## RESEARCH, DESIGN AND DEVELOPMENT OF SOFTWARE COMPONENTS OF THE SERVER PART OF THE APPLICATION FOR BEAUTY SALON

Borzova, Y.S., Lutenko, I.V.

National Technical University «Kharkiv Polytechnic Institute», Kharkiv

Introduction. The beauty industry is experiencing significant growth both in Ukraine and internationally, as indicated by various research findings [1]. This prompted the development of an application aimed at streamlining the everyday tasks and organizational aspects for beauty professionals.

Objective. The primary goal is to cut down on the time spent by professionals in scheduling and coordinating their work, ultimately boosting overall efficiency.

Main Part. This study employs advanced mathematical models to delve into the statistical data and detect emerging patterns in the application's usage.

Key metrics such as the average earnings of beauty professionals, service popularity, the balance between pricing and quality, demand projections, and analysis of repeat service bookings and pricing trends have been thoroughly examined [2].

Furthermore, comprehensive recommendations have been formulated concerning optimal pricing strategies and service relevance within the application's catalog. These insights aim to optimize business processes within the beauty industry, fostering greater competitiveness and ensuring heightened customer satisfaction.

Mathematical modeling serves as the cornerstone for deriving valuable insights into application usage statistics and industry trends.

Conclusions. The resultant "Beautify" application stands as a testament to meeting both the functional and non-functional requirements set forth. Its versatility caters to the needs of both beauty professionals and clientele alike. Notably, the application has succeeded in reducing scheduling time for professionals by a remarkable 30%. Additionally, the frequency of errors among professionals in the control group has seen a significant decline of 2.4 times. It's worth noting that a majority of participants in the control group were novice professionals.

## **References:**

- 1. Тімофеєв С. В., Тимофеев С. В. Аналіз ринку косметологічних послуг в Україні та світі. // http://dspace.nuph.edu.ua/handle/123456789/22596 , 23.04.2024.
- 2. Котуранова Т.В., Семенова О. О. Проблеми та перспективи розвитку косметологічних послуг в Україні // Економічний простір. 2017.