

UDC 004.49+004.67+004.633**DESIGN OF THE WEB INTERFACE OF THE REVIEWER
OF CONFIDENTIAL LIBRARY FUNDS**

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The basic principles of constructing the user interface of the client part of the computerized library information system of the scientific library of the higher education establishment have been defined. The advanced interface function of the browser of confidential library funds has been designed.

Keywords: *interface, ALIS, terminal, electronic edition, user, information protection, media content.*

Formulation of the problem. Every year in the world, the number of countries that in the educational process reduce the use of printed textbooks in schools, universities, replacing them with electronic equivalents. This saves money from the publisher, the reader; increase the speed of distribution of educational content among the recipients, and protect the environment, reducing the paper production and the negative impact of the paper industry on the environment.

In the modern libraries, automated library information systems (ABIS) are used for access to library funds. Many existing ALIS [2] provide a web interface for re-viewing electronic editions of the library, but they do not provide specific requirements for certain categories of libraries, such as libraries of higher education institutions [1]. Also, such reviewers of the ABIS funds do not have protection systems for certain IHE funds [5], for example, departmental library funds, which are not yet submitted by the final version of the published copy protected by copyright or related rights, but are already used in the educational process.

Analysis of recent research and publications. The construction of web-user interfaces was covered in publications by Frein B., Hogan B., Goldstein A., Lazaris L., Wail E., Gosha H. D., Savelyeva A. A., Alekseeva A. A., McCoy A., Sinelnikova V.R., Galkina V.O.

The design of interfaces for access to library systems was studied by scientists: Lavrova K. B., Kozhinkin I. O., Vlasova N. S., Pilko I. S., Root E. V., Reynolds B., Goldhor R. S.

However, in the above studies, the issue of protecting the intellectual property of the author from illegal copying and distribution was not exacerbated. Also, the problem of the unprecedented cathedral funds is not covered, the intermediate version of which, however, is used in an educational institution as an operative, dynamically changing methodological material. Access to these electronic resources should have a limited category of recipients [4]; also these media data can not be stored in computer memory or reproduced otherwise until the official publication of the final version of the publication.

Therefore, the design of a web-interface for the viewing of confidential library funds for a computerized library information system for IHE is timely and relevant.

The purpose of the article. Designing confidential, dynamic media resource modeling and structuring a terminal terminal for viewing in the web space..

Presentation of the main research material. Distribution of the Internet has led to the emergence and distribution of content readers on the Internet, namely browsers. Currently there are versions of browsers under the most common operating systems, including mobile. Such a development of events facilitates the production of cross platform systems, including library. However, at the same time as the emergence of web-versions of library-based systems, the problem of protecting media information appears. Unfortunately, many types of media data encryption are expensive for small libraries, as well as libraries of state educational institutions, including IHE. Therefore, the interface of the electronic fund reader interface of the computerized library system [3] was designed.

The basis of user interfaces for web-systems is compliance with UX (User Experience) and UI (User Interface) [6]. The experience, the impression that a user gets from working with the interface, is how simple or difficult it is for the user to achieve the purpose of using the interface covers the concept of User Experience. At the same time, the User Interface adjusts the look of the interface (visual, tactile, voice). The UI recognizes that it will be convenient to use the human interface, taking into account the color, size, font of the text and other elements of the interface. The balance of UX and UI and determines the convenience of using one or another web-system tool.

The figure shows the structure of the projected graphical interfaces of the library library viewer library computerized library information system. The main parts of this browser are the field of view (1), the search for the context of the publication (2), the content of the publication (4), the menu item (5), the bookmark item in the publication (6), the element of the publication of the full screen (7) , day / night switching element (8), high contrast contrast on / off switch (9), play / pause element for listening to audio book (11), audio book progress line (12), previous and next page switches (13) and switching to a specific page and automated transition at a given time (14). Elements 3, 10 - controls, when pushed on them, the demonstration of elements 4 and 11, 12, respectively. Elements 2, 3, 5-10, 13, 14 are continuously displayed with a transparency effect (80%), when the element is guided to a certain element, the transparency decreases (0%) and the element becomes fully visible.

The feature of the view field is that the image is displayed on the canvas element, which allows you to keep the book copy information protected from being copied by entering a blob-formatted image into a canvas image. Due to this solution, the information is conveniently stored on the server, transferred to display on the client part of the system without loss of artistic, artistic and chronological features of the publication, such as yellowing of paper. Also, the use of the binary blob format allows editing editions, including the optical correction of text and graphic materials.

Search by context of the publication allows you to view the insertion of keywords in the edition with the display of the page number of entry. This way the classical index of the publication is implemented. Also, using the blob format of the

publication's display format is an interactive display of the context of the use of the key phrase in the publication text.

The content implements the possibility of transitioning from the context of the publication to the use of semantic headings and subtitles of the publication, which also allows the structuring of publications to distribute and improve the perception of information in large publications.

The menu item controls the parameters of other items in the browser. For example, permission to display an element, change the level of transparency of the elements, adjust the brightness of the browser, and the time for automatically turning on the day / night modes.

The bookmark item allows you to save important user-specific entries in the publication. There is also an automatic bookmark that stores the user's location during the last session of a particular publication.

The full-screen edition feature allows you to increase the view to the screen size by removing standard browser and operating system elements.

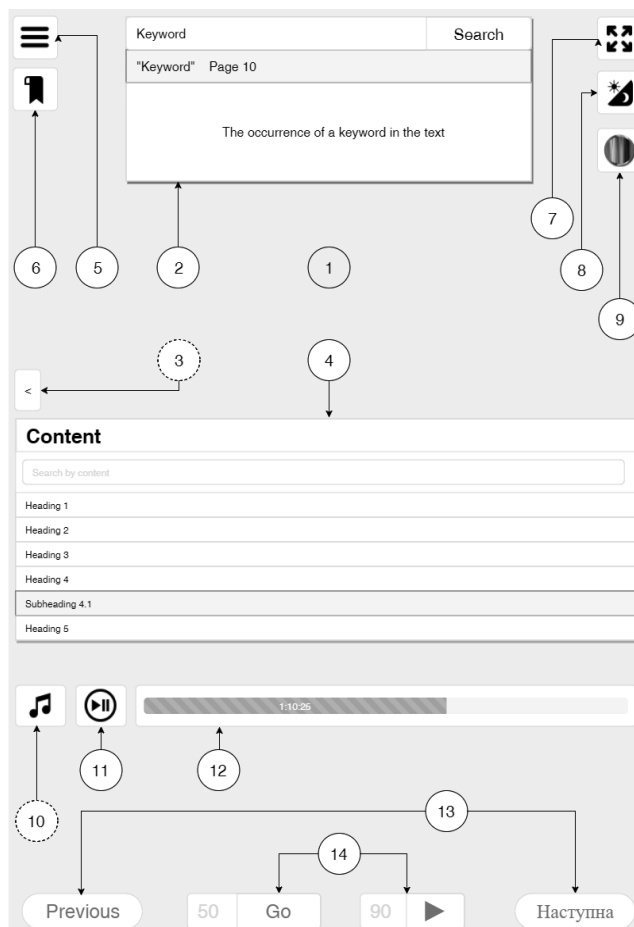


Fig. 1. Graphical user interface of the library viewer

The day / night mode switching element and the high contrast contrast mode switch / switch mode change the brightness and viewer's con-tension, which makes it easier to perceive information at night time (day / night element), and it improves perception for color-blind people .

The play / pause and progress bar of the audio book implements the audibility of the audio version of the publication. In this case, the element of the progress report follows the page position of the publication and makes the re-roll of the audio file to the current page.

To navigate through the pages of the publication, the switches of the previous and next pages are used, as well as switches for switching to a specific page and automated transition at a given time. Upon switching to the next / previous page, loading is in the range of plus and minus one page relative to the requested one, thus the protection of the information contained in the publication is realized and the amount of information transmitted through the network is reduced..

Conclusions. The presented structure of the browser of dynamically generated confidential content ensures the security of media data at the terminal of the final recipient. Further research should focus on researching the development of client browser versions for specific mobile and desktop platforms.

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УДК 004.49+004.67+004.633

ПРОЕКТУВАННЯ WEB ІНТЕРФЕЙСУ ПЕРЕГЛЯДАЧА КОНФІДЕНЦІЙНИХ БІБЛІОТЕЧНИХ ФОНДІВ

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Обумовлено основні принципи побудови інтерфейсу користувача клієнтської частини комп'ютеризованої бібліотечної інформаційної системи наукової бібліотеки закладу вищої освіти. Спроектовано розширений функціонал інтерфейсу користувача переглядача конфіденційних бібліотечних фондів.

***Ключові слова:** інтерфейс, АБІС, кінцевий термінал, електронне видання, користувач, захист інформації, медіа контент.*

Стаття надійшла до редакції 25.05.2017

Received 25.05.2017