

MyStoryPlayer, Collections, Playlists: Content aggregator tools in ECLAP Project

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Abstract—The exploitation of content in the area of cultural heritage is a critical issue. There is a strong push on defining and collecting content metadata from cultural institutions (such as museums, university, archives, library, foundations, etc.) to see them accessible on Europeana for a larger audience, the so called European digital library. This action is going to reduce fragmentation and to integrate valuable collections in a unique place. Europeana foundation and portal that do not collect content items files, but only classification information (i.e., metadata), including the original URLs to the content. These URLs refer to the original content owner and/or to the content aggregator. Europeana could have a strong validity for educational purposes. In the demo, the main tools in terms of aggregations are presented. The proposed aggregation model attempts to satisfy the above mentioned requirements with a semantic model and tools providing support for playlists, collections and media synchronization through MyStoryPlayer annotation tool. Finally, the aggregations are also provided as semantic concepts to Europeana. The results have been produced in the ICT PSP project ECLAP founded by the European Commission, www.eclap.eu.

I. CONTENT AGGREGATOR TOOLS IN ECLAP

A. Model

ECLAP e-library for performing art portal and service has been created for ECLAP ICT PsP project (European Collected Library of Artistic Performance) of the European Commission

ECLAP is a best practice network for collecting and aggregating content for Europeana.

In ECLAP, several different kinds of concepts and data are modeled ranging from content to users and their relationships.

The different kinds of content, and also the users are associated with a thematic taxonomy which describes the content in terms of genre, performing art type, historical period, subjects, management aspects, dissemination aspects, etc. Also the user profile includes such a classification to allow users to express their preferences about content theme.

Content in ECLAP can be: image, document, video, audio, archive, animations, etc., but also playlists, collections, web pages, annotations, comments, etc. This demo is focused on

describing aggregator contents like playlists, collections and annotations according to the semantic model in ECLAP.

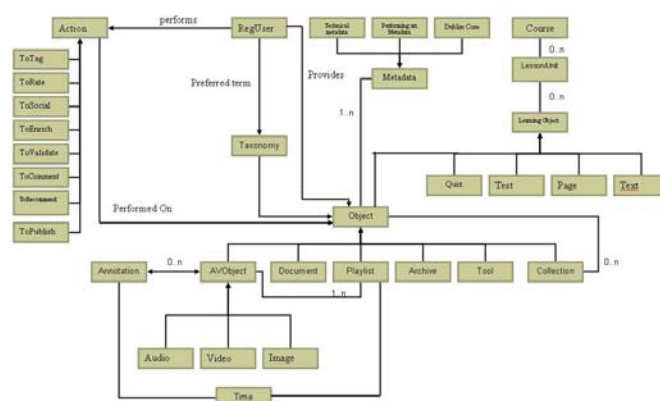


Figure 1. ECLAP semantic model

B. Playlists

According to the model of Figure 1, a playlist can be a set of audiovisual contents. Playlists are a way of playing a series of multimedia contents in a specific order, defined during the authoring phase. The ECLAP play list is not the classical play list of many social network, since in ECLAP the user may chose to put in the play list not an entire video or audio, but a segment of video, audio or a an image for a number of seconds. This can be done through a proper player (fig.2) that will be loaded during the editing phase in which user can select media, add them to playlists box, choose an order and choose a segment for each media. Even images has a time related to their permanence as annotations.

Once the edit phase is complete, user can save the playlist assigning full metadata to relate, in order to save it as an object that will be stored in database, will be available for the playback session, and will be shared with other users.

Thanks to the metadata, this object will be indexed properly, to keep easier the search on the portal.



Figure 2. Player loaded in order to choose the segment of media to add to playlist

C. Collections

A collection is a set of contents: audio, video, images, documents, pdf, playlists, zip files, etc., that are grouped together according to the personal purpose of the user. They may be thematic collection as well as used as the first step to collect content for preparing a lesson for e-learning environment, LMS. The teachers use the Collections as sources of contents that they can be grouped together following a topic or by choosing a connection amongst them. The ECLAP Collections are directly created on the Portal and may be published or kept private by the user. Unpublished collection will be visible only to the creator in a draft form; Published collection has been uploaded as new ECLAP content and it will be visible to all registered users. In both cases, they are automatically exported, on the LMS side of ECLAP to be used by the teachers to create a lesson.

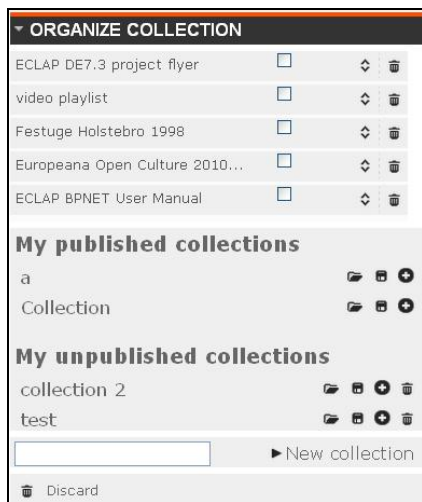


Figure 3. block where organize collections

D. Mystoryplayer annotation tool

MyStoryPlayer is a tool that allows users to be the central part in fruition of multimedia objects annotating them, and offers new solutions for educational and infotainment purposes.

The innovative part of MyStoryPlayer lies in the fact that no difference between media and the user's annotation exists, because both categories are referred to multimedia objects and they are temporally connected. Annotations are related to one or two media, and each media can be associated to many annotations. Therefore, according to the model, two audiovisual objects can be synchronized each other through an annotation containing temporal elements that define this kind of relation.

An annotation involves one or two media and is composed by a start time, an end time, an identifier of the media annotated, an identifier of the media to relate with the first one, and a textual description of the annotated segment. This information are codified by RDF triples and saved to a Sesame database, external to ECLAP one, interfaced with the Flash MyStoryPlayer that interprets the information and play the contents in synchronized way according to their temporal lines.

As for the other features like playlist and collection, no alteration is done on the original file, when two media are synchronized, because the system provide to generate new code RDF that identify this relation, and save on internal database the information about the annotation in order to allow the user to access to his annotations from his profile.

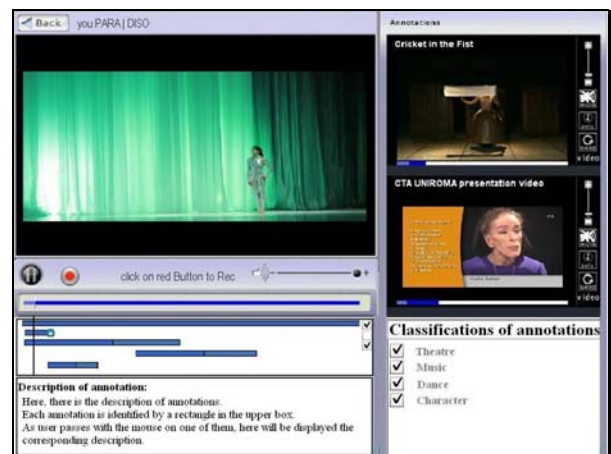


Figure 4. MyStoryPlayer interface

Acknowledgments

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Note for the demo: all the necessary equipment to present the demo will be brought by us. We will be present in our workstation at the conference, available for any question and/or explanation.