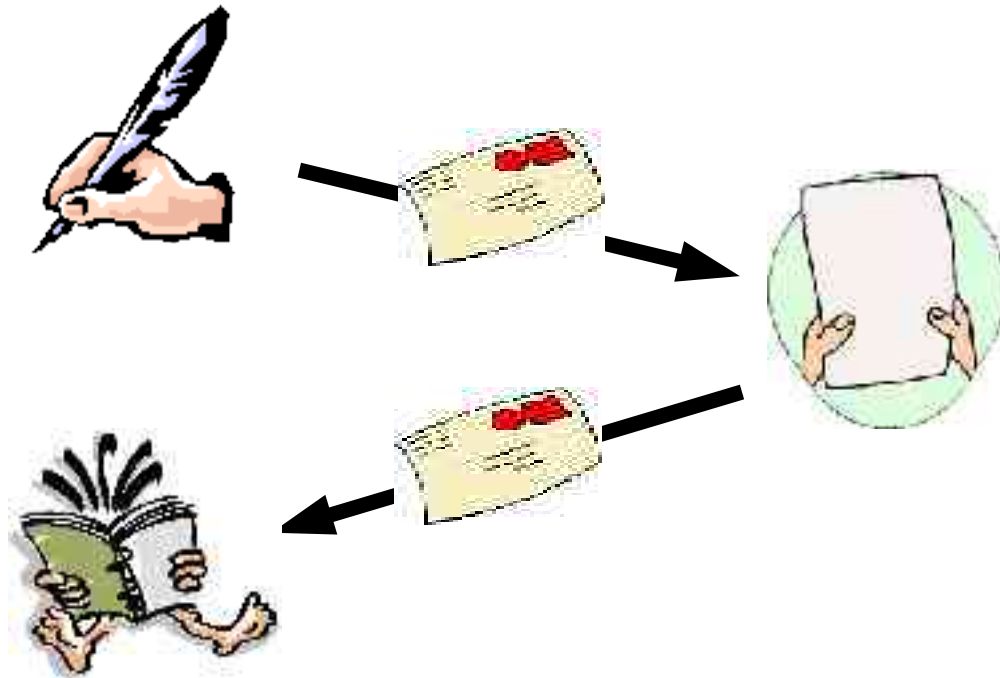
An example of “classical” collaboration





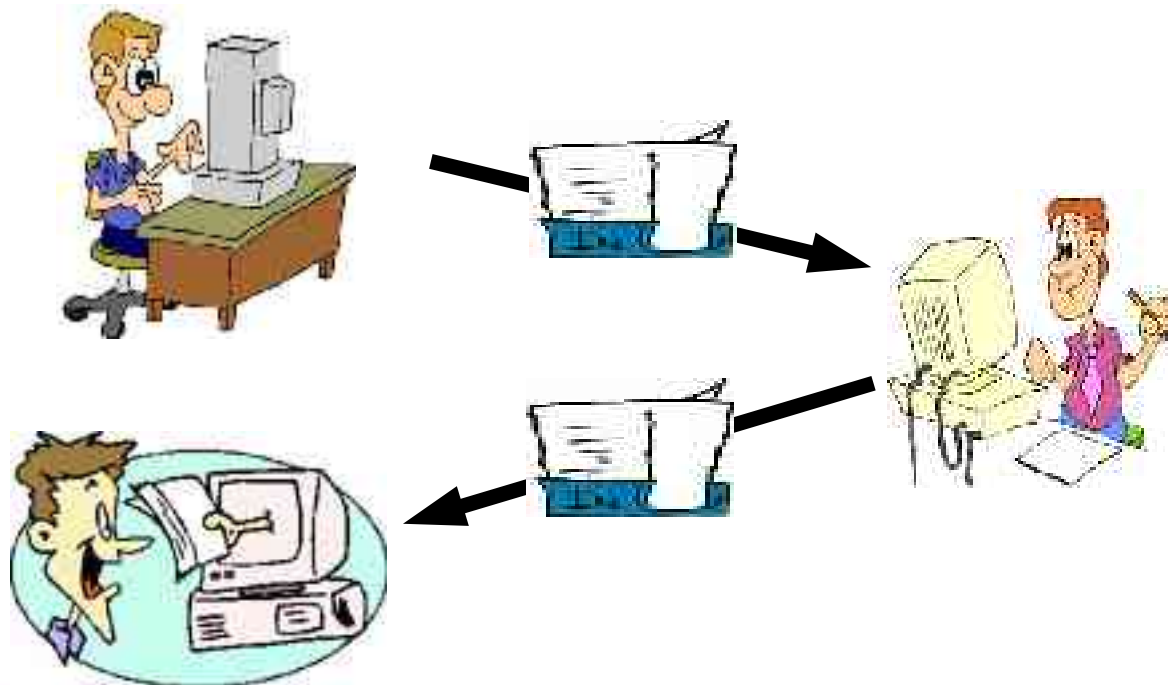
# Introduction to Collaborative Groups

An example of “classical” collaboration



# Introduction to Collaborative Groups

An example of... ¿Web-based collaboration?



# Introduction to Collaborative Groups

## An example of really Web-based collaboration



Collaborative document editing, the JAMES way

# Web-based Collaborative Environments



Web-based collaboration allows teams to work:

- Ubiquitously
- From different platforms
- Using standard tools (web browser)

We believe this type of collaboration can help teams to improve their work significantly.

# Web-based Collaborative Environments



Several systems have appeared aimed at collaborative teams.

We'll now have a look at some examples of web-based collaborative environments.

# Web-based Collaborative Environments



ZOPE - <http://www.zope.org>

The Z Object Publishing Environment can be considered a pioneer of its field.

Structures Web sites as sets of objects. A group of objects that work together to achieve a specific purpose is a “product”

# Web-based Collaborative Environments



ZOPE - <http://www.zope.org>

Although its primary purpose is to build information portals, several products are available for collaborative tasks such as document indexing services, forums or news.

It also enables delegation of control over parts of a site to other individuals.



# Web-based Collaborative Environments

PHPGROUPWARE -

<http://www.phpgroupware.org>

A system for allowing work in teams, written in PHP, which incorporates facilities for user and group managing.





# Web-based Collaborative Environments

PHPGROUPWARE -

<http://www.phpgroupware.org>



# Web-based Collaborative Environments



PHPGROUPWARE -

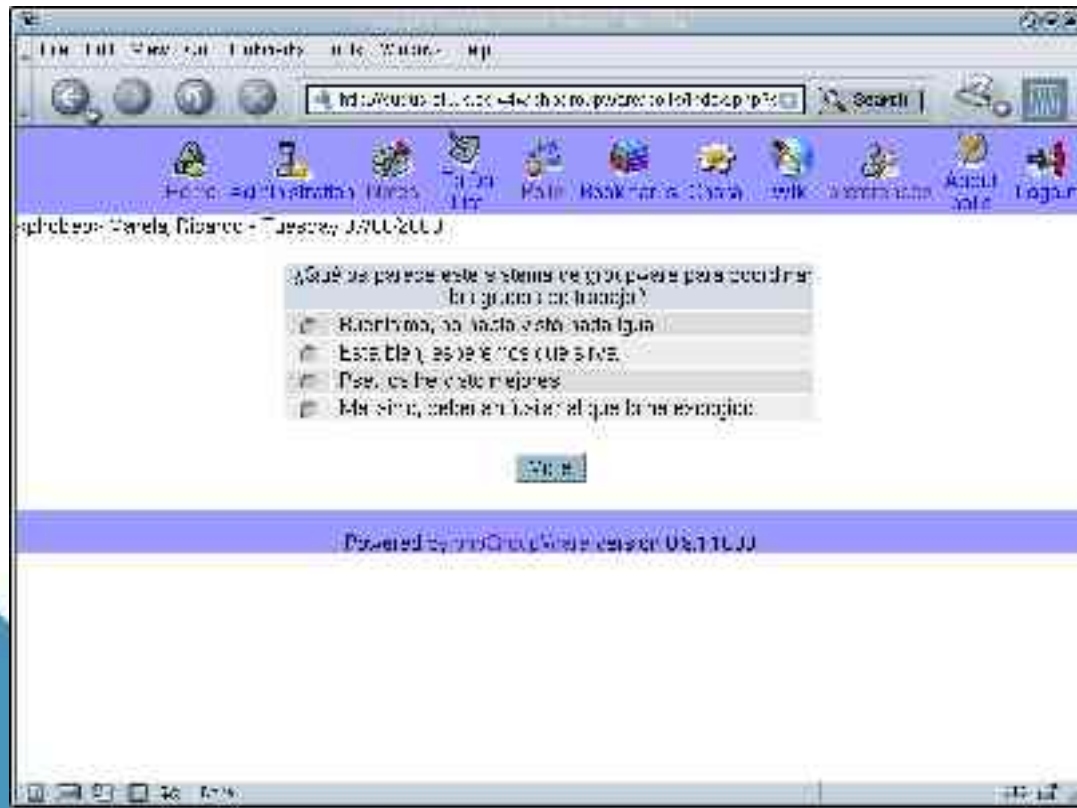
<http://www.phpgroupware.org>

Several modules have been developed to give functionalities such as group-shared notes, polls or bookmarks.

# Web-based Collaborative Environments

PHPGROUPWARE -

<http://www.phpgroupware.org>



# Web-based Collaborative Environments



PHPROJEKT - <http://www.phprojekt.org>

Another team-enabling system, mostly oriented to project management matters. It also claims to support 28 languages in its latest version.

# Web-based Collaborative Environments

PHPROJEKT - <http://www.phprojekt.org>



# Web-based Collaborative Environments



SLASH - <http://slashcode.com>

PHPNUKE - <http://www.phpnuke.org>

This two systems are samples of another kind of collaborative applications, oriented to content publishing and sharing, more than teamworking.



# Web-based Collaborative Environments

SLASH - <http://slashcode.com>

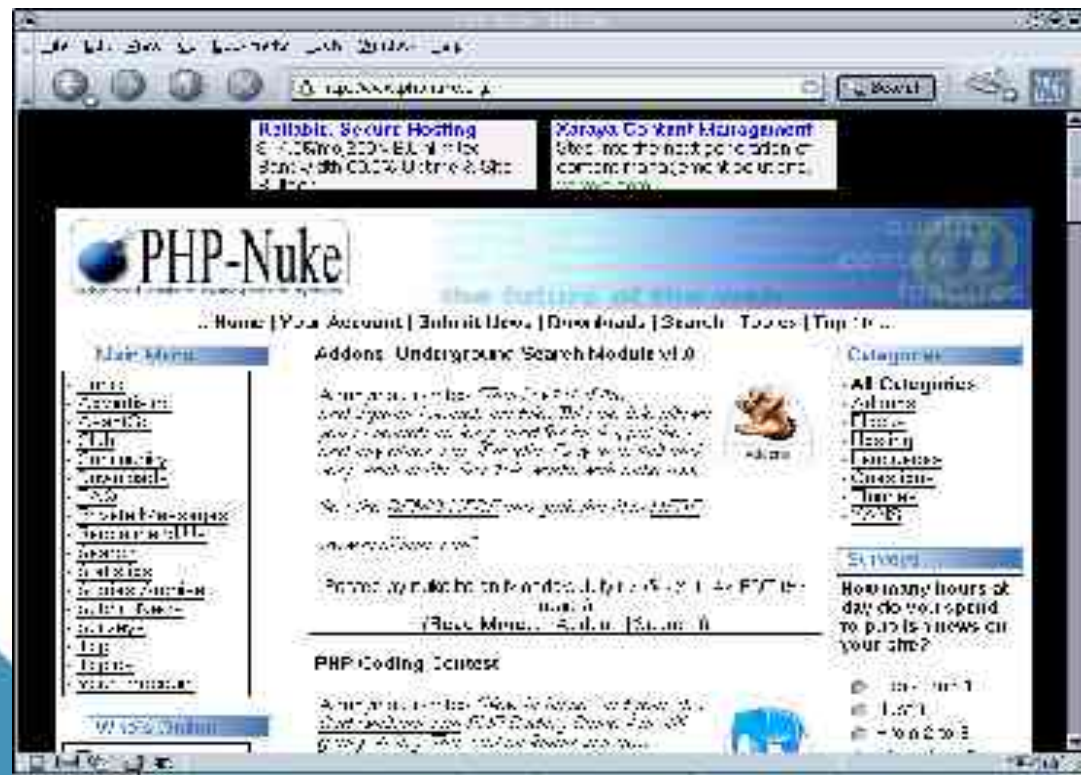
PHPNUKE - <http://www.phpnuke.org>



# Web-based Collaborative Environments

SLASH - <http://slashcode.com>

PHPNUKE - <http://www.phpnuke.org>





# Web-based Collaborative Environments



All these systems have pros and cons.  
However, we have a different proposal.

# The JAMES system



JAMES is a system for the development of modular environments to enhance Web-based collaborative work

It has been designed to be extensible, adaptable and to make information sharing and manipulation easy.

# The JAMES system

JAMES differs in some aspects from similar systems, for example:

- Permissions are handled in a more flexible way (module-group-role-user)
- It permits module-to-module communication (therefore extending basic system core capabilities)
- It can be easily adapted to fit heterogeneous purposes

# The JAMES system



The adaptability of JAMES makes it easy to use it as, for example, a development groupware, a simple content and news publication system or a conference management system (generally this can't be achieved with other collaborative tools)

# The JAMES system



We'll now have a look at several system concepts and functionalities

NOTE: We'll use a specific example for this, but later on we'll show different examples of JAMES environments adapted to various purposes

# Basic JAMES Concepts



JAMES can be divided in two parts: a system core, and several modules

A module is a block that provides a specific functionality to the system

# Basic JAMES Concepts



Some of the modules we'll see today include:

- Document editing
- Repository
- Content management
- Contact management
- Conference management
- WebBox
- Conference Access Control

# Basic JAMES Concepts



System functionality can be accessed by several users

User group together depending on several factors

However, users within a same group can have different functions, or roles



# Basic JAMES Concepts

Let's illustrate this with an example



Creating workgroups



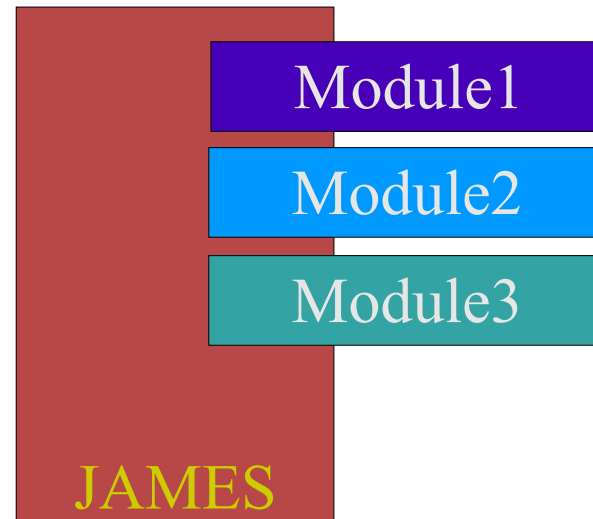
Sharing files with our  
workgroups

# Adapting and adopting JAMES

As we said before, JAMES can be used for several purposes

To remark this, before each example we'll see a diagram showing which modules were used to build the environment.

# Adapting and adopting JAMES



# Adapting and adopting JAMES

Once we have the functionality we need, we just have to change the UI to suit us better



User Interface change

# JAMES Core Services

Before getting deeper, a brief technical parentheses about this

JAMES core offers several services to modules:

- A uniform database access
- Permission management
- Configuration management
- Module-to-module communication

A module is a low-attached unit

Can comprise, apart from its own internal functions, an API offered to the rest of the system

The communications are event-based

## An example of module collaboration



Documenting and adding  
common files

# JAMES Core Services

The system core services, plus the new APIs offered by existing modules allow very fast development of new modules

(As an example, the conference management modules used both in Imaginatica and JADE, were developed in 2 man-months)





We'll now analyze a JAMES system  
adapted for conference  
management

## Part 2: A sample case

In this section we should achieve:

- An overview how a JAMES system was adapted to suit an specific need
- An introduction to three of the modules that were developed for conference management

# Imaginatica JAMES system



Imaginatica is an University-enterprise meeting held every two years in the University of Seville

On its last edition, 900 people enrolled during a week in the 100 conferences and workshops which took place

# Imaginatica JAMES system

Let's take a look at how this huge organization work was done

<http://imaginatica.eii.us.es>



Imaginatica Web site from  
a user's point of view

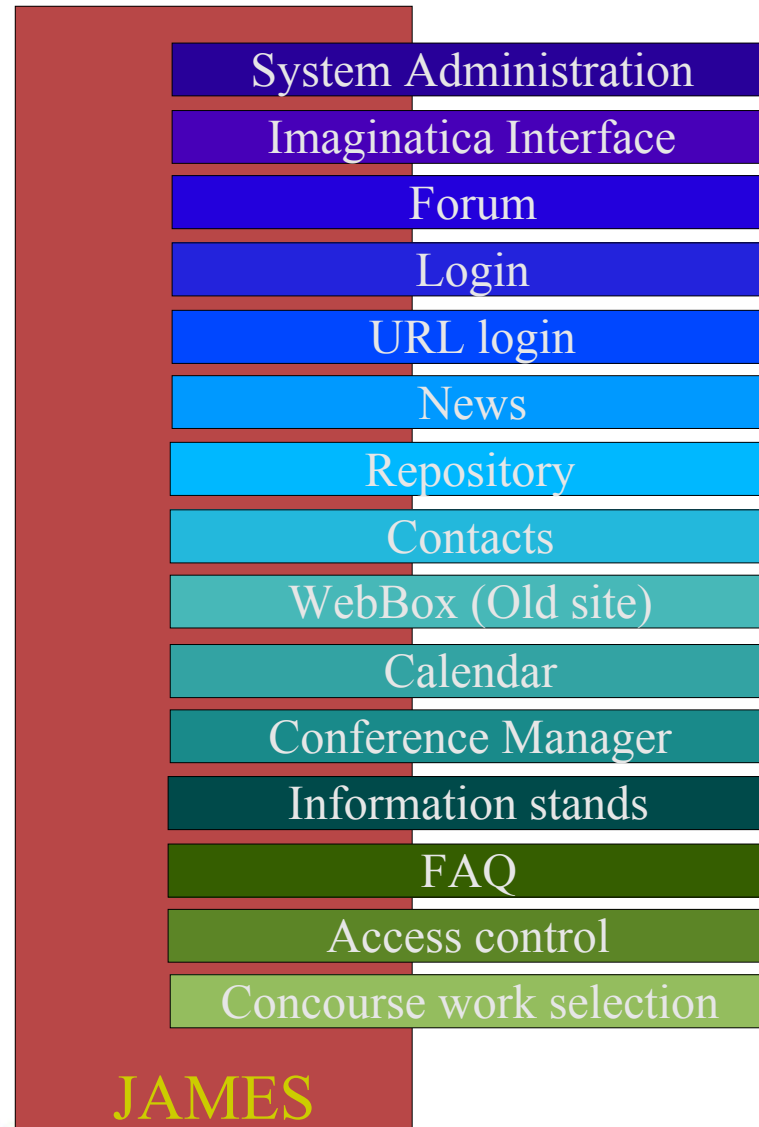
# Imaginatica JAMES system



But, organization also encloses all the contacts with sponsors, inscription and assistance control,...

Let's try to do this with JAMES

# Imaginatica JAMES system



# Imaginatica JAMES system

All the organization contacts were shared and tracked on each of its phases during the previous months



Contact management with  
JAMES

# Imaginatica JAMES system



All the conference-relative matters,  
from inscription to control and list  
publication were also handled  
within the system



# Imaginatica JAMES system



Conference management



Access control enables fast  
availability of assistance  
data

# Imaginatica JAMES system

If we need to reuse an existing page,  
we can do it with ease



Including external pages  
with WebBox

# Part 3: JAMES' possibilities

In this section we should achieve:

- A remark on how JAMES can be easily adapted to different purposes
- An introduction to three different environments developed with the JAMES system

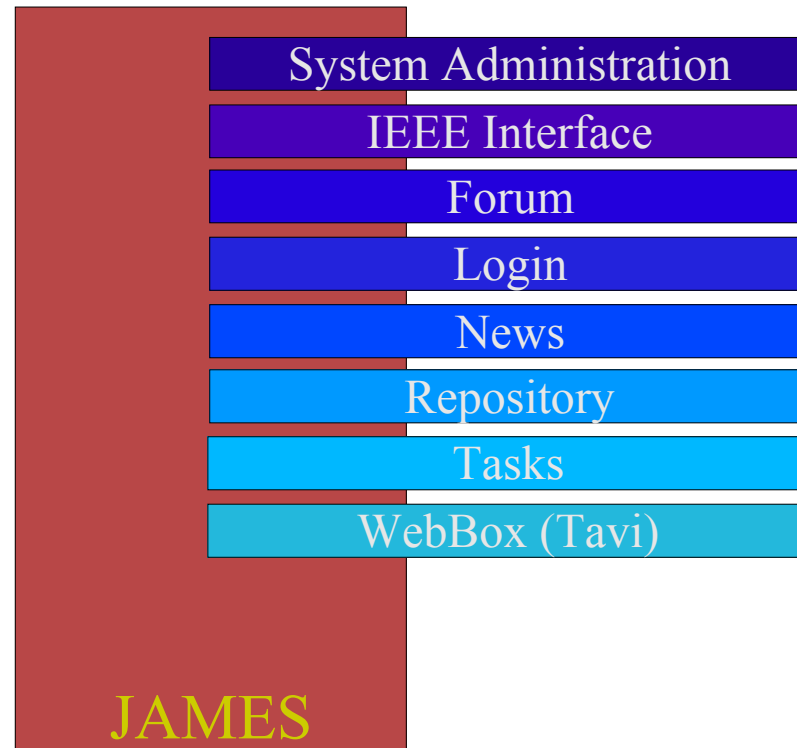
# IEEE Student Branch Website



JAMES was used to develop the Web site of the IEEE Student Branch of the University of Seville

This system's primary purpose was to inform branch members about activities, serve as a data file repository for internal documents and enhance opinion sharing

# IEEE Student Branch Website



# IEEE Student Branch Website

<http://ieeee.eii.us.es>



An IEEE Student Branch  
web site made with  
JAMES

# JADE Summer Meeting 2003

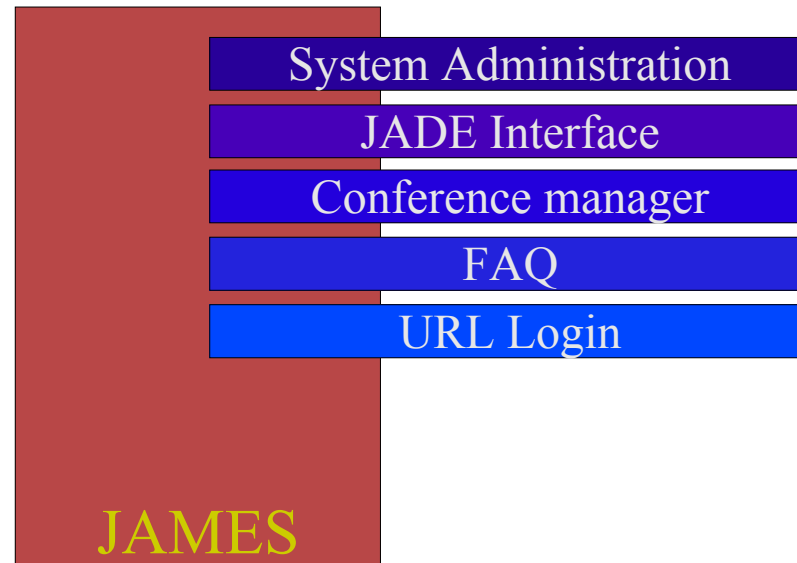


The site used for JADE Summer Meeting 2003 workshop selections is also a JAMES environment

This system is a basic conference selection system, which should also include a way to give helpful information to participants



# JADE Summer Meeting 2003



# JADE Summer Meeting 2003

<http://imaginatica.eii.us.es/jade>



The JADE Summer  
Meeting 2003  
Inscription Site

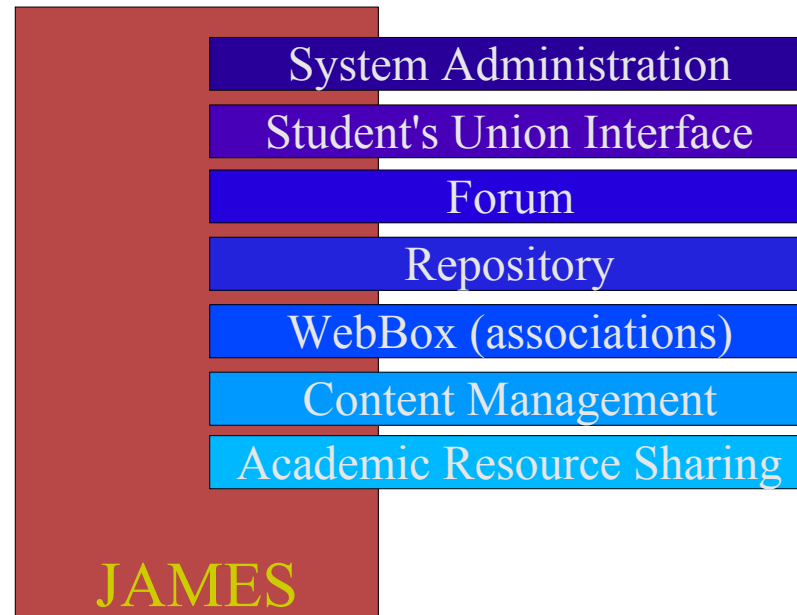
# Student's Union Website



As we already knew, the Student Union of the Computer Science School of the University of Seville was the original seed of this project

This system's functions are similar to other community websites, but also needed to include facilities to share class notes between students

# Student's Union Website



# Student's Union Website

<http://talika.eii.us.es>



Our Student's Union  
JAMES-based Website

# Part 4: The future of JAMES

In this section we should remark:

- The idea that JAMES allowed a fast development of the sites we've analyzed
- The idea that JAMES will soon be able to integrate functionalities with other technologies such as Web Services or MS .NET Framework
- The idea that JAMES is a development initiative which is still evolving and which you can support

# Next-generation JAMES



When we said that JAMES is easily extensible and allows fast site development, what do we mean, exactly?

Let's have a look at the evolution of JAMES



# Next-generation JAMES



First JAMES system:

CS Student Union

Total development time: 6 months

Core system + basic modules

Class notes sharing

# Next-generation JAMES



Second JAMES system:

Imaginatica Web site

Total development time: 2,5 months

Conference system

Contact management

Access control

# Next-generation JAMES



Third JAMES system:

US IEEE Student Branch Web site

Total development time: 1 week

Integration with Wikki-Tavi  
(UI+translation)

# Next-generation JAMES



Last JAMES system:

JADE Summer Meeting 2003 site

Total development time: 2 weeks

Personalize + Import data for  
Conference Manager

Internacionalization

# Next-generation JAMES



We're also researching a new communication system for JAMES, which will permit the system to integrate modules made with other technologies, such as MS .NET framework or Web Services based on SOAP or XML-RPC technologies

# Next-generation JAMES



We also plan to include functionalities to enable our system to use the technologies of new Internet paradigms, such as the Semantic Web and Agent programming.

# Next-generation JAMES



More information about this can be found  
in our paper:

“A communication infrastructure for  
building web collaborative applications”

(to be presented on IADIS International  
Conference, ICWI 2003)



# Next-generation JAMES



We do believe that the collaborative style of development we've followed in this initiative is what has made the JAMES project what it is today. We encourage you to support our initiative.

# Next-generation JAMES



You can be informed of the project's evolution visiting our project web site at:

<http://jamesproject.sf.net>

# Next-generation JAMES



We will also appreciate your feedback and user experience, suggestions, bug reports, or any other information sharing. We can be contacted by e-mail at:

[jamesproject-info@lists.sourceforge.net](mailto:jamesproject-info@lists.sourceforge.net)

# Conclusions

Greetings

The JAMES Development Team

... our “brothers of metal”

# Greetings

Rafael Corchuelo



... our project mentor

# Greetings

Our families, for supporting us through innumerable hours of coding.

To the JADE Meeting organizers for giving us the opportunity to be here today.

And, of course, to all of you for still stand seated here. We hope you've liked what you've seen

THE END

