Descriptive essay - Martin Mačej

The 4 agile testing quadrants

The 4 agile testing quadrants is a tool in an agile methodology used as guideline in order to test product.

First quadrant is focused on technical part of the product with activities such as unit testing, component testing or other automated test scenarios depending on the product (e.g. API tests or Web Service tests).

Second quadrant is a combination of automated and manual testing since its role is to discover whether the product meets customer requirements (functional tests).

In the third quadrant, we combine exploratory testing with "real life" testing. By that I mean manual user acceptance testing to see whether users are able to use the product. By further inspection of the user behavior or experiences we can discover issues or potential, future, problems. In order to secure enough time for this quadrant developers have to do their best to get some time on first two quadrants (do as automated as possible).

The last quadrant could be also called as "polishing" since its role is to improve imperfections, such as security or performance & load testing. In this quadrant so-called "-ility" testing takes part. By that we mean for example availability/reliability testing, scalability testing or portability testing, which in some cases is essential.

Exploratory Testing

Exploratory testing is also described as an activity of continuous learning, designing test and executing them. As a main benefit of exploratory testing we can mention that it doesn't require a lot of preparation as well as that crucial failures in a product are found in a short time period. However due to its freedom it is hard to keep track what was tested and what's not since we lose opportunity to revision.

System Testing

System testing belongs to a category of black-box testing, meaning it does not require any knowledge about inner structure (logic). Its aim is to research whether the product has met its requirements on both hardware and software level. While performing system testing we can consider multiple types of testing such as volume testing, stress testing, security testing, maintenance testing and many others.