

Testing terms and their use

I will start with talking about the 4 agile testing quadrants. It refers to a diagram with two axis.

Axis 1: Tests that support the team during development / Tests that critique the product

Axis 2: Tests facing business / Tests facing technology

This will give us four Quadrants which we can place the different types of test.

Quadrant 1 - Technology-facing tests supporting the team:

This contain the tests that test the code itself, Unit/Component tests. This are the test you are gone use to make sure that the code are work and has a good quality. The tests are automated and verifies the behavior of part of the systems work they you intended.

Quadrant 2 - Business-facing tests supporting the team:

The quadrant contain the tests that support the development team at a higher level. The focus on the system requirements, external quality and the features the customer wants. You use functional tests, prototypes and story tests. This can be automated or manually tests.

Quadrant 3 - Business-facing tests critiquing the product:

These tests focus on providing feedback to quadrant 1 and 2, by running the working software and see if it meet the expectations. This are test that only can be done manually by a human. It is test like Exploratory, Scenarios, Usability and User acceptance testing, this also include alpha and beta testing. They types of test all allow the customer test the software and see if it work like intended, and you may be able to gather new idea for new requirements.

Quadrant 4 - Technology-facing tests critiquing the product:

These tests focus on the Non-functional requirements, like performance, robustness,integration and security in the software. Some of this may be more important than some functional requirement. For this test you normally use tools to perform, performance, Load, Stress, Maintainability, scalability, security tests.

System Testing:

Is where you are testing a complete and integrated software system to evaluate if it fulfills the set requirements and validates the systems as whole. It is most often the final test to verify that the system to be delivered meets the specification. System Testing looks a both functional and non-functional testing, Requirements/events/input and outcomes.

It is use to test the big picture of the software, and we used because we make the assumption that Test of units cannot guarantee a correctly functioning system. Some defects can only be revealed at system level. There are many types of system testing black box tests, Scalability, Load, Stress, Reliability, functionality, usability and security testing.

Exploratory testing:

Explorative testing is not a testing technique, but a way of thinking about tests.

The main advantage of exploratory testing is that less preparation is needed and accelerates bug detection. Disadvantages are that they are performed on the fly and can't be reviewed in advance.it is difficult to show exactly which tests have been run. The main aspect of exploratory testing is learning about the software, its use, strengths, weaknesses, what it does and doesn't do and what works and doesn't work. You often use tools, including screen capture or video tools as a record of the exploratory session.