

# *JMeter*

## *Upskill Training*

# JMeter

- **Performance Testing:** Monitoring and measuring overall performance of an application regardless of load. It is an umbrella term where the concern is to collect metrics such as availability, response time and stability.
- **Load Testing:** Applying simulated load to an application and measuring the impact on the application performance.
- **Stress Testing:** Subjecting the application to a load to find out the point where the application breaks and understand how the system recovers.

# Performance Testing Tools

- **Apache JMeter**
- LoadNinja
- WebLoad
- SilkPerformer
- LoadRunner
- LoadView
- NeoLoad
- SmartMeter
- AppLoader
- Gatling
- BlazeMeter

# JMeter

- The **Apache JMeter** application is an open source software, pure Java application designed to test and measure performance of an application under load.
- Supports different protocols/services like HTTP, Web Service, LDAP, JDBC, Java, FTP etc.
- Supports distributed testing (remote start option).
- Records and plays back the user activity on the browser.
- JMeter can be used to simulate a heavy load on a server.

# *Installing JMeter*

# Downloading JMeter

- Java 8 or above is required for JMeter
- Use latest version of JMeter
- Download the **binary.zip** file from the following link:  
[https://jmeter.apache.org/download\\_jmeter](https://jmeter.apache.org/download_jmeter)
- Extract the zip file and browse the JMeter/bin directory.
- **Mac:** Use the terminal to open JMeter,
  - either drag the **jmeter.sh** file and hit enter
  - or in the terminal navigate to the jmeter/bin directory and run the following command: `sh jmeter.sh`
- **Windows:** Find the **jmeter.bat** file and double click the file

# Best Practices

- Identify performance testing requirements for the project and use correct number of users based on your test scenario, hardware capabilities and application server
- Demo websites to practice:
  - <https://blazedemo.com>
  - <https://www.demoblaze.com>
  - <https://computer-database.gatling.io/computers>
  - <https://petstore.octoperf.com/actions/Catalog.action>