**Performance Testing:** is a practice conducted to determine how a system performs in terms of responsiveness and stability under a particular workload, it can also serve to investigate, measure, validate or verify other quality attributes of the system, such as scalability, reliability and resource usage.

* **Connection Time:** Time to connect to server from client.
* **Response Time:** is a measure of how responsive an application or subsystem is to client request.
* **Throughput:** indicates the **number of transactions per second an application can handle,** the number of transactions produced over time during a test. Requests per second, calls per day, hits per second, reports per year etc.
* **Scenario:** In the context of performance testing, a scenario is a sequence of steps in your application. A scenario can represent ta use case or a business function such as searching a product catalog, adding an item to a shopping cart, or placing order.
* **Bottleneck:** Used to describe a single part of a system that prevents further processing or significantly degrades the performance of the system.
* **Capacity:** The degree to which a system can perform data processing degrades. For example, the number of new customers being added to a database.
* **Concurrency:** Normally this means that the number of simultaneous virtual users driving transactions across the user journeys in a given performance test scenario but can also mean the number of transactions synchronized to happen at exactly the same point.
* **Key Performance Indicators (KPI):** The Set of targets which set the expected performance targets within the production system. These may include page response times (e.g. 99% of pages loaded <=2 seconds), user concurrency, batch processing times, data throughput volumes, transaction failure rates, and underlying infrastructure behavior (e.g. Maximum Average CPU used, Minimum Free Memory Available, thresholds for remaining physical storage / disk usage, logging space etc.)
* **Load Testing:** A type of performance Testing used to evaluate the behavior of a system or component when the load on the system (via users and transaction) progressively increases up to and including peak levels
* **Non-functional requirements (NFRs):** Requirements that do not relate to the functioning of the system, but to other aspects of the system such as reliability, usability and performance.
* **Performance Engineering:** Activities designed to ensure a system will be designed and implemented to meet specific non design and implementation.
* **Performance Test Plan:** typically, a written document that details the objectives, scope, approach, deliverables, schedule, risks, data and test environment needs for testing on a specific project.
* **Performance Testing:** Testing designed to determine the performance levels of a system.
* **Reliability:** Related to stability, reliability is the degree to which a system provides the same result for the same action over time under load.
* **Scalability:** The degree to which a system’s performance and capacity can be increased typically by increasing available hardware resources within a set of servers (vertical scaling) or increasing the number of servers available to service requests (horizontal scaling)
* **Soak Testing:** A Type of performance testing used to evaluate the behavior of a system or component when the system is subjected to expected load over a sustained period of time.
* **Spike testing :** a type of performance testing used to evaluate the behavior of a system