

CDNH PORTAL

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ABSTRACT

The Digitization of national heritage is a process concerning several aspects. One very important aspect is the digital presentation of the cultural heritage elements. The main role of the Center for Digitization of National Heritage (CDNH) at the Institute of Informatics is to produce such presentations and put them available on the web, through the portal of CDNH. In this paper we present the content of the CDNH portal and its structure.

Key words: digitization, CDNH Macedonia, national heritage presentation

I. INTRODUCTION

The culture institutions in Macedonia are not stimulated to digitize and present their activities on Internet, so the Macedonian national heritage is scarcely represented on digital media or on the Internet. Due to the small amount of web sites and other digitized media in Macedonia concerning national heritage, Macedonian citizens were not used to search for that kind of material on web. This situation was the most important reason for creating the Center for Digitization of National Heritage (CDNH) at the Institute of Informatics. One of the missions of CDNH is production of digital presentations of the Macedonian national heritage, which can be accessed on web. For that reason, web portal of the CDNH [1], and system for storing data about national heritage with advanced search techniques were created [2].

II. CDNH PORTAL

Most of the digitized material concerning the national and cultural heritage produced by CDNH is presented on the CDNH Portal (www.cdnh.edu.mk). Therefore we could claim that the Portal of CDNH represents a collection of multimedia presentations of the Macedonian National Heritage. The portal also includes the presentations created by students [3, 6], as Multimedia course assignments and as diploma projects.

The digitized materials included in the Portal of CDNH are incorporated in around 85 projects. Each project is one web site concerning specific part of Macedonian national heritage. Through the given portal projects, many artifacts of the Macedonian cultural and national heritage, such as well known monuments, people and events are presented. Also, the tradition, the customs, the music and the folk dances, the natural beauties of Macedonia, historically important people, sacred object and archaeological sites are digitized and available for exploration to the Macedonian and the foreign community.



Figure 1: List of projects

The Projects could be accessed through the list of the Projects (Fig 1), where beside the name of the project, a short description of its content is placed.

The right side of the interface offers a “random project” proposal, a feature that allows quick access to some digitized content for the visitors of the portal that are not searching for anything specific (Fig. 2).

Prominent examples of Macedonian cultural, national and natural heritage that are digitally presented in the Portal of CDNH are:

- One of the oldest megalithic observatories in the World - Kokino;
www.cdnh.edu.mk/Proekti/multimedija2007/kokino/pocetna.html
- Archeology of the Macedonian empire – Vardarski Rid;
www.cdnh.edu.mk/Proekti/multimedija2007/vardarskirid
- Roman empire – cities like
 - o Heraklea,
www.cdnh.edu.mk/Proekti/multimedija_06/Heraklea/
 - o Stobi,
www.cdnh.edu.mk/Proekti/multimedija2007/stobi/
 - o Bargala, (Fig 4)
www.cdnh.edu.mk/Proekti/multimedija2007/stip/
- Many churches and monasteries from the Byzantium period
 - o Churches and Monasteries of Matka (Fig. 6, Fig. 7)
www.cdnh.edu.mk/Proekti/multimedija2007/crkvimatka
 - o St Joakim Osogovski
cdnh.edu.mk/Proekti/multimedija2007/joakimosogovski/
 - o Gallery of icons
www.cdnh.edu.mk/Proekti/multimedija2007/galerijaikoni/



Figure 2: List of projects

- The creators of the first Slavic alphabet – St. Cyril and St. Methodius
www.cdnh.edu.mk/Proekti/multimedija2007/kirilmetodij
- The founders of the first University in the world – St. Kliment and St. Naum of Ohrid, who also created the Cyrillic, the alphabet of the Slavic nations.
www.cdnh.edu.mk/Proekti/ostanati2007/klimentnaum/
- Macedonian folk, dances, songs garb, instruments
www.cdnh.edu.mk/Proekti/multimedija2007/makedonskiora
- www.cdnh.edu.mk/Proekti/multimedija_06/ansamb1%20Orce%20Nikolov
- www.cdnh.edu.mk/Proekti/diplomski/Narodni%20Nosii/

III. THE STRUCTURE OF A PROJECT

Each project included in the Portal of CDN H contains materials about artifacts connected on principles of locality or homogeneousness. These projects cover different fields of national heritage. For example, in the presentation of the town of Shtip, the museum of the town, some of the archaeological localities near that town, artefacts found in the museum or in the localities, bridges and other features are presented (Fig. 3, <http://www.cdnh.edu.mk/Proekti/multimedija2007/stip/>) Similarly, in the presentation of one of the famous poets from Macedonia, Kosta Racin, beside the presentation of his life and his literature, one can also see the specialized museum “The house of Racin” and literal manifestation “Racinovi Sredbi” dedicated to him (Fig 4, www.cdnh.edu.mk/Proekti/multimedija2007/kocoracin/) Such a structure of the projects, does not allow one to find all topics of the same category of cultural heritage. So, if interest is shown only in archaeology, there will be a problem to find all the presentations concerning this particular topic.

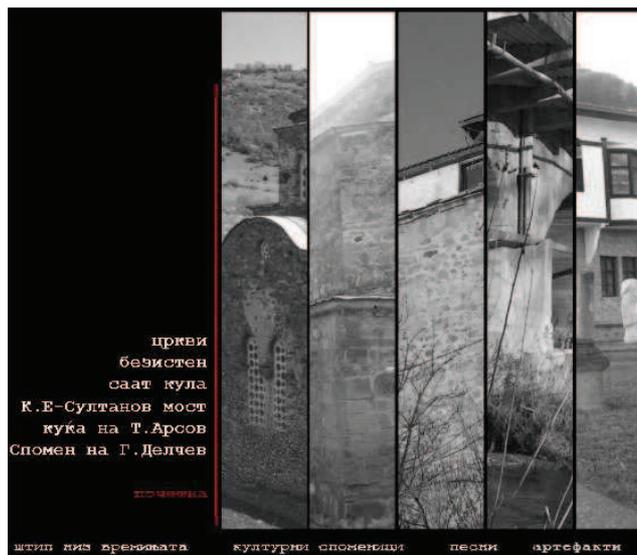


Figure 3: The web site: National Heritage of Shtip.

More precisely, there are projects in which the main topics is not the archaeology, but there are some pages, pictures, videos or animations that present some archaeological localities, as in the presentation of Shtip. This was a downside needed to be resolved with some other technique.

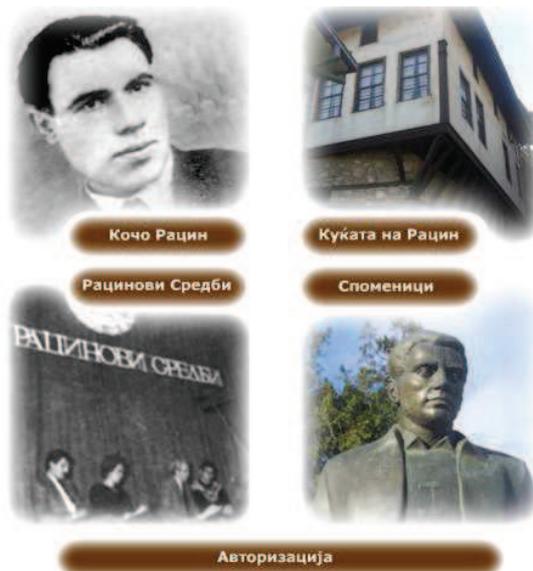


Figure 4: The web site about Kosta Racin

IV. CATEGORISED SEARCH

In order to make the portal more available to the target groups of visitors that are interest only in the specific parts of the national heritage, we have created categorized search of the digitized material that we have. First, we’ve specified categories and subcategories that are covered by the projects. The categories and subcategories are:

- Archaeology: localities, coins, mosaics, ceramic, sculptures, artefacts and buildings;
- Architecture: breaches and old buildings;
- History: famous places, monuments, persons and events;

- Ethnology: music instruments, garb, playing, national songs, traditions, manifestations, jewellery, trade and old town songs;
- Geography: natural beauties, cities, villages and regions;
- Literature: old Savic literature, reformation literature, modern literature, drama, poesy, prose and national literature;
- Culture: theatres, movies, manifestations and orchestras;
- Religion: churches, monasteries, mosque, icons and frescos;
- Museums: museum of Macedonia, specialised museums, city museums)

Also we present another approach to the search, by defining Multimedia category, with subcategories: pictures, videos, sound, 3D presentations and panoramas.

Whenever it is possible, the project is separated into parts that belong in different subcategories. A reference, containing short explanatory text, is made to that specific part. Then, we assign one or more categories to each project (or part of the project). More precisely, each reference is placed in all corresponding subcategories mentioned above. In that way, the category search becomes available through the new page (Fig. 5).

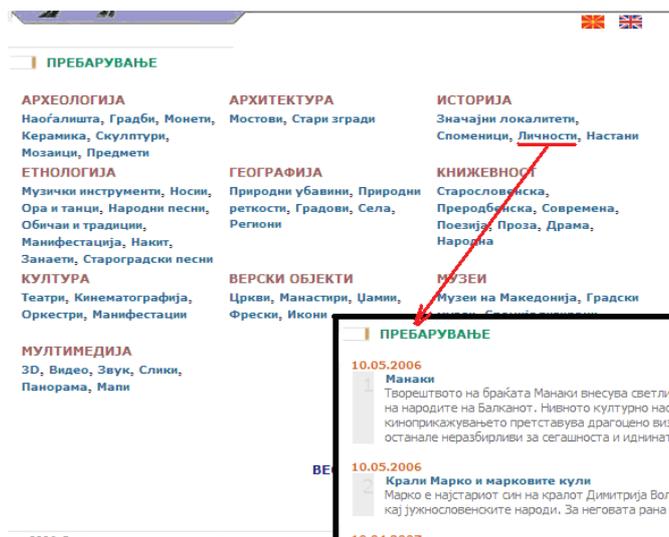


Figure 5: category search

Now one is able to choose the field of interest, and then she will obtain all projects in which themes of that field are elaborated. Again, the projects or parts of the projects are given as a list, but now we have reduced the choices, and we are sure that all the web pages in that list contain themes of our specific interest.

V. IMPACT OF THE PORTAL

The concept of the Portal of CDNH is rapid production of presentations about Macedonian national heritage. Due to the availability of large amount of digitized material, there is a growing interest for the CDNH Portal itself [7]. Additionally, many of the localities that represent archaeological, historical and natural beauties, presented in the Portal are becoming more interesting for tourists, students and researchers. There

is also growing interest for the Macedonian culture, history and literature.

The CDNH Portal was competing and won in the category of e-culture in the national WSA competition [4].

The World Summit Award [5] is a biannual competition of e-society in 6 different categories: e-government, e-health, e-science, e-learning, e-culture, e-entertainment, e-business and e-inclusion. It is a global initiative to select and promote the world's best e-Content, started in 2003 in the framework of the United Nations' World Summit on the Information Society (WSIS). This is done through national contests, a global contest, held every 2 years, and numerous content-focused national and international conferences and workshops – the WSA Road Show.

VI. CONCLUSION

Here, we presented our approach in building a portal that contains a lot of digitized content about national heritage. It can be seen as top down approach concerning the way of production of digitized material, project by project, and bottom up approach in implementation of the categorized search. The impact of such an effort is huge, because this presents a pioneer work in this field in our country.

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