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## **NEUMORPHISM IN WEB DESIGN**

Web design is a relatively new direction in the field of web development, which is evolving rapidly. New trends and tendencies are constantly arising, bringing new impression to the design of pages, drawing attention, and most importantly, simplifying work with web resources. Designers demonstrate their creative potential and try to create extraordinary solutions, thereby standing out from the crowd, which is becoming widespread. One of such visual trends is neumorphism, having become very popular among the users of the Dribbble design platform.

The purpose of this work is to analyse information about neumorphism as a direction in the web design, determine its aim, characteristics and application ways, besides, define the major advantages and disadvantages that arise throughout the implementation phase of this trend in website design.

The term “neumorphism” comes from the combination of the words “new” and “skeuomorphism”. This indicates the origins of the trend, the revival and reinterpretation of the old style, which realistic websites design started from. Neumorphism uses the intensity, angle, and blurring of shadows around objects to highlight them. Due to the soft shadow and general view of web pages, the design looks futuristic, modern and realistic.

Features of neumorphism include:

- the convexity of cards that become part of the background, in contrast to the common styles, where design elements “fly” over the background due to contrasting shadows;

- lack of contrast. Almost all buttons, corners, and other elements are in the same colour, except for contrasting text.

Despite this, the palette remains unified:

- smooth effects, transitions of elements from one state into another;
- easy to code, because the bulge effect is much easier to achieve with the help of HTML and CSS.

Neumorphism is characterized by achromatic colours and gradients. Black, white, and derived shades help draw attention to elements, photos, and icons. Gradients add brightness to the entire design and are used in different places of shapes, outlines, graphics, and background itself. They are perfectly readable on different screen sizes, and modern combinations of colours and styles, attract a lot of user attention. In addition, the choice of background colour depends entirely on the ability to display dark and light shadows on it (idbi, 2020).

Due to the use of shadows and a few elements on the web page, the style is noted by “visual freshness”. The trend of “breathing” sites appeared in design quite a long time ago, but neumorphism hyperbolized this direction. Besides, the style is quite close to the typical minimalism, which makes it possible to combine several modern styles, selectively using individual elements of neumorphism in design.

Despite its positive qualities, neumorphism has numerous negative characteristics that make it impossible to implement this style for a wide scope of users. According to statistics, 57 million of Americans have some kind of disability, resulting in 54% of adult users with disabilities going online. Under the W3, web accessibility and mobile device accessibility should cover all limitations of the users’ capabilities, including auditory, cognitive, neurological, physical, speech, and visual ones. However, neumorphism is not able to support cognitive, physical, and visual limitations (Редакция UNPUB, 2020). As it does not have a contrast ratio, the difference between the elements and the background is tiny. Consequently, people

with sight problems, like blindness, or colour blindness have difficulties interacting with the interface.

Another issue is weird navigation and design hierarchy. Convex shapes, smoothed corners, and other elements make users insecure about actions. The lack of hierarchy on the screen significantly affects the users' decision-making process, as well as their mental one (VDSina, 2020). Thus, many elements with the absence of hierarchy and design focus, prevent users from understanding what is taking place on this screen. Because of this, the intuitive component is lost, which might confuse the user. The main principle of any design system operation - information content - is thus violated. Therefore, the users' experience suffers greatly, and neumorphism loses to other styles in web design that put convenience first.

So, neumorphism is positioned as a visually attractive and "light" style that draws attention of a wide range of users with its unusual and realistic view. However, the softness of shapes, blurry shadows, and unity of the palette make the trend incompatible with the rules of both UX and UI design. They deprive people with no visual, cognitive and physical problems of the ability to use websites designed in neumorphism. Because of this, the introduction of neumorphism in web page design is impossible for a wide range of users, and can only be used in some separate elements.

## REFERENCES

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