Dspace-Dev @ University of Minho

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1 INTRODUCTION

DSpace related activities at University of Minho[3] (UM) started in April 2003 and since then many developments have been made. The first step was taken by the UM's Documentation Services (SDUM) with the translation of DSpace to Portuguese which was followed by it's the implementation of the RepositóriUM[4], the university's institutional repository. The translated version of DSpace has been downloaded and used in many other institutions in Portugal and Brazil.

This very same version of DSpace served as a basis for the Papadocs[5] system – a system which aimed at providing access to all assignments developed by the students of the Department of Information Systems. This instance of DSpace also served as test-bed for a series of add-ons created at the department.

The following sections provide a short description of some of the add-ons that resulted from this project.

1.1 Commenting Add-on

The Commenting Add-on consists in a set of classes, servlets and custom tags that bring informal communication capabilities to the DSpace environment. The informal communication is assured by a threaded forum that can be attached to any DSpace resource: web-page, community, collection, submitted item or e-person. This add-on has already been submitted as a patch at the Sourceforge repository.

1.2 Recommendation Add-on

The Recommendation Add-on delivers a set of custom-tags that provide suggestions of related resources. The most relevant custom-tag receives a parameter identifying the selected resource to which the suggestions/recommendations shall be made. The add-on works by exploring the database and collecting items, e-persons and comments that are considered to be relevant.

1.3 Web of Communication Add-On

The 3D Web of Communication allows the user to discover hidden relationships between items, comments and e-persons. It works by displaying a 3D graph with all the resources involved in a

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[3] http://www.uminho.pt

[4] http://repositorium.sdum.uminho.pt

[5] http://papadocs.dsi.uminho.pt

communication process. The user is able to switch between the text and the 3D interface, thus it can be used as a 3D navigational system over DSpace.

1.4 Controlled Vocabulary Add-on

The Controlled Vocabulary Add-on allows administrators to control the set of keywords used to describe the items submitted to the repository. To controlled vocabulary is described by a self contained XML file. Currently it takes the form of taxonomy but it can easily be extended to support more complex structures such as thesauri. We started by porting into our system the publicly-available ACM Computing Classification System (CCS). ACM contributed to our work by validating our XML version of the CCS. It is worth noting that this same version of the CCS is also available at the ACM's Website at http://www.acm.org/class/1998/.

2 FUTURE WORK

This project has lead to the formation of new and interesting ideas. Some of which we would like to explore in the near future. These include the improvement of the Controlled Vocabulary Add-on to support more complex structures, such as thesauri, and develop automatic metadata extractors that could fill in some of the required information during the deposit of new items.

Ongoing work consists in the integration of some of the add-ons with the official DSpace source code.