Social - Oriented Applications of the Folklore Heritage for the Needs of the Non-formal Learning and Cultural Tourisms

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Abstract. The report presents a description of the most popular digital folklore archives in the world. Specifications for designing and developing web-based social-oriented applications in the field of education and cultural tourism are formulated on the basis of comparative analysis. A project for structuring and categorizing the content is presented. A website for accessing the digital folklore archive is designed and implemented.

Keywords: Digital Folklore Archives, Web-Based Social-Oriented Applications, Education and Cultural Tourism, Metadata, Semantic Web

1 Introduction

The storage and the access to the folklore heritage of each country are very important for the preservation of the national identity. This is one of the basic principles of the European Union policy.

Unfortunately, great part of the cultural heritage such as music, dance, tales, rituals and traditional customs are endangered. One reason for this is the vulnerable nature of this heritage, fragile and transient in time, in most cases only existing as a fact at the time of execution or transmission of the custom.

In the context of globalization, the understanding of cultural heritage is increasingly linked to the advanced information society. Internet and multimedia resources provide great opportunities for broad public access to the cultural heritage and for its management.

The purpose of this paper is to present a socially-oriented website of the Bulgarian folk heritage for the needs of the non-formal learning and cultural tourism.

2   Analysis of Existing Digital Archives

In Tab. 1 some of the folklore archives and their characteristics are analyzed. As a result of the analysis it could be concluded that there is no archive which fully meets all the characteristics in order to be called multimedia archive, and that very often in the existing digital archives the focus is not on the folklore as a whole, but only on certain aspects. Worldwide, there are many organizations that promote and work in the field of folklore. Some of them keep folklore archives, but often they are not accessible to ordinary users for two main reasons:

- archives, even if they are digitized, are not available online and are stored in the organization repository;
- the access to the records is limited or there is a usage fee, or it is only for persons who are engaged in research in the field, whether the archive is digitized or not, or whether it is web-based or not.

As a conclusion from the analysis comes the need to create a digital archive of folklore materials using multimedia elements that gives the opportunity to provide the complete range of materials. These applications should be web-based, presenting already digitized and classified folklore elements and should provide easy access to information requested by users.

3 Design of the Social-oriented Website in the Field of Non-formal Learning and Cultural Tourism

The main techniques applied in designing the social-oriented website for the non-formal learning and cultural tourism are the use of the Semantic Web [3], adding metadata [4] to the folklore information and creating ontologies.

The purpose of the web site is to give easy access to the folklore information, which is described and structured in XML documents [1]. The design (Fig.1) is consistent with the purpose of the site – to inform about the folklore heritage, to support non-formal learning and cultural tourism. The developed website includes two main applications: "Traditions and Customs" and "Cultural Tourism". Searching for objects, shown in Fig. 2, can be realized by keyword or parameters such as language, geographic region, historical period, etc.

The administrative part of the site allows adding new data (Fig. 3), as well as editing and deleting data. All data files are described with folk characteristics according to the type of the artifact, keywords and file properties are added as well. Also the opportunity for adding new types of folklore artifacts and subcategories is given.

Table 1. Characteristics of existing folklore archives

№	Title	Text	Audio	Graphics	Video	Search	Access fee	Online	Notes
1	Living human treasures	+	-	+	+	+	-	+	http://www.treasures.eubcc.bg/ to the UNESCO "Living Human Treasures" in Bulgaria, aims to highlight the characteristics of Bulgarian folklore in national and regional scale, traditional activities– skills, technologies and practices that are stored in the form of a living human experience
2	The Fife Folklore Archives	+	+	+	N/A	+	N/A	-	http://library.usu.edu/Folklo/ American folklore
3	The Folklore Program at the University of California	+	+	+	N/A	+	N/A	-	http://ls.berkeley.edu/dept/folklore/
4	The Ukrainian Folklore Archives	+	+	+	+	+	-	+	http://129.128.116.48:8890/photo_archives/ dedicated to the Ukrainian way of life; site has two sections: a collection of over 3,000 photographs with search and a series of descriptions of the wedding rituals.
5	The Israel Folktale Archives (IFA)	+	-	-	-	+	N/A	-	http://www.folklore.org.il/asai.html cultural heritage of ethnic groups in Israel
6	American Folklife Center, Library of Congress	+	+	+	+	-	N/A	-	http://www.loc.gov/folklife/other.html detailed information on the folklore of USA.
7	The Estonian Folklore Archives	+	+	+	+	N/A	+	-	http://www.folklore.ee/rl/era/ stores not only Estonian folklore, but also fine-Hungarian and that of people living in Estonia
8	Western Australia Folklore Archive (WAFA)	+	+	+	+	+	+	+ (but not the whole archive)	http://www.humanities.curtin.edu.au/cgi-bin/view?area=waf preserves the folklore of Australia

Table 1. Characteristics of existing folklore archives

| №	Title	Text	Audio	Graphics	Video	Search	Access fee	Online	Notes
9	Philadelphia folklore project	+	+	+	+	+	+	+ (but not the whole archive)	http://www.folklore project.org/ Folklore Archives of Philadelphia, USA
10	American Folklore	+	-	-	-	-	-	+	http://www.american folklore.net/ consists of American folk tales and local myths and legends, storytellers, stories of ghosts and time of all 50 states

Fig. 1. Homepage of the website
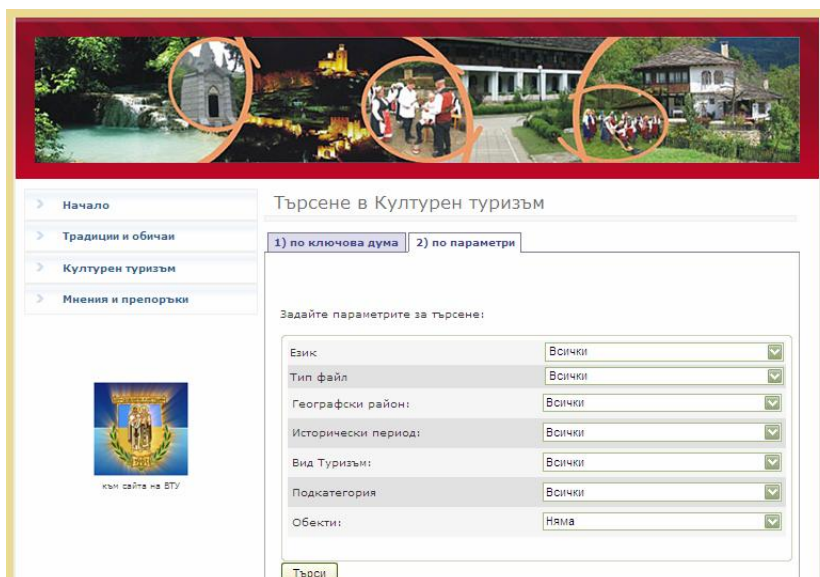
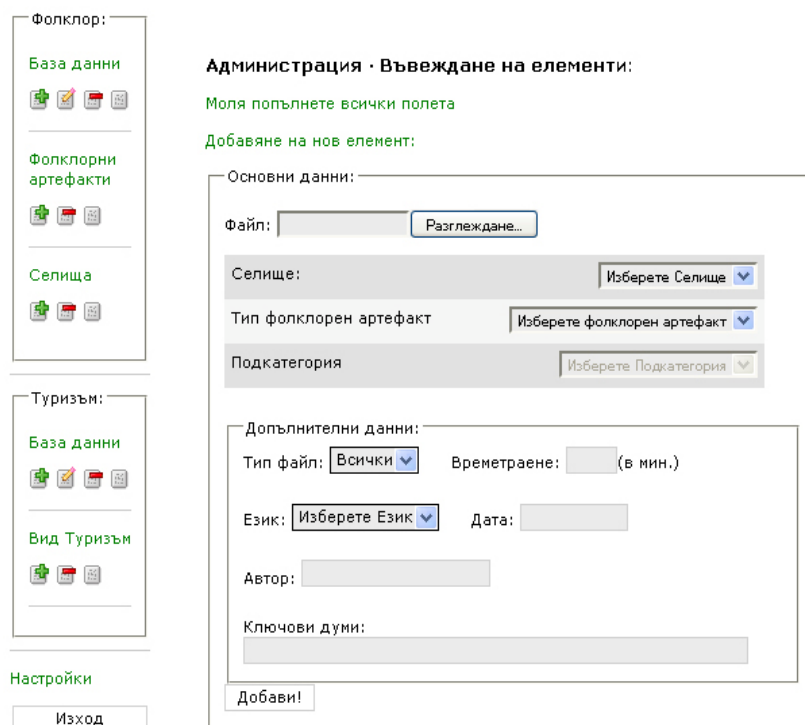**Fig. 2.** Searching process in the application "Cultural Tourism"

Fig. 3. Administration of the site

4   Structuring the Data of the Digital Folklore Archive

For each of the two applications in the site, "Traditions and Customs" and "Cultural Tourism", categorization of available objects is ensured. The categories folklore artifacts and the possible subcategories are presented in Fig.4 and Fig.5. This categorization scheme is used for data structure in the website.
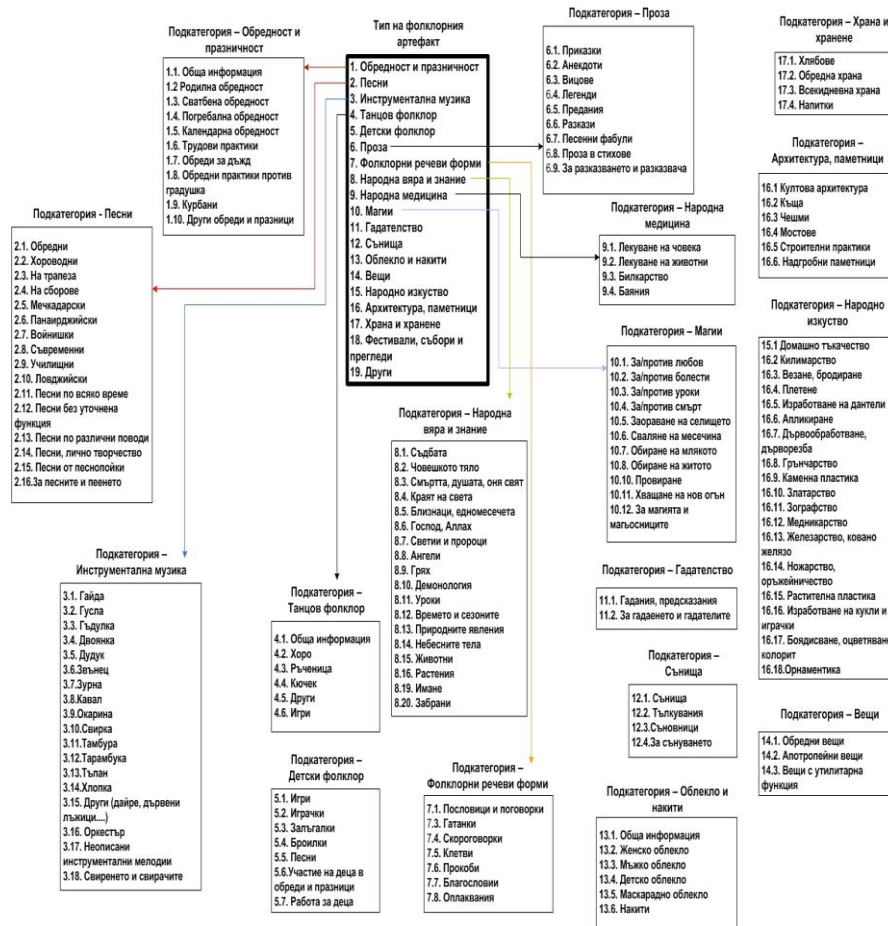

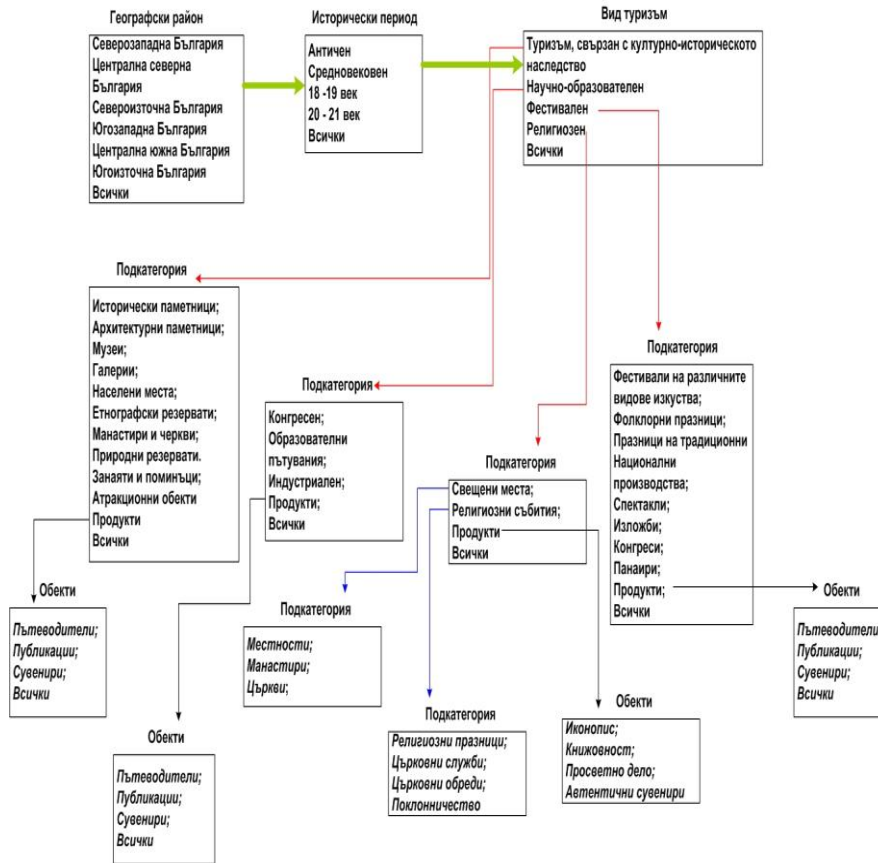**Fig. 4.** Categorization of the objects in "Traditions and Customs"

Fig. 5. Categorization of the objects in „Cultural Tourism"

HTML, CSS, XML [2], PHP, JavaScript and Macromedia Dreamweaver are the tools used for implementation of the website.

For the application "Traditions and Customs" are created two XML documents shown in Fig. 6. The first one includes metadata for each file with folklore object such as song, legend, riddle, etc. The second XML document includes the structure of the folklore artifact types and their subcategories. In the same way the data in the "Cultural Tourism" section are described.

```xml
<?xml version="1.0" encoding="UTF-8" ?>
- <DB>
  - <file>
      <size>9</size>
      <lang>BG</lang>
      <selishte>Велико Търново</selishte>
      <tip_folkloren_artefakt>Песни</tip_folkloren_artefakt>
      <podkategoriq>Училищни</podkategoriq>
      <date>09/04/2010</date>
      <keywords>песни училище</keywords>
      <author />
      <dir>Search.rar</dir>
      <tip_file />
    </file>
  - <file>
      <size />
      <lang>EN</lang>
      <selishte>Троян</selishte>
      <tip_folkloren_artefakt>Детски фолклор</tip_folkloren_artefakt>
      <podkategoriq>Игри</podkategoriq>
      <date>09.06.2010</date>
      <keywords>fddaa</keywords>
      <author>polq</author>
      <dir>doklad_donika_polq5.doc</dir>
      <tip_file>Текст</tip_file>
    </file>
  - <file>
      <size>4</size>
      <lang>BG</lang>
      <selishte>Габрово</selishte>
      <tip_folkloren_artefakt>Песни</tip_folkloren_artefakt>
      <podkategoriq>На трапеза</podkategoriq>
      <date>12.06.2010</date>
      <keywords>песен трапезна габрово</keywords>
      <author>polq</author>
      <dir>trakiisko_nastoenie_thracian_easy_mood_.mp3</dir>
      <tip_file>Песен</tip_file>
    </file>
  </DB>
```

```xml
<?xml version="1.0" encoding="UTF-8" ?>
- <subs>
  - <sub>
      <name>Обредност и празничност</name>
      <pr0>Обща информация</pr0>
      <pr0>Родилна обредност</pr0>
      <pr0>Сватбена обредност</pr0>
      <pr0>Погребална обредност</pr0>
      <pr0>Календарна обредност</pr0>
      <pr0>Трудови практики</pr0>
      <pr0>Обреди за дъжд</pr0>
      <pr0>Обредни практики против градушка</pr0>
      <pr0>Курбани</pr0>
      <pr0>Други обреди и празници</pr0>
    </sub>
  - <sub>
      <name>Песни</name>
      <pr1>Обредни</pr1>
      <pr1>Хороводни</pr1>
      <pr1>На трапеза</pr1>
      <pr1>На сборове</pr1>
      <pr1>Мечкадарски</pr1>
      <pr1>Панаирджийски</pr1>
      <pr1>Войнишки</pr1>
      <pr1>Съвременни</pr1>
      <pr1>Училищни</pr1>
      <pr1>Ловджийски</pr1>
      <pr1>Песни по всяко време</pr1>
      <pr1>Песни без уточнена функция</pr1>
      <pr1>Песни по различни поводи</pr1>
      <pr1>Песни, лично творчество</pr1>
      <pr1>Песни от песнопойки</pr1>
      <pr1>За песните и пеенето</pr1>
    </sub>
  - <sub>
      <name>Инструментална музика</name>
      <pr2>Гайда</pr2>
      <pr2>Гусла</pr2>
      <pr2>Гъдулка</pr2>
```

Fig. 6. XML document with metadata

5   Conclusions and Future Work

The preservation of the national folklore heritage should not be understood only as a physical storage, but as a part of a comprehensive project for its use in accordance with the contemporary needs of the society. This paper presents an overview of existing digital folklore archives. Based on a comparative analysis specifications are formulated with purpose to be developed web-based social-oriented applications for the needs of the education and cultural tourism.

A project for structuring and categorization of content for easier access is presented. A website for access to digital folklore archive with two main applications (metadata for the artifacts and detailed search in the archives) is implemented.

In near future, the developed website will be enriched with new folklore artifacts, real XML metadata will be added, sections with virtual expositions will be included and several training modules will be developed.

Acknowledgements

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