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# THE DEVELOPMENT OF A MOBILE APPLICATION "ART-ROOM" IN THE CONTEXT OF MODERN WEB DESIGN

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Abstract. Considering the interest in art in the digital era, research aimed at studying and optimizing the design of mobile applications for promoting art products becomes very important for the further development of cultural space and supporting creative initiatives. The use of graphic components in the development of a mobile application and the subsequent implementation of the developed product in web design on the domestic and global markets undoubtedly acquires great practical significance, so the development of a mobile application "Art-Room" according to modern design principles and the use of new trends in design was the goal of this work. To achieve this goal, various research methods were used, such as classification, comparison, analysis, deduction, and modeling. The foundation of the design solution of the "ArtRoom" application is a thoughtfully developed conceptual idea of creating a Ukrainian information platform aimed at popularizing Ukrainian art and interacting with businesses, organizations, and institutions operating in the market. The interface of the mobile application was developed according to the design of art genres with the methodology of UI/UX regarding the balance of all colors and elements of the interface and the rules of web design and composition, using the online tool Figma, contains 22 standard screens adapted for different device models, with quick access panels and the possibility of using previously researched photographic elements.

**Key words**: guide, study of mobile design, web development, methodology.

### Introduction.

With the development of mobile devices and the growing number of smartphone users, mobile applications are becoming one of the fundamental means of communication and information perception. The use of new methods such as augmented reality (AR), virtual reality (VR), and artificial intelligence (AI) allows creating unique and personalized interfaces.

Development and implementation of a series of methodological proposals for the dynamic process of creating mobile applications is based on the use of solutions that support the production process of mobile software from idea generation to delivery to the user and servicing [1, p. 12]. However, this process must meet certain requirements of human psychology and design conventions. In the production and use of graphical user interfaces (GUI), the process of grouping information is important, which is a component of visual intelligence and involves the application of knowledge from cognitive psychology. Some authors [2, p. 102] note the effectiveness of grouping based on semantic relevance of component groups, which surpasses other modern methods of object detection. At the same time, the popularity of a mobile application among users determines the design of the interface itself [3, pp. 2-5; 4, pp. 5-8].

Therefore, the development of mobile applications requires a comprehensive approach using innovations from various fields of science, which in turn will help ensure the effectiveness of this web design product in the information space.

#### Main text

The historical aspects of the formation of online advertising, types of platform applications, and their characteristics were studied; the main criteria for creating modern products were identified; the emergence, transformation, classification, and characteristics of mobile application coding languages were researched.

The design of this development is characterized by a minimalist style with an achromatic color palette; the application of interface elements with rounded corners; the development of interface design according to the UI/UX methodology, taking into account the balance of colors, forms, and fonts; the design process in the online tool Figma; filling the application with screens of  $375 \times 720$  pixels for possible adaptation to different device models; creating a quick access panel at the bottom of the screen; using previously researched photographic elements; applying an achromatic color palette of interface elements – black buttons with a light gradient, size –  $260 \times 45$  pixels,  $140 \times 30$  pixels; forms for filling (light-gray color with an internal shadow) –  $245 \times 40$  pixels; selecting three fonts (Arsenal for headings, Montserrat for main text, Montserrat Alternates for accent elements of the interface); balance of all colors and elements according to the rules of web design and composition.

The process of creating a mobile application interface is divided into an informative-research part and the actual interface design. At the first stage, the direction of the application and its value for users, the target audience, and an

analysis of competitors in the market were determined. The second stage was devoted to identifying the main functions of the application, creating prototypes (Wireframes), researching user activity and route (Userflow), interactive prototyping, selecting a color palette, and designing the interface.

## Conclusion and Summary.

This development is considered complete, based on previous research on mobile application development, developed with the use of modern technologies and rules for creating compositions, contains a thoughtfully developed conceptual idea that implies promoting Ukrainian art in Ukraine and beyond, and supporting cooperation between artists and various cultural institutions for ensuring marketing of their goods and services.

For the successful promotion of the mobile application "ArtRoom" in the information space, strategies have been developed, including commercial activities in social networks, cooperation with influencers, optimization of application stores, feedback, cooperation with artists and collectors, organization of events, cooperation with media and journalists, and the use of QR codes and technologies. This toolkit will ensure the success of the mobile application and increase its competitiveness in market.

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