Artistic Work Life-Cycle Archiving

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Abstract

Gathering knowledge about artistic works and creators is generally not very hard (i.e. databases about cinema or music). But it is harder to learn about the life-cycle of these artistic works (i.e. how a film is made). Then, we can think about a database about the life-cycles of artistic works with project management features.

This paper presents a framework (Life-Cycle Description Framework) which contains a method to archive the life-cycles of artistic works and a tool to reuse them. It allows experts to build a documentation, to build database entries, and to write project templates. And it allows Web surfers to get this documentation, to retrieve the database entries, and to launch projects.

The method includes an evaluation step to validate the project templates with the help of some creators. Thus, the Web surfers do not only rely on the quality of the expert work.

The first part of the Life-Cycle Description Framework (documentation) has been successfully carried out since 2005. The two other parts (database and project follow-up) have been tested internally since a few months. The first promising results will be followed by a public beta release. We will also work on non-artistic domains.

Keywords: artistic works, life-cycle, archiving & preservation, cultural knowledge, acquisition & retrieval, production process.

1 Introduction

Gathering knowledge about artistic works and creators is generally not very hard. For example, we can find on the Web databases about the cinema, about music, etc. But it is harder to get knowledge about the life-cycle of these artistic works. For example: how to make a film? Of course, we can find many elements to answer this question (i.e. there are a lot of books about how a scenario is written or how the light is used). But the production processes are rarely documented.

The life-cycles of artistic works are part of our cultural heritage. A database about them with large documentation could be useful to anyone who would like to start a creation project. We can also think about some management features which would allow Web surfers to follow-up their creation projects on the Web. Thus, the issue is how to archive life-cycles of artistic works in order to study them and to reuse them.

This paper presents a framework (Life-Cycle Description Framework) which answers this question. The Life-Cycle Description Framework contains a method to archive the life-cycles of artistic works and a tool to reuse them. This framework is divided into three parts: documentation, database, and a tool to follow projects.

The next section presents the related work. Then, the approach (how the knowledge is acquired and retrieved by the experts and the Web surfers) and its implementation are presented. Later, a section shows the results of our evaluation, and a discussion provides information about possible applications and limitations. The paper ends with the conclusion and some words about the future work.

2 Related Work

Several huge databases can be found on the Web about artistic works and creators. Some artistic domains are more visible than others. Here are some examples of such domains with examples of databases:

- the cinema: The Internet Movie Database (`http://www.imdb.com/`),
- music: AllMusic (`http://www.allmusic.com/`),
- video games: Moby Games (`http://www.mobygames.com/`).

We can also find database about newer domains, for example (Grau, 2003): the Database of Virtual Art (`http://www.virtualart.at/`). These

databases are very useful, but do not provide enough information about the life-cycles to start a new film, a new video game, etc.

We can look closer at the video game domain. A large documentation is available on the Web in addition to databases; for example: virtual museums like Classic Gaming Museum (`http://www.classicgaming.com/museum/`). Moreover, the emulation technology (Esposito, 2004) even allows playing the games on many devices and on the Web. This documentation is also extended to the video game cultural heritage. For example, we can archive game atmospheres thanks to virtual reality (Esposito, 2005). But it is hard to get information about how a video game is made, from the idea to the release of the game.

Some research projects deals with digital preservation (Lee, 2002; Gladney, 2006) and especially with artistic work preservation, for example: Mustica (Bachimont, 2003), InterPARES (Roeder, 2004), and Caspar (Giaretta, et al., 2006). But the focus is on archiving works and not on archiving generic work life-cycles. This approach does not answer to "How to make a film," for example, but it provides a lot of information on several films.

We have just seen that today, we have not a database about life-cycles of artistic works. The step beyond such a database could be to use a tool on the Web to manage a project based on a life-cycle description. For example, Zoho Project (`http://projects.zoho.com/`) and Project 360 (`http://www.project360.com/`) allows us to manage a project on the Web with a Gantt view. But these tools do not provide a template/instance approach: You cannot choose a template (i.e. an artistic work life-cycle such as "Making a humorous video") to launch your project and follow it.

RendezVousCreation (`http://www.rendezvouscreation.org/`) is a non-profit organization. Its goal is to provide the cultural knowledge we are talking about (life-cycle descriptions) in an educational way. Since 2005, a large documentation has been built. It is the starting point of our Life-Cycle Description Framework. Now, it allows us to build an artistic work life-cycle database and to design a tool which takes advantage of this cultural knowledge to let the Web surfers launch their projects.

3 Approach and Implementation

3.1 The Life-Cycle Description Framework

The Life-Cycle Description Framework contains a method to archive life-cycles of artistic works and a tool to reuse them. This framework is divided into three parts: a documentation, a database, and a project follow-up tool

(see figure 1). It allows experts to build a documentation, to build database entries, and to write project templates. And it allows the Web surfers to get this documentation, to retrieve the database entries, and to launch projects.

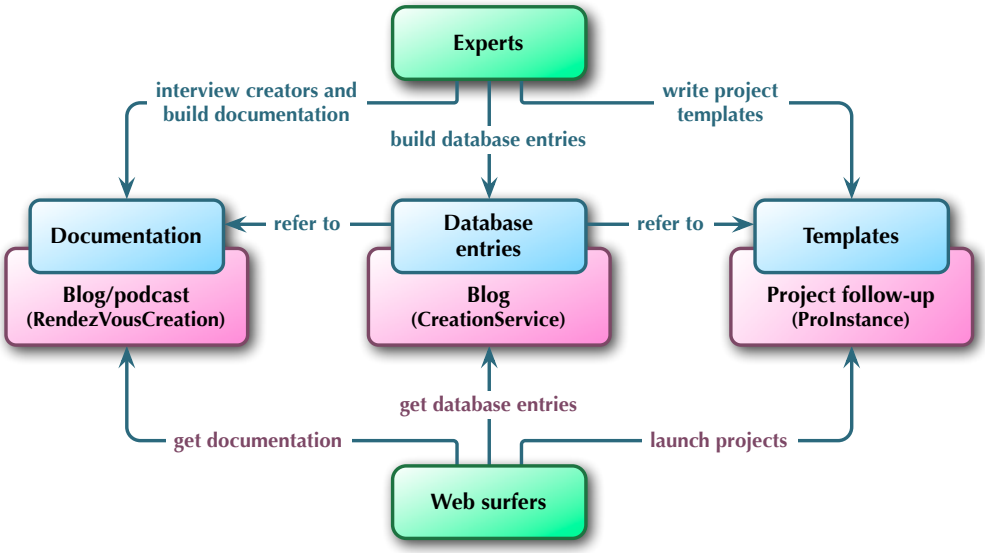

Figure 1: Architecture of the Life-Cycle Description Framework.

Here is the basic use case:

- the Web surfer accesses the life-cycle database,
- the Web surfer chooses a domain (i.e. audio-visual),
- the Web surfer chooses a life-cycle (i.e. audio-visual documentary),
- the Web surfer gets the database entry about an audio-visual documentary,
- the Web surfer accesses to the documents about an audio-visual documentary,
- the Web surfer launches a project based on the audio-visual documentary template,
- the Web surfer invites friends to join the project,

- the Web surfer and the team complete the project,
- an expert/creator provides some feedback.

4 Documentation

The documentation is the first part of the Life-Cycle Description Framework. The experts interview creators and build the documentation. And the Web surfers get this documentation (`http://www.rendezvouscreation.org/`).

Here are some examples of creators: musicians, directors, writers, photographers, and graphic artists (see figure 2). The interviews are based on three parts: before the production, the production, and after the production. Thus, its covers the entire life-cycle, from the idea to the comments of the public. But before an interview, a strong preparation phase is needed to have enough information about the domain and the production process.

Figure 2: Some creators who were interviewed for RendezVousCreation (Tania de Montaigne, Sam, Philippe Ayme, Éric Viennot, Travis Bürki, Vincent Luc, DJ Zebra, Foudil).

RendezVousCreation also provides production notes following the same phases. We produce documentary films (i.e. how a documentary film is produced). We give examples, for example: photo galleries (see figure 3). We also develop educational games. We have two famous games on the Web about aesthetic in photography and camera adjustments in photography (see figure 4). We write articles about the tools (software, hardware) which can be used for a creation (i.e. an article about the microphones). We provide references (books, Web sites, etc.). And we provide some advice about purchases.

Figure 3: Some photos sent by RendezVousCreation visitors (Serge Ramelli, Frédéric Hiard, Marouane Cherkaoui, Charlotte Vernhes).

Here is the list of the life-cycles of artistic works which are documented by RendezVousCreation:

- photo report,
- audio-visual documentary,
- short fiction film,
- humorous video,

- song,
- own-produced music album,
- concert,
- video game,
- magazine paste-up,
- magazine issue,
- novel.

Figure 4: Screenshot of the second educational game published by RendezVousCreation (Déclenchez-moi, camera adjustments in photography).

This cultural knowledge is provided using a blog. It allows the Web surfers to subscribe and to write comments about each element. The categories of this blog are related to the type of content: interviews, production notes, pictures, video games, texts, videos, knowledge, tools, references, etc. The version 2 of this blog uses the Blogger platform (`http://www.blogger.com/`).

The podcast technology is also used. It means that the users can automatically get the audio interviews, the videos, and more in an application such as iTunes or on a portable device such as an iPod. Feedburner (`http://www.feedburner.com/`) is used to enhance the blog to a podcast.

Here are the file formats which are used: JPEG for photos, PNG for other pictures, MP3 for interviews and music, MPEG 4 and DivX for videos. The interviews, the music, and the videos can be played in the blog using the Flash technology. The interviews and the music use Dewplayer. And the video are also shared on several Web site like YouTube, Dailymotion, and Blip.

Figure 5: Screenshot of the podcast category of the RendezVousCreation Web site (`http://www.rendezvouscreation.org/`).

4.1 Database

The database is the second part of the Life-Cycle Description Framework. Experts build database entries. And Web surfers get these database entries (`http://www.creationservice.org/`).

This life-cycle database can be seen as a structuring of the documentation into database entries. These entries are classified following the domain of the life-cycle. For example, an audio-visual documentary and a short fiction film belong to the audio-visual domain, a song and a concert belong to the music domain.

Here is the list of domains which are available on CreationService:

- photo,
- audio-visual,
- music,
- video games,
- graphic design,
- literature.

An entry (i.e. photo report) contains references to the documentation:

- interviews (i.e. photographers),
- production notes (i.e. an article about a photo report),
- a documentary film (i.e. a film about how a photo report is made),
- examples (i.e. photo galleries),
- educational games (i.e. our two games about photography),
- articles about the tools (i.e. an article which compare two cameras),
- references (i.e. a list of books and Web sites),
- some advice about purchases (i.e. links to buy products).

An entry also refers to a template. This template allows the Web surfer to launch a project and the tool described below allows the project follow-up.

The life-cycle database is a simple blog. The categories of the blog are the domains. Thus, the Web surfer can choose a domain by choosing a category of the blog. The Blogger platform is used.

4.2 Project Follow-up

The project follow-up is the third part of the Life-Cycle Description Framework. Experts write project templates. And the Web surfers launch projects.

Using their expertise, new interviews, and strong references, the experts write descriptions of the life-cycles. They define the phases, how they are split into tasks, and they write the description of these tasks. Thus, they write project templates.

The experts also provide diagrams which show a graphical organization of the life-cycles: the standard Gantt diagram and an AWLCD diagram (see figure 6 for an example). AWLCD is an ontology to describe life-cycles of artistic works. It has been used especially to describe contemporary musical works in the Caspar project (Geslin & Esposito, 2007), but it also allows to describe generic life-cycles.

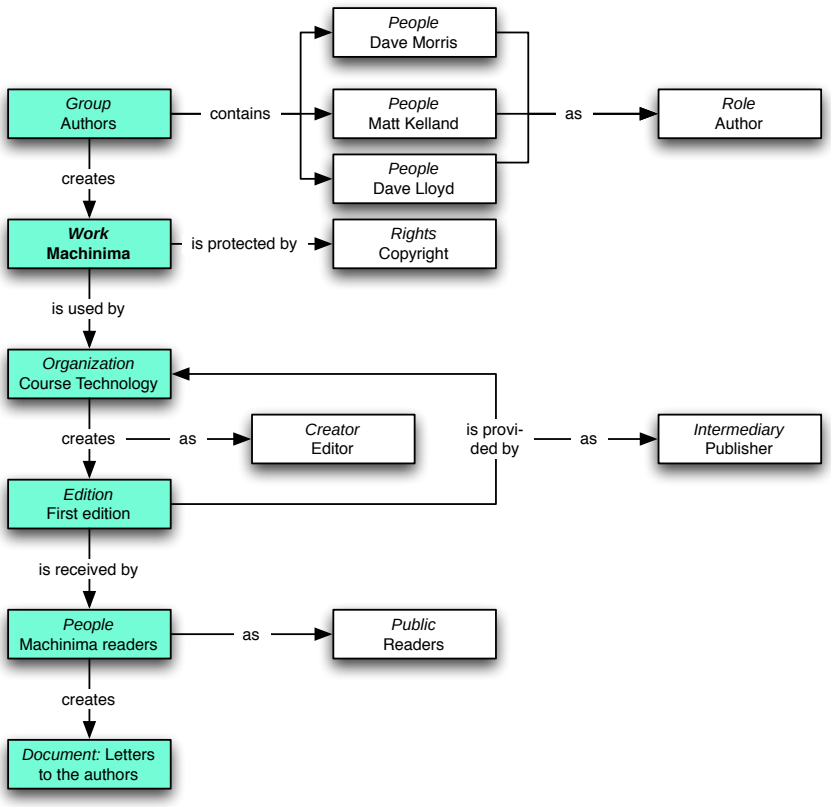

Figure 6: A description of a book life-cycle using AWLCD.

A web tool was designed and developed. Its name is ProInstance. “Pro” for project. And “Instance” because the approach is a template/instance approach: experts write project templates (see figure 7) and the Web surfers launch projects by instancing these templates.

The Web surfer who has just launched a project can invite friends to join the project. ProInstance helps to follow the project. It provides access to the description of the tasks, to document examples, and more. The team members can choose the status of the tasks, refer to documents, add comments, etc. Besides, ProInstance allows experts and creators to provide some feedback.

ProInstance is a free software (`http://www.proinstance.org/`). It was written in PHP 4. It does not need a database (XML files are used).

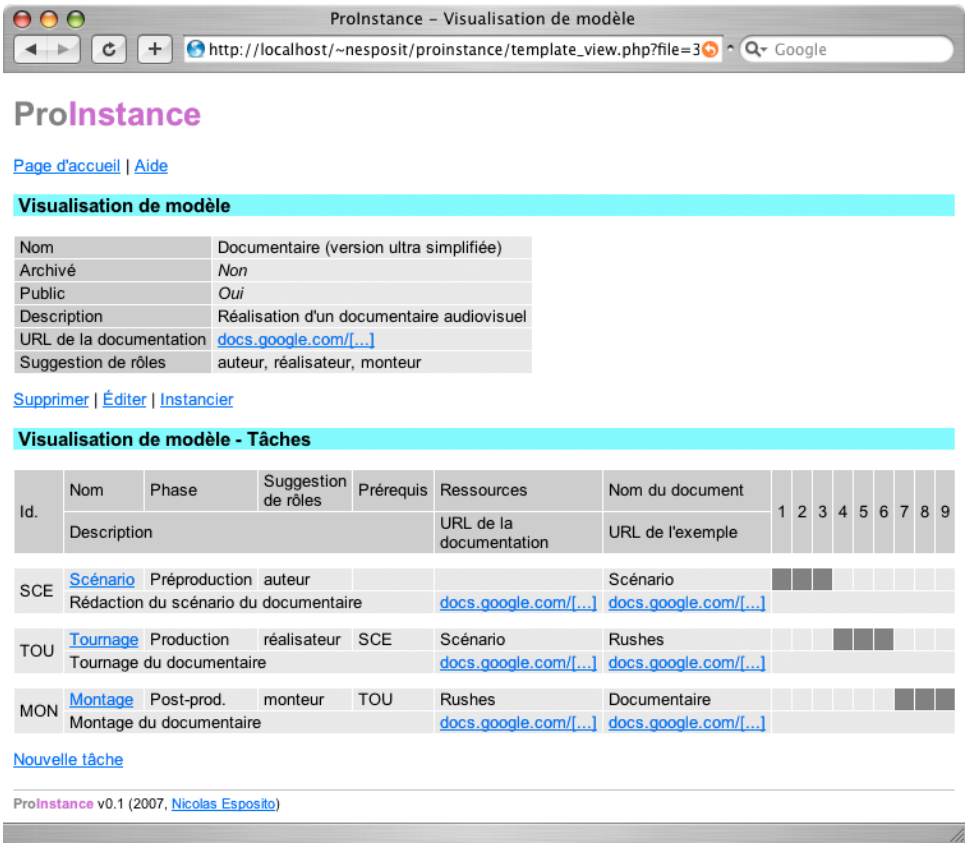

Figure 7: A screenshot of ProInstance wich displays a very simple template.

5 Evaluation

The method of the Life-Cycle Description Framework includes two steps of quality assurance. This quality assurance is about the project templates. The first step is a requirement: the expert must have been involved in the kind of project he or she describes.

The second step comes after the first version of a template. The expert must interview creators about this first version in order to correct and enhance it. The question is: Is the template accurate enough? In other words: does it really describe the life-cycle?

It is very hard to get a generic life-cycle. There are two main risks. The first risk is to be too general: a description that is too general does not provide enough information to start a new project. And the second risk is to be too specific: A too specific description does not provide enough freedom.

The additional interviews allow an expert to find a happy medium. The expert presents the first version of the template and he or she asks creators what to modify, what to add, and what to remove. Working with several creators can be confusing and the expert has to avoid elements that are too specific.

Our experience shows us that these two steps of quality assurance are essential. The first version of a template is generally too simple. After the additional interviews, a corrected and enhanced template provides very useful knowledge to start a new project.

6 Discussion

The Life-Cycle Description Framework is currently used for artistic domains (music, video games, etc.). But it could also be used for non-artistic domains. We are building documentation about these life-cycles:

- how a technical book is written,
- how a service on the Web is created,
- how a company is created.

But our approach/implementation does not address mainly three issues:

1. The long-term preservation (i.e. 100 or 200 years) of the archived content. For example, we do not embed information about the formats we use.

2. Interoperability. The content can easily be extracted from ProInstance (thanks to the XML files we use), but the documentation and the database is harder to extract from Blogger.

3. Translations. Only some interviews and the database entries are available in English. We have to translate a lot of content from French to English.

7 Conclusion and Future Work

We propose the Life-Cycle Description Framework. This framework contains a method to archive life-cycles of artistic works and a tool to reuse them. Our implementation provides a large documentation about some life-cycles of artistic works, a database which structures this documentation, and a Web tool to launch projects based on templates.

The future of this implementation is to work on more life-cycles and more domains (especially non-artistic domains). It is also to progressively translate our content into English. And soon, a public beta release of ProInstance will be available.

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