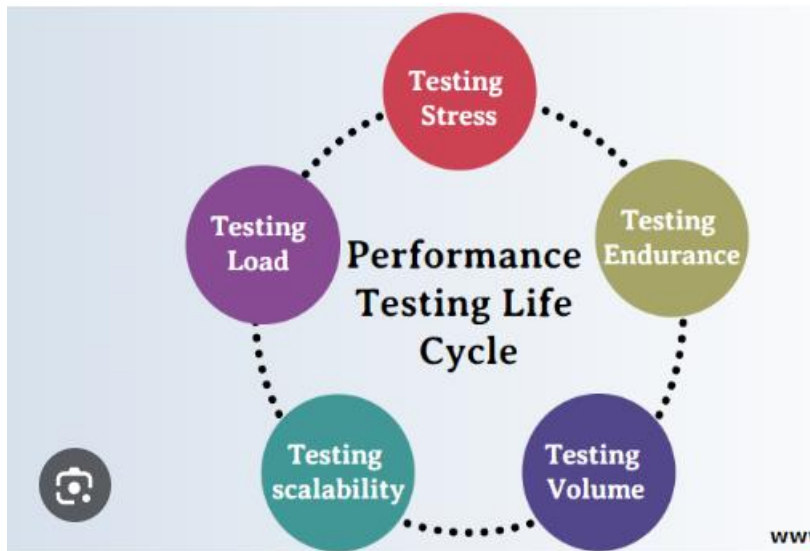


PERFORMANCE TESTING:

It is the most important non-functional testing



CHECKING THE BEHAVIOUR OF AN APPLICATION BY APPLYING SOME LOAD IS CALLED AS PERFORMANCE TESTING

What we need to focus on while doing performance testing is load, Response time and Stability

Load: how many people or task the system can handle

Response Time: how fast the system reacts to a request

Stability: how well the system performs over time and different condition

EXAMPLE

Consider you are sitting in a restraint

Load: how many people are there in a restaurant?

Response time: how fast the waiter is bringing in the food after taking order

Stability: if the restaurant is jam-packed and then also the restaurant is running smoothly that means that the restaurant is stable

WHEN WE USE PERFORMANCE TESTING

We will do performance testing once the software is stable and have moved to production, and it may be access by multiple users concurrently, due to this reason, some performance issue may occur, To Avoid these performance issue, the tester performs one round of performance testing

Types of performance Testing

1. Load: how many people or task a system can handle comfortably at once

For example we make simulation of hundreds of users and see how the system works

2. Stress: how system behaves when push to its limits or beyond

We simulates users to check the breaking point of website

3. Scalability: how well the system handles growing amount of work by adding more resources

Gradually increasing the number of users and test the resources behaviours

4. Stability how reliable the system keeps working smoothly over time and in different situation

Checking's for crashing, slowdowns of software's

WHAT ARE DIFFERENT PERFORMANCE TESTING TOOLS

- JMETER
- LOADRUNNER
- GATLING
- BLAZEMETER
- NEW RELIC
- K6