

METHODOLOGY OF RATING ASSESSMENTS OF TOOLS FOR CREATING WEB APPLICATIONS

Yuriy SKORIN,

PhD in Technical, Assoc. Prof.

ORCID ID: 0009-0004-5218-6369

Semen Kuznets Kharkiv National University of Economics,
Kharkiv, Ukraine

The choice of effective technologies and tools greatly simplifies the process of creating a web application for both the contractor and the customer. After all, the timing of development and the quality of the final product, its performance depend on the choice of technologies and means of creating web applications. In modern conditions, tools and technologies for creating web applications are constantly updated, new ones appear, some are outdated, for high-quality work you need to have up-to-date information. The purpose of the study is to facilitate the selection of effective technologies and tools for creating web applications.

To do this, you need to perform the following tasks: to conduct a study of the current state of tools for creating web applications; analyze technologies and tools for creating web applications; conduct research on technologies and tools for creating web applications; comparison of technologies and tools for creating web applications; review the methodology of rating assessments, development of evaluation criteria; to carry out an experimental study of the method of rating assessments; to review methods for choosing effective tools for creating web applications; develop evaluation criteria; evaluate the tools for building web applications; analyze survey data; to experimentally investigate the improved method of rating assessments.

The relevance of the study is due to the high demand for the use of web applications.

The scientific novelty lies in the improvement of the method of rating assessments, which allows saving time for development and improving the quality of the software product by creating appropriate evaluation criteria.

The methods of scientific research are the method of rating assessments, the method of selection and the method of comparison. Practical value of the study – the results of improving the method of rating assessments can be used by IT companies to save resources and create high-quality software products.

The prospect of the study is to improve the choice of effective technologies and tools for creating web applications through the introduction of new selection methods.

The widespread use of web applications and the abundance of technologies and tools for creating web applications causes the problem of selecting technologies and tools for creating a particular web application. After all, the success of the web application, its security, interactivity, performance and stability depend on the technologies and tools used.

The method of rating evaluations begins with the selection of criteria for choosing technologies and tools for creating a web application, then their importance is determined. Importance is usually established through peer review. The final value of the rating is determined by summing up the products of the importance (weight) of the criterion for its expert assessment for each technology or tool for creating a web application. By calculating the rating of various technologies and tools for building web applications and comparing the values obtained, the best technology or tool is determined. If the rating assessment of two or more technologies and tools for creating web applications according to the main criteria coincide, then the procedure is repeated using additional evaluation criteria. The rating evaluation method used in the analysis of technologies and tools for creating web applications is a numerical or ordinal indicator of performance or popularity and shows the importance or impact of a particular object or condition. The indicator of evaluation of efficiency and popularity at a certain point in time, which is determined by expert opinion or sociological survey, is determined by what place it occupies among its counterparts. So, the method of rating assessments is a system of rules and approaches to studying the effectiveness, in our case – technologies and tools for creating web applications using performance indicators by determining the place of each technology or tool in the overall process of creating a web application. The use of monitoring is also effective, which involves several measurements of the object under study and subsequent analysis, evaluation, comparison of the results obtained to determine patterns, trends, variables and their dynamics. Thus, the evaluation method is a means of monitoring technologies and tools for creating web applications, and it, like any method, is based on principles. Scientific principles are requirements for the construction of a theory, which are formed as primary, underlying a certain set of facts. When characterizing different systems, the principles reveal those essential characteristics that are responsible for the correct functioning of the system, without which it would not fulfill its purpose.

In the process of performing the work, the scope of use of web applications was analyzed, the current state of tools for creating web applications was characterized, and methods for choosing effective tool technologies for creating a web application were considered. The need to improve the method of choosing technologies and tools for creating web

applications was identified. The process of creating web applications is considered in detail, popular technologies and tools used in the creation of web applications are examined, and the further development of these tools is analyzed. The method of rating assessments was theoretically and methodically studied, namely, all stages of the method were examined, its advantages and disadvantages were determined, and the criteria for evaluating tools for creating web applications were considered. The methods of calculating the rating score and possible options for improving the method are considered. An experimental study of the improved method of rating assessments was also conducted. With the help of Google Forms, a survey was conducted on the evaluation of tools for building web applications and their evaluation criteria. The results of the survey were analyzed and calculated using Microsoft Excel and the adequacy of the experiment was proven. During the work, the following tasks were completed: familiarized with the literature on the topic; the current state of tools for creating web applications is investigated; technologies and tools for creating web applications are analyzed; the methods of choosing effective tools for creating web applications are examined; the method of rating assessments has been investigated; evaluation criteria have been developed; Evaluation of tools for creating web applications was carried out; survey data were analyzed; An improved method of rating assessments has been experimentally investigated. The results of improving the rating evaluation method can be used by developers or IT specialists. IT companies to select effective tools for creating web applications. The prospect of the study is to improve the method of rating assessments by developing criteria for evaluating tools for creating web applications, this will allow choosing technologies and tools according to the necessary criteria.

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