STUDY CASE OF A COLLABORATION PORTAL FOR AN INTERNATIONAL SCIENTIFIC PROJECT

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In this paper we present the results of the design, development and preliminary evaluation tests of a web-based collaboration portal aimed at supporting the teamwork of an international scientific collaboration.
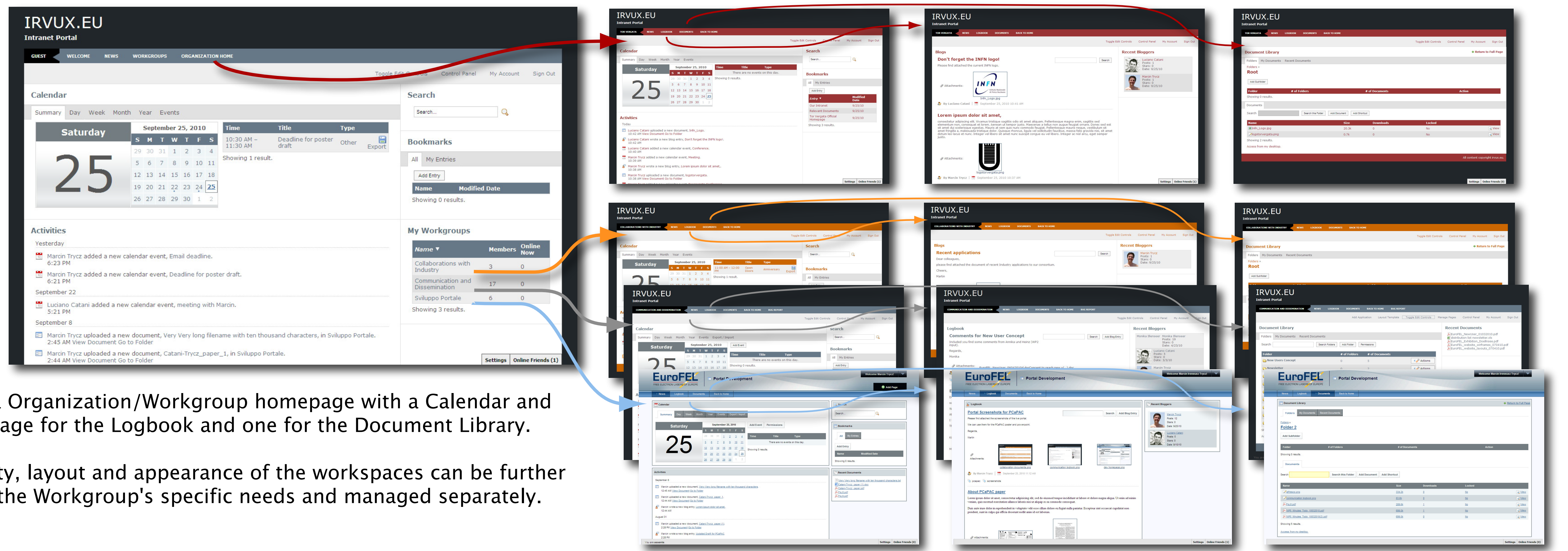
In the academic research environment often people use very simple collaboration tools, usually chosen out of habit. In the case of international collaborative projects, in which people don't work physically in the same place for most of the time, these important tools are far from being effective and appropriate. For instance, a collaborative scientific project is made of teams of specialists from different research institutions and countries that need to share files, drawings, pictures, software etc. and document the progress of their work. The different tasks of the project are managed by work groups (WGs) of specialists that organize their work by scheduling meetings, workshops and by setting deadlines. Quite often a single researcher contributes to more than one work group.

The aim of our Portal is to offer a suite of web instruments fulfilling the above requirements without adding extra complexity to the procedures the scientists are familiar with.
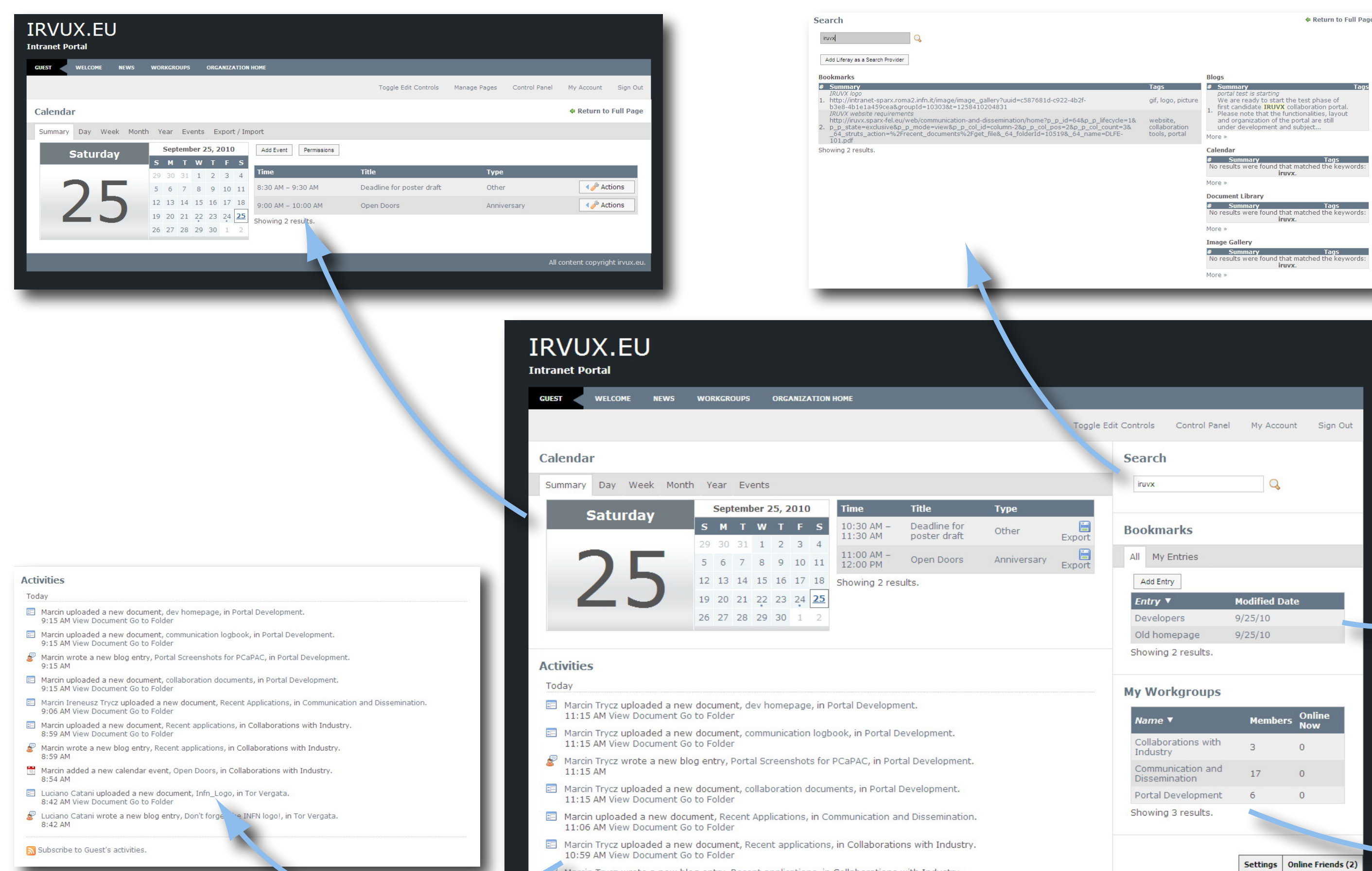
STRUCTURE & WORKFLOW

Each user of the Portal is a member of an Organization and participates in one or more workgroups.

All Organizations and Workgroups have a dedicated workspace, and there is also a general workspace containing information about the project as a whole.

All of the workspaces have their own set of pages and applications, that commonly contains a Organization/Workgroup homepage with a Calendar and other tools, a dedicated page for the Logbook and one for the Document Library.

The structure, functionality, layout and appearance of the workspaces can be further customized according to the Workgroup's specific needs and managed separately.

HOMEPAGE & APPLICATIONS

Upon authentication, the user is presented with his/her Homepage, which is the start point for the Portal's navigation.

It presents information relevant to the whole project, the latest news relevant to the user and links to the user's Organization workspace and Workgroup workspaces.

The user's Homepage generally contains a set of standard applications.

The Calendar allows management of events and deadlines. The events are timezone sensitive; users can be reminded of relevant events through an automated email system. The Bookmarks permit to highlight important content and links.

The advanced Search feature enables searching content in full-text mode; the user can focus the search on a particular content type or Workgroup.

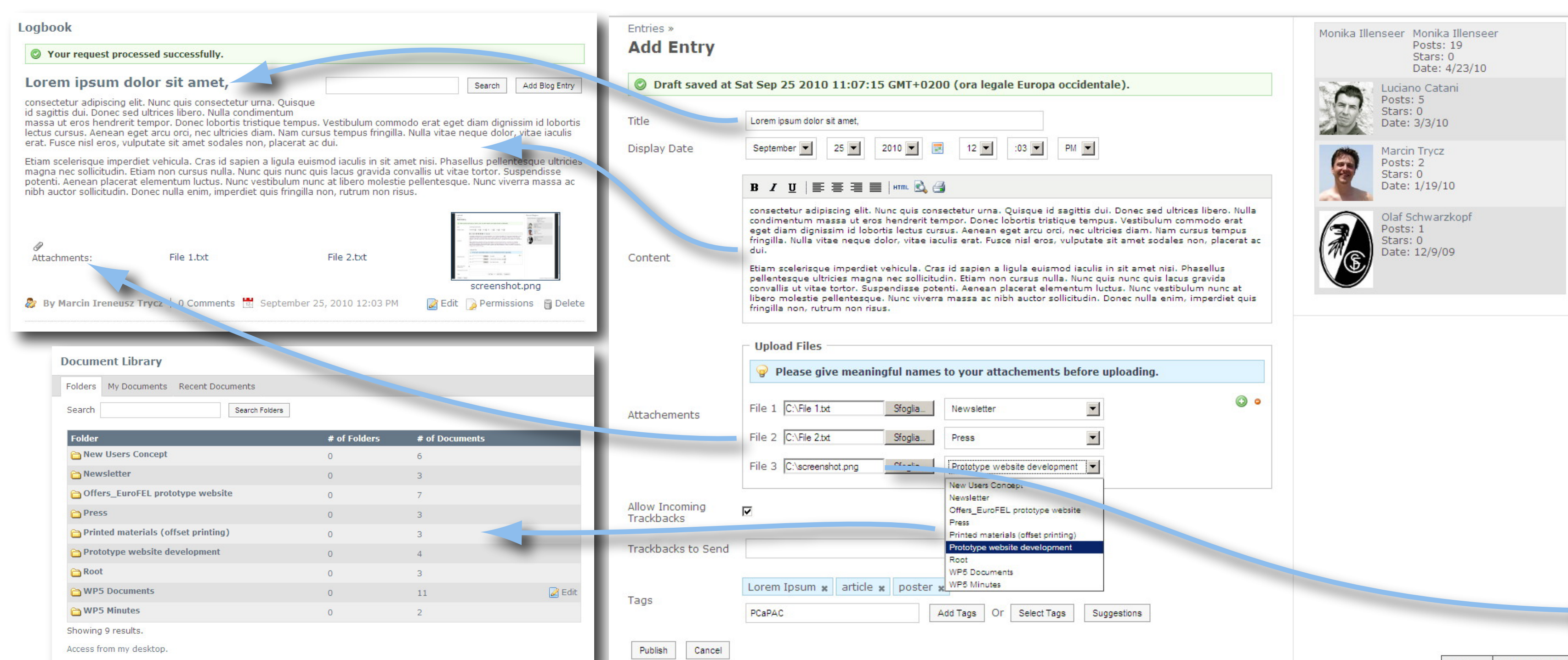The Activities list the latest actions in the user's Workgroups.

The dedicated Workgroup interface allows users to manage their membership in the Workgroups.

It also permits the Workgroup's admins to grant membership to users that applied for it.

In addition to the user's Homepage each Organization and Workgroup has it's own Homepage containing information specific to the scope of that Organization/Workgroup.

LOGBOOK & DOCUMENT LIBRARY

The Logbook and the Document Library are the core of the portal's functionality.

The Logbook is the main tool for sharing information and documenting the progress of the collaboration.

The Document Library is the repository for the files uploaded to the Portal. It works in synergy with the Logbook, but it can also be used by itself.

The Logbook's edit page has a simple and friendly interface; there are the usual Title and Content sections, and an Attachments section.

The entries can also be tagged to simplify categorization of content and search features.

In the Attachments section the user is prompted to choose the file to upload and the destination Folder.

The folder list follows the structure defined in the Document Library, including subdirectories.

After the upload the files can be accessed either through the entry's link or by using the dedicated Document Library interface.

All of the entries and text-based documents (.txt, .doc, .pdf, ...) are indexed in full-text mode, simplifying the search of the archived content.

Why would you want it ?
- It's a collaboration tool: it helps you and your colleagues working together to a common effort;
- it helps documenting the activities and allows archiving content in a single shared space;
- it's flexible and expandable: you can add more application when you need them;
- it's customizable: it can be easily adapted to your project structure and particular needs.