



## **DESIGN DEVELOPMENT AND RESEARCH OF THE MOBILE APPLICATION INTERFACE WITH A GIVEN SET OF FUNCTIONS**

*Dorogaya A., Higher education applicant, Department of MST, KhNURE*  
*Tkachenko V., Professor, Department of MST, KhNURE*

Smartphones are an integral part of our lives, as we use mobile apps every day. The mobile application interface is one of the most important elements that determine the success of a product. Its effectiveness lies in providing users with convenient access to the specified functions. Developing a mobile application interface requires a detailed study of the needs and wishes of the target audience. Only by taking into account the needs of users, the designer can create an interface that provides convenient and easy interaction with the product.

The topic "Design development and research of the mobile application interface with a given set of functions" is extremely relevant nowadays. The results of this research should help to solve the problem of connecting a client with a service provider in an easier way and in a shorter time. This application addresses the problem of calling a tow truck in the Canadian city of Vancouver. Choosing the best interface design option to solve the problem is the main goal of this research work, which can be achieved through the following key tasks:

- analysis of existing methods and principles of interface design, especially for mobile applications;
- review of existing criteria for evaluating the effectiveness of the interface and existing tools for sketching and prototyping interfaces;
- market and target audience research;
- development of a functional concept and design of interface features as low-fidelity prototypes;
- designing UI and UX options for individual screens;
- choosing the format of the questionnaire and forming it. Conducting the survey. Test the design;
- data analysis and evaluation of research results.

The first step in designing an effective mobile application interface is to analyze existing methods and principles of interface design. This part of the research explores the various methods and principles of UI and UX design that can be used to create an effective mobile application and the best practices of UI and UX design used in modern mobile applications.

The success of a mobile application largely depends on how simple and intuitive its interface is. To achieve this, it is necessary to take into account the principles of interface design, which are based on logic and contribute to the easy orientation of users in the product. The study of the mobile application interface



allows to identify weaknesses and improve user interaction with the product. This can reduce the number of mistakes users make and increase their satisfaction with the product.

In addition, a given set of functions of a mobile application should be logically and clearly displayed in its interface. To achieve this, you can use a variety of design techniques that allow you to create an intuitive interface. Simplicity in interface design is also important. An overly busy or confusing interface can frustrate users and lead to errors or abandonment of the application.

It is important to understand the needs and preferences of the target audience. User research, such as surveys or user testing, should be conducted to gather feedback and insights from potential users. This information can be used to shape design decisions and ensure that the interface meets user expectations.

To achieve the goal of choosing the best design, one of the methods of user usability research should be chosen - a survey. It results in the users' assessment of efficiency, and satisfaction, which are some of the main principles of usability evaluation. The questions in the questionnaire are mainly about the users' impressions of the information viewed in the dynamic prototyping application. The survey will give good insights into the problems.

#### References

1. Krug, S. (2014). Don't make me think: A common sense approach to web usability (3rd ed.). New Riders.
2. Cooper, A., Reimann, R., & Cronin, D. (2014). About face 3: The essentials of interaction design (4th ed.). Wiley.
3. Fling, B. (2009). Designing for mobile: A practical guide. O'Reilly Media, Inc.