

ANALYSIS OF AVAILABLE SOFTWARE TOOLS WITH ADVANCED SEARCH ENGINE

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ABSTRACT:

This article presents an analysis of modern software tools for search engines, which are currently being developed and have a wide range of capabilities. The principles of work, weaknesses and features of the software tools Google Desktop, Yandex Desktop, and the Rival Desktop are studied. The results of the analysis can be used to develop general functional requirements for a database of electronic documents when creating an advanced search system.

KEYWORDS: Google desktop, Yandex desktop, Copernic Desktop, sidebar, search bar, free search bar

INTRODUCTION:

Today, since the processing of documents in electronic form is growing rapidly, each large, medium, and even small organization faces a number of problems when working with large volumes of electronic documents stored on servers on the local network. As the volume and size of electronic documents increases, one of the most important tasks is the problem of their sorting, reliable storage, as well as ensuring their effective use.

The growing volume of electronic documents causes problems with finding the necessary information quickly and accurately. As a solution to this problem, many large companies working in the field of software development, presented their products. Work is also underway to further improve them.

The following is an analysis of the advanced software tools of the search system, which are currently being developed and have a wide range of features.

MAIN PART:

Google Desktop software is a Google product and is one of the most popular types of this type of software. The program has the ability to accurately, quickly and completely search for text, audio, video, emails, files and other types of documents. Google Desktop helps find new information not only on your PC, but also on your local network and the Internet. Google's desktop application is similar to Google's search engine[3].

This program first indexes all the files on your computer, and then allows you to search for all the files you need. At the user's request, the index is constantly updated when adding modified files and web pages, as well as messages from e-mail. The indexing process can take several hours or a whole day, depending on the characteristics of the computer and the number of files.

The program has many amenities for the user and is able to work in the following modes:

- side panel;
- search bar;
- free search bar.

The sidebar is displayed on the sidebar of the computer desktop and contains various gadgets that display information that is of

interest to the user. The user can optionally install the gadgets he needs. Gadgets are classified by direction and are easy to find.

The search bar is used to save screen and convenience, and this bar is located at the bottom of the computer's desktop.

A free search bar allows you to go to any part of the computer desktop[7].

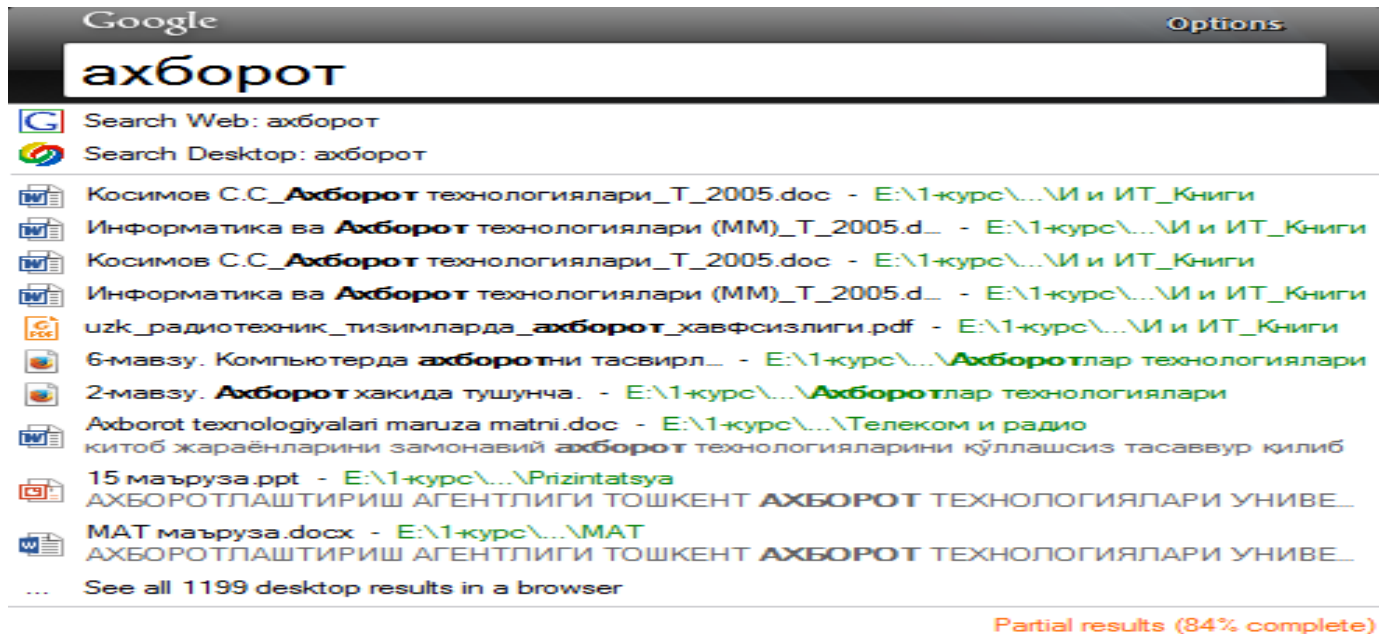


Figure 1. Google Desktop search bar

In addition, the Google desktop application has an advanced search box that allows the user to make various settings. You

can also sort the search results in different views.

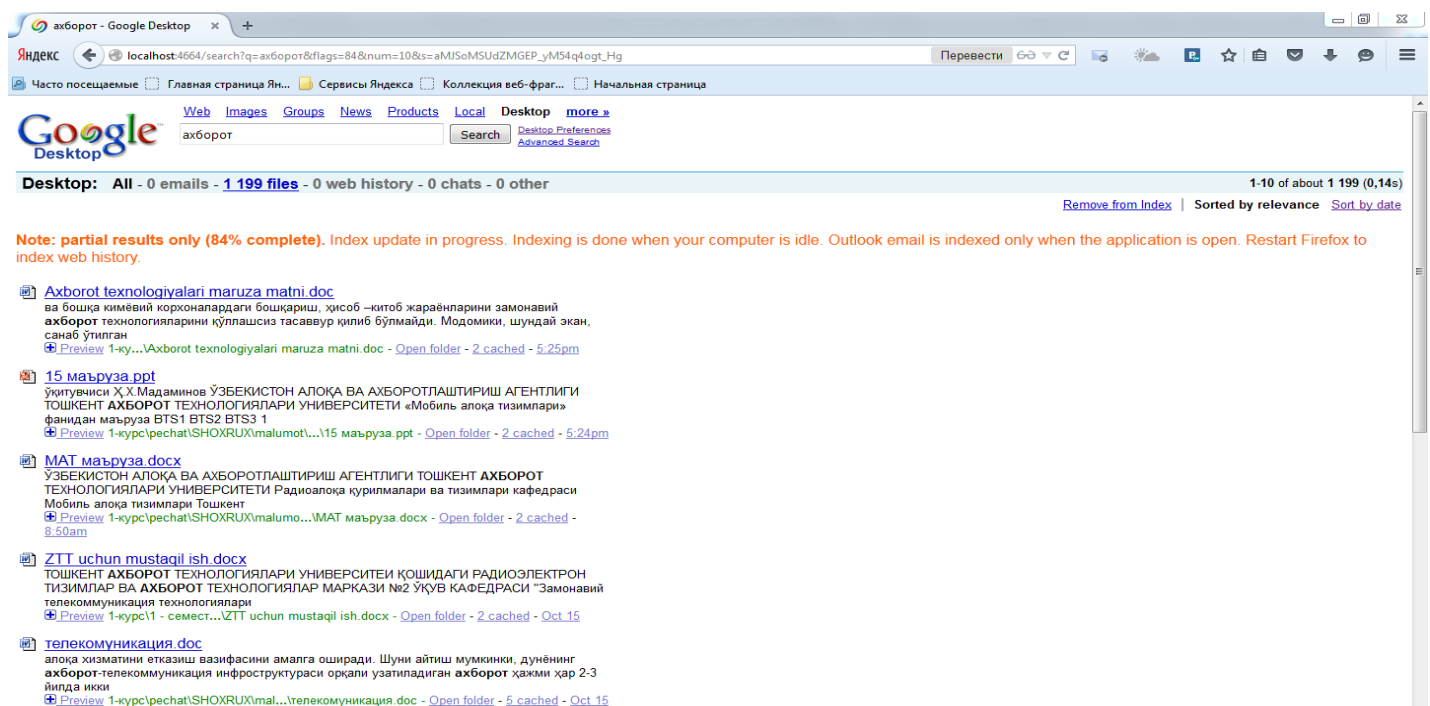


Figure 2. Advanced search window

The program also has a dynamic search option, and the search is repeated when the user enters each letter. Installing and configuring the program does not cause inconvenience to the user.

One of the advantages of this program is that it supports many different types of files, and the document found on the basis of the request can be viewed in the program window. Google makes copies of files and other items on the desktop each time it crawls and saves them in the cache on your computer's hard drive. Thus, instead of recovering files that were deleted by mistake, they can be viewed using Google Desktop. For security reasons, the ability to lock with a password is included.

The disadvantages of the program are the high indexing time, the lack of support for the logical element "OR" and the inability to search for files in the archive format "RAR"[3].

Many experts warn that using other versions of Google Desktop to search can be dangerous when searching on the Internet. Google desktop beta software automatically saves emails through Outlook, Outlook Express, and Internet Explorer. The search engine also saves copies of web applications, as well as Excel and PowerPoint files through Internet Explorer and America Online chat. One version of the Google desktop application has a feature that even stores indexes of documents that have

access to confidential information stored on a computer in a Google database. Experts advise against installing Google desktop software on computers with multi-user and confidential information [4].

The operating principle of the Yandex desktop program is similar to the Google desktop program. It scans all the files in the computer's memory, that is, all the words it encounters, and compiles the indices. The indexing process is faster than the Google desktop search engine. The search box will not be activated until the indexing process is complete. Once the process is complete, a search can be performed [5]. There aren't as many performance modes in this app as there are in Google Desktop Search.

Its advantage is that it supports many types of files, it is possible to sort the results up to 255 pages per page. In addition, this program has many operators for exact search on demand. For instance, "!" the operator finds the words in the exact form. "!!" the following statement finds words in any form and agreement. As evidence, if the query "!! kun " (uzbek language) , as a result, all words based on" day "will be shown (kun, kunida, kundan, (uzbek language) etc.). (Figure 3). Similar operators are common in the Yandex desktop application. Currently, the advantage is that it also supports files in archive format.

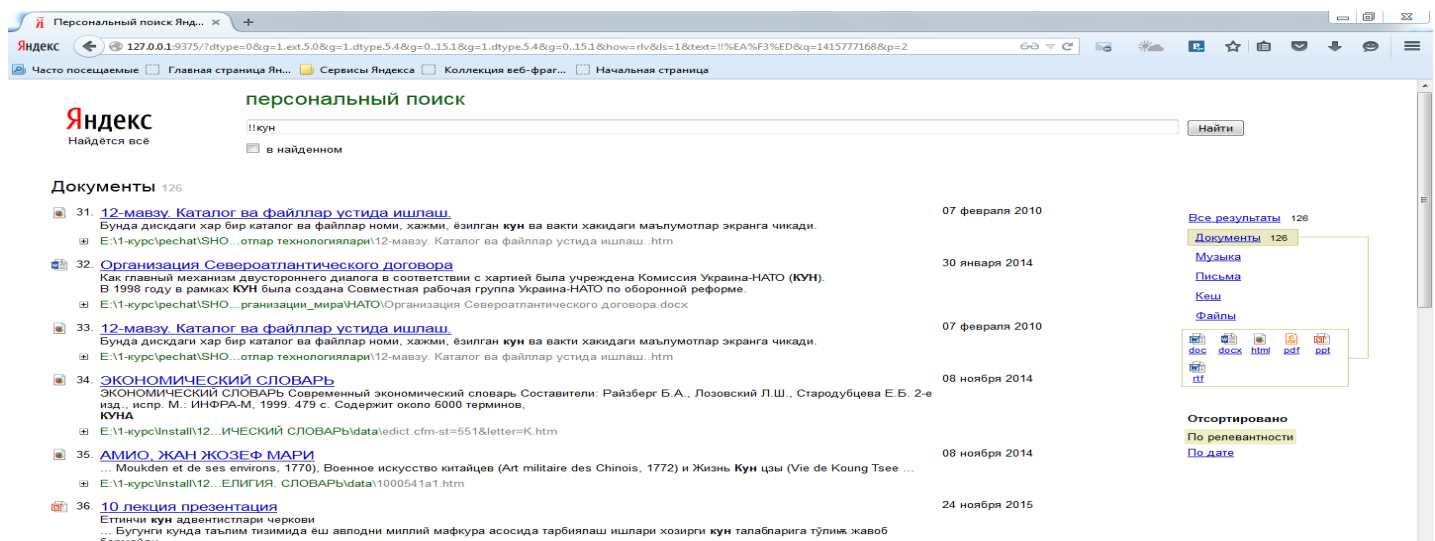


Figure 3.

In this program, viewing a document, such as the Google Desktop program, is not performed in the program window, and this is considered a program flaw. Also, one of the main disadvantages is that the program does not search on the local network.

Copernic Desktop, like other programs, has the ability to search for files in different

formats. The software is downloaded to the computer with minimal CPU usage, using persistent and fast memory sources. Copernic Desktop Search Utility has many settings. Displays all results in a list divided into categories. Results can be viewed directly in the application window (Figure 4).

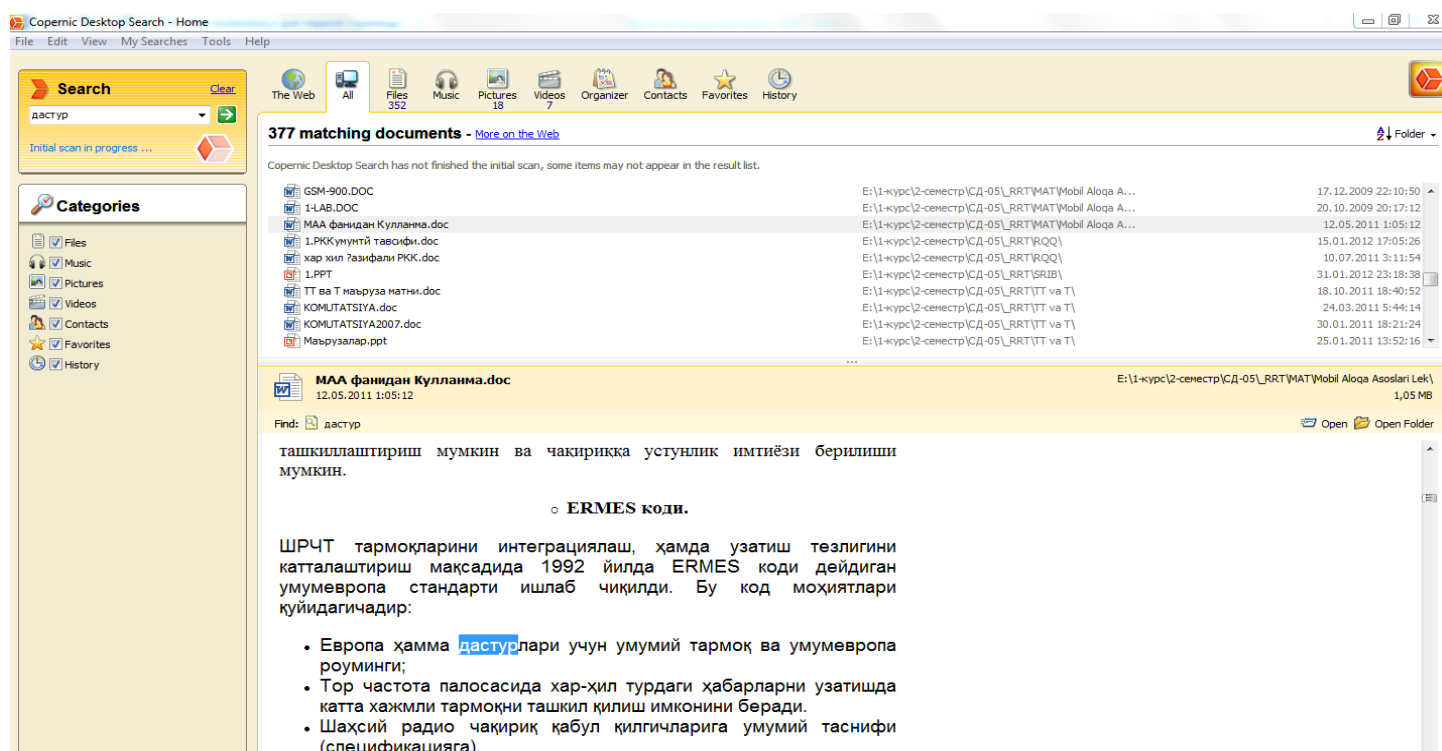


Figure 4.

PROGRAM SPECIFIC ASPECTS:

- designed to search for documents with different extensions;
- Even if it does not have a Russian interface, there is no problem storing information in this language;
- minimum load on the operating system due to the direct use of the processor and RAM;
- has several settings for quick and easy search.

SOFTWARE FLAWS:

- has a private code;
- has a large volume;
- does not have a Russian interface.

CONCLUSION:

The article analyzed the available advanced search engines. The results of the analysis can be used to develop general functional requirements for a database of electronic documents when creating an advanced search system.

Based on the foregoing, in further studies we will consider the performance mechanisms of advanced search engines in the database, indexing and application of search engines.

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