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ЦВЕТА И ЦВЕТОВЫЕ МОДЕЛИ КАК ОСНОВНЫЕ
ИНСТРУМЕНТЫ РАЗРАБОТКИ ИНТЕРФЕЙСА

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Real-time communication with other people is simply indispensable. However, we get about 80 % of information visually while communicating with somebody and only 20 % through other means. Therefore, vision is very important for communication. Nowadays our everyday life is impossible without computers. Moreover, we more and more communicate with other people by using different chat programs. Communication by using a computer has some differences from usual communication. The main one is that almost all information you get by communicating with help of computer is visual. In this case, if you want to develop a popular program interesting not only for you, you should think about your own unique interface. Often programmers think that interface is not important because a program should be functional and in best-case scenario he makes the interface according to the rules of minimalism. It is a not bad idea but sometimes programs look boring or even repulsive. One of the best ways to fix the situation and to make your interface special, not similar to others, is to choose a correct colour spectrum of your future program. There are *many* different ways to do it but nowadays *Itten* colour circle is the most popular method of choosing colours. This circle contains only 12 basic colours, but the optimal number of chosen colours ranges from one to four. Most often chosen colours that create good combinations become a colour schemes and today they are used by a programmers all over the world.

The simplest one is a *monochrome* colour scheme. You take only one colour from the circle. Other colours are the variations of this colour but with different brightness and transparency. In addition, this scheme is not limited. It means that you can choose not only three variations of the basic colour.

Analogous colour scheme is more interesting and diverse compared to the previous scheme. You take from two to four colours located close to each other. These colours combine well because they have similar characteristics. For example, a red-orange-yellow analogous colour scheme will seem very energetic and lively.

The most balanced one is the *triadic* colour scheme. Using vibrancy and complementation, but straying from the trickier contrast, the triadic structure is the safest and most reliable colour scheme. You can select any three colours located 120 degrees from each other: one colour for the background, and other two for content and navigation.

Complementary colour scheme looks unusual in compare with previous schemes. You take only two colours, but these colours must be located opposite to each other. Combination of chosen colours gives us a good contrast. The interface with this colour scheme will be catchy and lively.

There is combination of complementary and analogous schemes, which has no special name. First, we select a basic colour and one opposite colour for it. Then you take the basic colour and two colours located on the left and on the right of complementary colour. This scheme represents interesting combination of different colours.

Another variation of complementary colour scheme is the *split complementary* colour scheme. You can take two basic colours and one opposite colour for every basic one. You get a big contrast, but it is a borderline, it means that more than four colours in a colour scheme will be difficult for a user to percept.

Choice of the colour scheme is the first step on the way of creating the interface. The second step will be choosing colours. Different schemes have their own rules but first you should choose at least one basic colour.

Black: The strongest of the neutral colours, black exists on almost every program. It can take on variety of characteristics depends on its supporting colours, or dominate all of them if used in excess. Its strength amidst neutrality makes it the colour of choice for long blocks of text, but as a primary colour can give the impression of edginess, sophistication, or even evil.

White: White is the colour most associated with virtue, purity, and innocence in Western cultures. Minimalistic and simple programs most often use it as a background. By drawing the least attention of all the colours, white is the best for accenting the other colours in the window.

Ivory: In terms of emotional response, ivory (and cream) are slight variations on white. Ivory is seen as warmer (or less sterile) than white, making it more comforting while still exuding the same minimalistic and complementary aspects. Ivory should be used in place of white to soften the contrast between it and darker colours.

Gray: While in certain situations it can seem brooding or sad, gray is nonetheless a popular choice for looking traditional or professional. However, one of the greatest advantages of gray lies in varying its hues — changing the shade can give you a customized mix of properties from white and black, a powerful tool in skillful hands.

Beige: Beige is the wildcard of the colours, as its main use is in drawing out other colours. On its own, beige is dull, though this can be used to symbolize humility. However, it will take on the characteristics of the colours around it, making it an interesting design tool. For these reasons, beige is usually a secondary or background colour. Darker shades of beige will create an earthy and almost paper-like texture, while lighter shades feel fresher.

Red: The most stimulating colour, red is so energizing that it can be used to increase blood circulation. Representing passion and power, red is the colour that

will attract the most attention, which is why it is commonly used for warnings and important notices. However, this could work against you, as red can incite anger, or at least, overstimulation. If you use it other than for notices, use it sparingly (or at least in a lighter shade) or not at all.

Yellow: Is one of the more versatile colours, depending on the shade. A bright yellow is the most energetic of the colours, without the severity of red. Middle shades of yellow give a sense of comfort while still feeling invigorating. Darker shades (including gold) can give the impression of antiquity. These shades are good as a background but better to use in some combinations.

Green: Green bridges the gap between warm and cool colours, though tends to be more of a cool colour. This means green has the same relaxing effects of blue, but still retains some of the energizing qualities of yellow. As such, it creates a very balanced and stable atmosphere.

Blue: Like yellow, blue's meaning varies greatly depending on the shade. All blue shades are universally relaxing and safe, but the lighter shades will seem friendlier while the darker ones seem more somber.

Purple: Historically associated with royalty, purple retains the tone of luxury, even to the point of decadence. Purple suggests lavishness and wealth in general, making it a popular choice for fashion. Lighter shades like lavender (with pink hues) are considered romantic, while darker shades seem more luxurious and mysterious.

Orange: As the most muted of the warm colours, orange is uniquely versatile. As a primary colour, it can be engaging and energizing, and as a secondary colour, it also retains these properties in an unobtrusive way. Orange also helps to create a sensation of movement and energy.

You can use RGB colour model to get a great number of different colours. In general, we have more than 100 different brilliant colour combinations, which could be used for your program. Choose right colour set is a very important step.

After you choose a colour scheme and colours, you can start to develop design of the interface of your future program. Now everything depends on properties of the window of your program and on the content that will be placed in this window. You can use examples of interfaces from different programs or follow somebody's advices, but it will be better to make your own unique interface. However, only your imagination can help to reach this aim. In a certain way every programmer is an artist. Nevertheless, you should not forget that first of all you are programmer and you develop a program, not drawing a picture. Undoubtedly, interface is very important, choosing of primary and secondary colours is very important too, but your program will be popular only if it is functional. Therefore, before creating design and sketches you must make algorithm of your future program.