

## **Manual testing**

Manual software testing is when human testers check the quality of a new application without using automation tools or scripting. The purpose is to identify bugs or defects, ensure the product is error-free, and check it conforms to specified functional requirements.

The process compares the behavior of a software application (or one of its components or features) with the expected behavior which was defined in the initial phases of the software development life cycle (SDLC).

Manual testers design test cases or scenarios with 100 percent test coverage and execute them one by one before verifying the results. They ensure that any reported issues are passed to the development team to fix, and then tested again.

### **Integration Testing**

Integration Testing is the process of testing an application with two or more integrating components. It is performed once the individual components have been unit-tested, and aims to identify problems with the interfaces and the interactions between them. System Testing

### **System Testing**

means testing the system as a whole, once all its components have been unit-tested and integrated. It checks that the complete application works as intended, by comparing it against the original requirements.

### **Unit Testing**

This is when the individual units or components of an application's source code are tested, to make sure each function performs as expected. It is usually carried out by developers rather than engineers, as it requires detailed knowledge of the internal program design and code.

### **Acceptance Testing**

User Acceptance Testing (UAT) is performed by the client or end-user, to confirm that the software meets the agreed requirements. Sometimes called pre-production testing, it takes place during the final phase before releasing the product to market.

### **White Box Testing**

White box Testing, also known as glass box or transparent testing, is an approach in which the QA is familiar with the internal code or structure of the application. It is primarily used for unit testing. White box Testing also covers specific techniques like data flow testing, control flow testing, decision coverage, and path testing, and a few others.

### **Black Box Testing**

Black box testing is one type of manual testing that examines the software's functionality without peering into its internal structure and coding.

The primary source in this type is the requirements specified by the users. The first tester creates positive test scenarios and adverse test scenarios by considering valid and invalid input to validate whether the software is working properly or not.