

УДК 62-97/-98

Mikhaylo Fisun<sup>1</sup>, Svitlana Voitenko<sup>2</sup>

<sup>1</sup>student of group E-411 en NU “Zaporizhzhia Polytechnic”

<sup>2</sup>senior teacher NU “Zaporizhzhia Polytechnic”

## **METHODS OF SOFTWARE TESTING**

There are numerous types of software testing techniques that you can use to ensure that changes to your code work as expected. Not all testing is created equal, however, and we explore how these testing practices differ: BlackBox Testing, WhiteBox testing, and others.

In BlackBox testing, a tester uses the software to verify that it works correctly in every situation. However, the test remains completely unaware of the software’s internal design, back-end architecture, components, and business/technical requirements. The purpose of black-box testing is to find performance flaws, missing functionality (if any), initialization errors, and glitches that may occur when accessing an external database.

In whitebox testing, testers verify systems that they know intimately, sometimes even systems that they have created. Whitebox testing is used to analyze systems, especially when performing unit, integration, and system testing.

Functional testing is designed and executed to verify every feature of a website or application. It verifies that each feature works according to the expectations defined in the corresponding requirements documentation.

There are several subsets of functional testing, the most prominent of which are: UnitTesting, IntegrationTesting, AcceptanceTesting, NonFunctionalTesting, PerformanceTesting, and others. For example, in

UnitTesting, each individual component is tested before the developer submits it for assembly. In SystemTesting: all system elements, hardware and software, are tested for overall functionality to check that it works according to the specific requirements of the system.

Usability Testing: Usability testing is performed to verify that the software can be used by the actual target users without any problems. It is put into the hands of a few potential users to get feedback before it is actually used.

Visual testing: Visual testing verifies that all UI elements display as expected, with the correct shape, size, color, font, and placement.