ABSTRACT

Explanatory note size — 105 pages, contains 7 illustrations, 35 tables, 34 references, 5 applications.

Topicality. Testing plays an important role at every stage of software development, allowing to find errors in the program code, on the graphical interface, and to track the correctness of the work of certain sequential actions. There are two testing methods: manual and automated testing. The difference between them lies in the execution time and expendable resources. The essence of automation is to minimize manual software testing. However, the methods of implementing automated testing in software are not convenient and universal, which leads to certain difficulties during implementation. Therefore, the development of software that will provide the opportunity to add universal functions of automated testing events is a relevant topic.

The aim of the study. The main target is to simplify the implementation of the event functions to the automated testing tool.

The object of research: software for automated testing.

The subject of research: instrumental tools of automated testing.

To archive this goal, the **following tasks** were formulated:

– analysis of the subject area;

– review of existing methods and solutions;

– develop an architectural solution that will make it easy to implement the event function of the automated testing tool without needing changes in other levels of the architecture;

– provide a variety of types of event functions;

– develop a web application in which testing can be managed. It`s creation of test scenarios, creation of data set, creation of information about the project that will be tested.

The scientific novelty of the results of the master`s dissertation is an architectural solution is proposed, with the help of which the implementation of new

actions of the automated testing tool occurs without the need for changes in other levels of the architecture.

The practical value of the obtained results is that the developed architecture helps to easily implement universal event functions for the software developer. The end user receives a web application in which he could create and run test scenarios.

Relationship with working with scientific programs, plans, topics. Work was performed at the Department of Informatics and Software Engineering of the National Technical University of Ukraine «Kyiv Polytechnic Institute. Igor Sikorsky».

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