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METHODS OF TESTING DESKTOP AND WEB APPLICATIONS

Today the process of software development includes many aspects but special attention is paid to testing. Software testing is an assessment of the product software being developed to check its capabilities, abilities and compliance with the expected results. To do this, you need to consider the internal structure of the program and make some reasonable assumptions about the presence of errors and their grouping in different parts or modules of the program. At the same time, it is desirable to qualify groups of errors: errors made by experienced programmers, errors made by low-skilled programmers, or errors that are the result of poorly developed common ideas. Early detection of such groups of errors increases the efficiency of the testing process, for example, if more errors are found in any part of the program than in others, additional psychological, economic or technical efforts should be directed to 120 of its testing. So, the **aim** of our investigation is to present testing methods of desktop and web applications.

As we have seen from the studied sources, today there are the following testing methods, as: black box method, white box method, gray box method. If we consider object-by-object testing, it can be divided into functional testing, user interface testing, localization, speed and reliability, security and compatibility testing. Subjects of testing: alpha-tester, beta-tester [1; 3].

There are the following testing criteria:

- 1) positive testing;
- 2) negative testing

First, the elements are tested and the results of the software coding stage are checked. In the second step the integration testing focuses on the detection of errors at the design stage. On the third turn of the spiral, correctness testing is carried out, which verifies the correctness of the software requirements analysis stage. At the final turn of the spiral system testing is carried out, reveals defects of the stage of system software analysis.

The researchers describe each step of the testing process:

1. Testing elements. The goal is to check each module individually. Methods of testing the "white box" are used.
2. Integration testing. The goal is to test the Assembly of modules into a software system. The test techniques "black box" are mainly used.
3. Testing of correctness. The goal is to check the implementation of all functional and behavioral requirements, as well as efficiency requirements in the software system. Only black box testing methods are used.
4. System testing. The aim is to verify the correct integration and interaction of all elements of a computer system, the implementation of all system functions [2].

The organization of the testing process in the form of an evolutionary expanded spiral provides maximum efficiency of error detection.

Conclusion. Thus, the ultimate goal of testing software applications is to obtain a quality software product for the information system while maximizing the effectiveness of investments in testing (or maximizing the number of errors detected by one test).

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