## **Descriptive Essay**

The 4 agile testing quadrant is a terminology used to describe, visualize and group different tests together, to make them easier understandable.

In what's called quadrant one, we've got the testing to primarily support the development team. These are automated tests, will primarily consists of unit tests. This quadrant encourages test driven development. To ensure quality and increase confidence level of produced code.

Quadrant 2 are also tests designed to help the development team. The primary difference between quadrant 1 and 2, are quadrant 2 focuses on the business/customer side of the product. In other words, these are the tests someone with no coding knowledge would be able to write. When X is input in this field, I expect to get Y in return. They are a mix of automated and manual tests. Another test in quadrant 2 could be user interface design. Someone have to design the user interface, and feedback always improves a product.

Quadrant 3 and 4 focuses more on the tests which can be used to provide feedback and critique the product. Side note, critique isn't exclusively negative. Positive critique, and feedback can be found with these tests as well. The tests in quadrant 3 are primarily manual. We try to simulate a real user as best as possible. We might script our way out of writing large amounts of test data, but most of the input will simulate a real user. One of the tests which could be conducted in this quadrant are user acceptance testing (UAT). UAT is a good way to get feedback from users/customers, and get/think of new stories to add to the development list(backlog or the like).

Quadrant 4 focuses more on the technologically aspect of the system. Such as performance and security. In this quadrant we could test to see if our system would crash if an abundance of users/customers were to use it. We could try to test for SQL injection, firewall holes, or any other unwanted security risk.

System testing is the purpose of testing entire systems. These tests should be done after integration tests. They should require no programming knowledge, and falls into the category of black box testing. The tests conducted in system tests are derived from all components which have successfully passed integration tests.

Exploratory testing is the sort of testing Quality Assurance(QA) people usually conduct. Trying to think as a user, and of the different ways of interacting with the system. They come up with tests to cover all possible (not necessarily realistic) cases a potential user could encounter. They probe and prod the system, trying to find flaws and defects. This will only benefit the system. Improving its quality, security and confidence.