# **Agile Testing-**

Agile testing is a software testing process that follows the principles of **agile software development**. Agile testing aligns with iterative ***Development Methodology*** in which requirements develop gradually from customers and testing teams. The development is aligned with customer requirements. Agile testing is a continuous process rather than being sequential. The testing begins at the start of the project and there is ongoing integration between testing and development.  The common objective of agile development and testing is to achieve a high product quality.

# **Principles of Agile Testing-**

1. **Testing is continuous:** Agile team tests continuously because it is the only way to ensure continuous progress of the product.
2. **Continuous feedback:**Agile testing provides feedback on an ongoing basis and this is how your product meets the business needs.
3. **Tests performed by the whole team:** In a traditional [software development life cycle](https://reqtest.com/testing-blog/what-test-managers-should-know-about-the-software-development-life-cycle/), only the test team is responsible for testing but in agile testing, the developers and the business analysts also test the application.
4. **Decrease time of feedback response:** The business team is involved in each iteration in agile testing & continuous feedback shortens the time of feedback response.
5. **Simplified & clean code:** All the defects which are raised by the agile team are fixed within the same iteration and it helps in keeping the code clean and simplified.
6. **Less documentation:**Agile teams use a reusable checklist; the team focuses on the test instead of the incidental details.
7. **Test Driven:**In agile methods, testing is performed at the time of implementation whereas, in the traditional process, the testing is performed after implementation.

# **Agile Testing Methods-**

1. Behaviour Driven Development (BDD)
2. Acceptance Test Driven Development (ATDD)
3. Exploratory Testing

## **Behaviour Driven Development-**

Behaviour Driven Development (BDD) improves communication amongst project stakeholders so that all members correctly understand each feature before the development process starts. There is continuous example-based communication between developers, testers, and business analysts.

The examples are called Scenarios which are written in a special format called Gherkin Given/When/Then syntax.  The scenarios hold information on how a given feature should behave in different situations with different input parameters. These are called “**Executable Specifications”**as it comprises of both specification and inputs to the automated tests.

## **Acceptance Test Driven Development (ATDD)**

## ATDD focuses on involving team members with different perspectives such as the customer, developer, and tester.  **Three Amigos** meetings are held to formulate acceptance tests incorporating perspectives of the customer, development, and testing.  The customer is focused on the problem that is to be solved, the development is focused on how the problem will be solved whereas the testing is focused on what could go wrong.  The acceptance tests are a representation of the user’s point of view and it describes how the system will function.

### **Exploratory Testing**

## In this type of testing, the test design and test execution phase go hand in hand. Exploratory testing emphasizes working software over comprehensive documentation. The individuals and interactions are more important than the process and tools. Customer collaboration holds greater value than contract negotiation.

## **Advantages of Agile Testing-**

* It saves time and money
* Agile testing reduces documentation
* It is flexible and highly adaptable to changes
* It provides a way for receiving regular feedback from the end user
* Better determination of issues through daily meetings