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# PEDAGOGIK MAHORAT

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## **MAKE BEAUTIFUL CONTROL BUTTONS FOR A WEBSITE IN CORELDRAW VECTOR PROGRAM**

*In article the ways of creation buttons of management for web-pages with the help of tools program Corel Draw are considered.*

**Key words:** vector, element, image, graphic objects, effects, menu, vector object, raster object, parameters, panels of tools, tool.

*Ushbu maqolada Corel Draw dasturida instrumentlar yordamida Veb-sahifa uchun chiroylar boshqarish tugmalarini yasashning yo'llari ishlab chiqilgan.*

**Kalit so'zlar:** vektor, element, tasvir, grafikli obyektlar, effektlar, menyu, vektorli obyekt, rasstrli obyekt, parametrler, uskunalar paneli, uskuna.

*В статье рассмотрены пути создания кнопок управления для Веб-страниц с помощью инструментов программы Corel Draw.*

**Ключевые слова:** вектор, элемент, изображение, графические объекты, эффекты, меню, векторный объект, растровый объект, параметры, панели инструментов, инструмент.

Computer graphics can be defined as a science of mathematical models of geometric objects, shapes and principles.

Computer graphics appeared as an independent direction in the 60s of the XX century and a package of special programs was developed. The first work in this direction was aimed at the development of vector graphics, drawing lines through intersections.

Much of the theoretical and practical work has focused on the study of spatial shapes and objects since the 1970s. This direction is called three-dimensional graphics (3D). Modeling of three-dimensional images requires taking into account the three-dimensional nature of space and objects, the location of observers and lighting sources.

In the 90s, the field of application of computer graphics has expanded significantly and there appeared opportunities for its widespread application. As a result, computer graphics has become a tool for professionals not involved in programming and computer technology.

Types of computer graphics differ from each other in the way they are displayed on the monitor screen and printed on paper. Computer graphics types represent a method of storing an image on a monitor screen.



**Figure 1.** Raster graphics

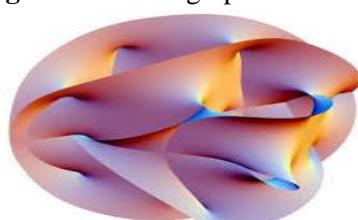


**Figure 2.** Vector graphics



**Figure 3.** Fractal graphics.

The advantages of the vector model:



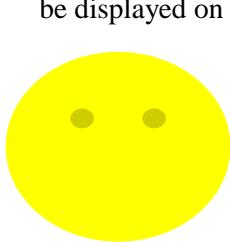
**Figure 4.** Three-dimensional graphics.

A much smaller amount of memory is used to store a vector model image, as it only stores information about the values and types of object arguments, not information about each pixel. The computer works with this compact model. It is transferred to a pixel image only while printing, displaying on a monitor.

A vector image can be adapted to any level of detail, and can be customized to a single object or group of objects at any time. This feature allows you to match the content of the object to the model. For example, in a portrait, a group of objects named separately can be adapted in the nose, right eye, left ear, and so on. This allows you to work separately with any part of the image.

The disadvantages of the vector model:

The inclusion of many different types of objects in a vector model makes it difficult to study the structure of this image. Therefore, a lot of time is spent on the study of programs that work with vector models. A vector object can be very complex, it may not be printed on paper as the user expects, and it may not be printed at all if the printer misinterprets or misunderstands the vector commands (Figure 5).



**Figure 5.**



**Figure 6.**

This line does not take up much space in a computer memory, because only the parameters of the line are displayed in the memory. Simple objects are combined into complex objects in it, so vector graphics are also called object-oriented graphics. Although vector graphics are stored as lines in computer memory, the image is displayed as dots on the screen. Calculates each parameter before displaying the image. That is why vector graphics are called computational graphics. With the help of vector graphics it is possible to carry out a simple type of finishing work [1].

Vector graphics is an important characteristic of a system and its composition of simple graphic elements serve, here are a few examples of simple graphic elements.

A line with a given length, directed at a certain angle, starting from the points whose coordinates are indicated.

An ellipse with the center coordinates at a given point, the length of the semicircles, the color and thickness of the line, as well as the color of its painting.

A rectangle with the coordinates of the point in the upper left corner, the length of the sides, the thickness of the line and the color.

When displaying a vector image, calculates the linear geometric attributes of simple elements, the relationship between its initial and required dimensions, as well as the allowable error in the output devices (monitors, printers). This method significantly increases the scaling capability. No matter how much you increase the image size, its quality does not change. When you reduce the size of the image too much, the lines of simple elements may overlap and change (distort) due to the reduction of errors.

Vector graphics programs CorelDraw, AutoCAD, 3DS MAX - each image is based on a certain shape and line. With the help of these programs it is possible to work with two or three-dimensional images, the quality does not change with the enlargement of objects, and a large database of tools creates great opportunities for users. The created files are saved in formats such as \*.cdr, \*.dwg and so on.



**Figure 7.** Vector image



**Figure 8.** Raster image

The image formed by raster graphics is mainly used in electronic and polygraphic publishing houses (Figure 8). A raster image consists of a set of dots in the form of a two-dimensional array (matrix), which are called pixels. A raster image consists of the smallest pixels.

Its attributes do not depend on the attributes of other pixels. Depending on the capabilities of the operating system used in the computer, images with a resolution of 480x640, 800x600, 1024x768 and more can be placed. Depending on the size of the image, its capacity will also increase. The capacity of the screen is parametric and is determined by the number of dots per inch. Images made with raster graphics are rarely produced using computer software. For this purpose, a drawing or photograph drawn by a professional artist is entered into a computer using technical means.

Recently, digital photo and video cameras have been used to input raster images into computers. Therefore, the main purpose of raster graphics is not to create an image, but to process an existing image.

A Canadian firm called Corel is one of the leading software companies.

The Corel DRAW 11, which forms the basis of Corel's software, was released in August 2002. It has great potential in the production of advertising products, the preparation of publications and the creation of images for Web pages.

Corel DRAW is a graphics program that helps you to create vector images, graphic text, and all the creative ideas you can imagine [1].

All images produced by Corel DRAW are divided into two classes: dot and vector. In vector graphics, the line is considered as the main element of the image. In raster graphics, such lines are created using dots (pixels), while in vector graphics, lines that are more general than dots are used to create images, making the images more accurate.

An optional representation of vector graphics consists of lines and complex ones are formed from simple lines. The mathematical basis of vector graphics is the study of the properties of geometric figures. The representation of vector images in computer memory is more complex than that of dot images. The disadvantage of spot images is that they require a large amount of space to store in computer memory. When working with high-resolution bitmaps, the size of the files on them is hundreds of megabytes [2].

Mostly when working with such large objects, modern computers are not so fast. Working with a vector image is much easier. To make it bigger or smaller, you can just change the image parameter that controls it. In this case, the size of the vector image file does not exceed one byte.

When data is transmitted through images, the speed of analysis and reception is much higher than through data channels. That's why a single poster with an image (which can easily give the desired effect) has a stronger effect on the viewer than a series of ads.

Any amount of information is well received by the viewer (children like picture books). In other formats, such information is not acceptable (exchange tables). As a result, the demand for graphical data is growing day by day.

Software tools for working with such graphics and images are a lot and different. One of these programs is Corel DRAW.

Version 12 of the Corel DRAW combines modern capabilities and was released in 2004 (version 13 of the Corel DRAW was released in 2005). This software is used in industrial design, advertising product development, publishing systems and creating various images for web pages. Corel DRAW software is a package program that includes several part programs. These programs make it easier to share information with each other.

To start the Corel DRAW graphics editor, issue the command Pusk(startup)-Program-Corel DRAW Graphics Suite X3-Corel DRAW X3, or double-click the left mouse button on its shortcut on the Windows XP desktop [3].

Files created in Corel DRAW have extensions such as \*.CDR, \*.CMX, \*.WMF. After downloading the program, the Corel DRAW window will appear on the screen, which contains the main elements of the user interface.

When CorelDRAW starts, the following dialog box opens.



**Figure 9.** CorelDRAW program dialog

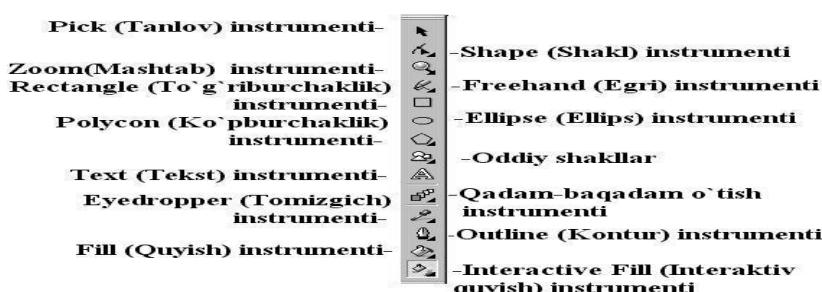
Here: New - Create a new file, Recently Used - refer to the last five files used. Open - open files that are in the computer's memory. New from template - create a new file based on existing templates. Corel TUTOR - pdf. e-book with instructions on how to work in CorelDRAW format. What's New - information about the differences of the program from previous versions and the introduced innovations [4]. Depending on the purpose of the job, selecting one of the above (in our case, the New section) will open the working window of the program CorelDRAW. It consists of the following sections:

1. Program row, which shows the current program and file name;
2. Menu Bar - a menu bar, where all the commands available in CorelDRAW are grouped into these menus;
3. Standard - Standard panel, which includes commands such as creating a new file, opening, saving, printing existing files, common to all programs;
4. Property Bar - Formatting panel, which displays the properties of the sheet without any objects, and its properties when the object is selected;



**Figure 10.** The working window of the CorelDRAW X3 program

5. Toolbox - a panel of tools, toolbars, which includes all the tools available in the program and allows you to use them.



**Figure 11. Toolbox - a panel of tools, all tools of the toolbar**

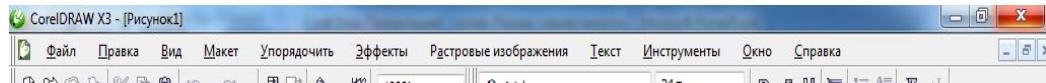
6. Color Palettes - color palettes, which show the colors in the selected color palette, you can display other colors close to it by holding down the left mouse button on any color for 3 seconds.

Taking out and removing these panels are done by right-clicking in the upper right corner of the screen and selecting the desired panel name from the drop-down list. They can be placed anywhere on the screen.

Main menu. The main menu bar is located at the top of the Corel DRAW screen, below the row header row. This is the only item in the program that has a specific location that cannot be placed anywhere on the

screen. The main menu consists of 11 items. The user can also add additional special commands to this menu.

These are: Файл, Правка, Вид, Макет, Упорядочить, Эффекты, Растроевые изображения, Текст, Инструменты, Окно, Справка.



**Figure 12.** The main menu bar of CorelDRAW X3

Standard instrument panel. The standard toolbar is located below the main menu bar. This panel has buttons that allow you to quickly and easily find the various functions of the Corel DRAW. In addition to these buttons, the panel has a drop-down list called Zoom levels.



**Figure 13.** Standard toolbar of CorelDRAW X3.

Functions of standard toolbar buttons:

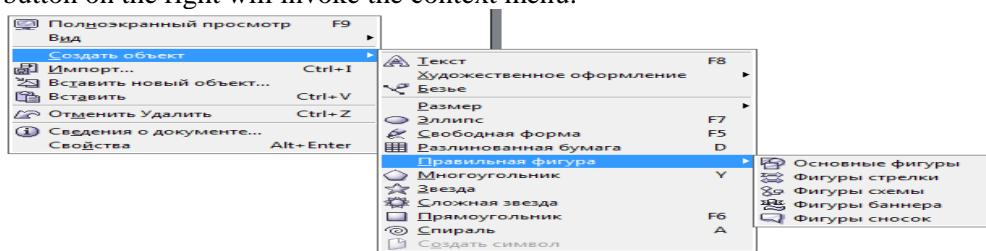
- 1 - creation of a new document;
- 2 - open an existing document;
- 3 - storage of the document;
- 4 - printing of the document;
- 5 - shearing;
- 6 - copying;
- 7 - put;
- 8 - cancellation of the last action;
- 9 - repetition of the last action;
- 10 - import (linking one document to another);
- 11 - export (send files);
- 12 - application loading module;
- 13 - Access to the Corel DRAW website;
- 14 - scale magnification.

Attributes panel. An attribute panel is a panel whose composition and tools change depending on which instrument or object is currently active. The attributes panel is located below the standard tools.



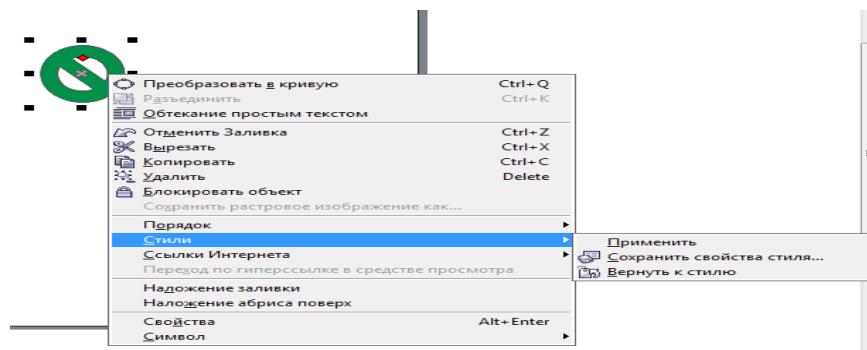
**Figure 14** Attributes panel of CorelDRAW X3.

To appear the menu press right button of the mouse. In Windows, some actions are performed by right-clicking anywhere on the screen. This feature is also widely used in the Corel DRAW graphics editor. Clicking the button on the right will invoke the context menu.



**Figure 15.** Pressing right button of the mouse appeared context menu in CorelDRAW X3.

Object menu. We call this menu by going to the group of selected objects and clicking the button on the right. Commands in such menus are called context menus because they depend on the status of the minutes being called.



**Figure 16.** Object menu of CorelDRAW X3.

An interesting aspect of creating animated buttons is that the image is more effective when the pointer is redirected to the graphic references on the WWW pages and changes its appearance when the mouse button is pressed. CorelDRAW automates the creation of such objects.

An example of this is the creation of a button that changes its appearance. The first step is to create views that show when the button is pressed and when it is not. Make a rectangle around the edges and fill it with black. Make a copy of this rectangle above and to the left, filling it with white. Make a note at the top, for example, type the button BUTTON and mark the inside of the red color with white. The unpublished button is ready (Figure 17, left). now it is necessary to create a variable object from it [5,6,7].



**Figure 17.** Various parts, buttons in CorelDRAW X3.

Highlight the button image and select the Effects Rollover Create Rollover command from the menu. Appearance does not change, but instead of several objects there is a button pressed in the normal state, which is indicated by the inscription Rollover [NORMAL] in the status bar.

To change the image in other modes, right-click and select Edit Rollover from the submenu. With the exception of the change button, all images are made invisible and an additional Internet toolbar appears on the screen. If you often create images for the Internet, then you need to install this panel in the program window. If the Internet toolbar is always visible, you do not need to give a menu command to create a button, just click the "Create Rollovers" button on the panel. Switching to Switch mode is done by clicking the "Edit Rollover" button.

After switching to edit mode, you will need to create an image for the other two buttons. In the list on the left side of the Internet panel, select the OVER option bar. As a result, the mouse pointer switches to the mode of setting the directional button. Previously, the NORMAL option was selected, which showed the normal appearance of the button. Delete the text line and fill it in black. The button (yellow BUTTON) looks the same when the mouse pointer is pointed (Figure 17, center).

Select DOWN from the list of image options. now you need to draw the appearance of the pressed button. Let's use the first created button view. Paint the text black and erase the outline. Push the text (green BUTTON) and the white rectangle to the lower right, and drag the black rectangle to the opposite side. A pressed button appears (Figure 17, right).

Click "Finish Editing Rollover" to finish the button creation process and switch to the program's initial mode. now you can see the appearance of the created object [8]. Click the "Edit Rollover" button on

the Internet panel. You can view the button animation. When you hover the mouse pointer over the created button, its image changes. Hold down the mouse button so that the button appears in the third image view. Release the mouse button and move the pointer aside. The button is in the first image view. Button images can also change slowly, but change faster when used on the Internet. Press the "Finish Editing Rollover" button to enter the initial mode [3.4].

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