

Hrabovskiy, Y., Bondarenko, D., & Starkova, O. (2024). Development of a methodology for creating a website for online healthcare services. *EUREKA: Physics and Engineering*, (5), 183-200. <https://doi.org/10.21303/2461-4262.2024.003440>

Abstract

The aim of this research is to develop a method for creating an online service site in the field of health care. The object of research is the process of developing a medical website. The developed site of online services of the medical institution is a partial implementation of the medical information system. The creation of the methodology for the development of the site of online services in the field of health care was carried out on the basis of the development of API methods (Application Programming Interface methods) and functionality on the site server, which provides the opportunity to interact with eHealth and will allow integration with other medical systems. A feature of the created medical information system is interaction with the centralized eHealth system. API documentation, which is publicly available, is used to interact with the eHealth system. The choice of tools for the development of a medical information system is substantiated. For this, alternative variants of means of developing the client side of the site are determined and the importance of each means was calculated. Super Decisions software is used to determine the importance of criteria and compare alternative options. With the help of the Super Decisions program, the React framework is chosen for the development of the client side of the site. The structure of the website of online services in the medical field is developed, the client and server sides of the product are practically implemented. Development of the server part of the site was carried out based on integration with third-party systems and creation of API methods for exchanging information on the client side. Criteria are defined and programming languages for backend development are analyzed. PHP (Hypertext Preprocessor) language is chosen based on the analysis of reasonable criteria. Symfony is chosen as the PHP framework. A graphic representation of the structure and navigation of the site is developed. The procedure for setting up the environment and raising the project according to the selected technologies is proposed. Integration of the developed site with eHealth is proposed. Experimental testing of the developed site for online services in the field of health care is performed.

Keywords: medical information system, API documentation, eHealth, site of online services in the field of health care.