

## **Apache JMeter Course Syllabus**

- 1. Introduction to Apache JMeter
  - What is Apache JMeter?
  - Features and benefits of JMeter
  - Installing and setting up JMeter
  - Overview of JMeter GUI and components
- 2. Getting Started with JMeter
  - Creating your first test plan
  - Understanding thread groups
  - Adding and configuring samplers
  - Configuring listeners for results analysis
- 3. Load Testing Basics
  - Introduction to load testing
  - Configuring thread groups for load testing
  - Running load tests and analyzing results
- 4. Working with Samplers
  - HTTP/HTTPS requests
  - FTP requests
  - JDBC requests for database testing
  - SOAP and REST API testing
- 5. Controllers in JMeter
  - Logic controllers:
    - Simple Controller
    - Loop Controller
    - If Controller
    - While Controller

- Switch Controller
- Recording Controller for test plan creation
- 6. Assertions and Timers
  - Adding assertions to validate responses
  - Using timers to simulate real-world scenarios
- 7. Parameterization and Correlation
  - Parameterizing test data using CSV Data Set Config
  - Extracting dynamic data using Regular Expression Extractor
  - Correlation techniques for dynamic values
- 8. Advanced JMeter Features
  - Distributed testing with JMeter
  - Using JMeter in non-GUI mode
  - Generating HTML reports
  - Customizing JMeter properties
- 9. Plugins and Extensions
  - Installing and using JMeter plugins
  - Popular plugins for enhanced functionality
- 10. Integrating JMeter with Other Tools
  - Continuous integration with Jenkins
  - Using JMeter with Docker
  - Integrating JMeter with monitoring tools
- 11. Best Practices and Troubleshooting
  - Best practices for creating efficient test plans
  - Debugging and troubleshooting JMeter scripts
  - Optimizing JMeter performance