

JMETER

Introduction:

- ❖ Overview of Performance Testing
- ❖ Performance Testing Concepts
- ❖ Performance Testing Types
- ❖ Why to use performance Testing tool?
- ❖ What is JMeter?

Running JMeter:

- ❖ JMeter's Classpath
- ❖ Using a Proxy Server
- ❖ Non-GUI Mode
- ❖ Distributed Mode

Introduction to Elements of JMeter Test Plan:

- ❖ Thread Group
- ❖ Controllers
- ❖ Samplers
- ❖ Logic Controllers
- ❖ Listeners
- ❖ Timers
- ❖ Assertions
- ❖ Configuration Elements
- ❖ Pre-Processor Elements
- ❖ Post-Processor Elements

Building a Test Plan:

- ❖ Adding and Removing Elements
- ❖ Loading and Saving Elements
- ❖ Configuring Tree Elements
- ❖ Running a Test Plan

Adding Users:

- ❖ Adding Default HTTP Request Properties
- ❖ Adding Cookie Support
- ❖ Adding HTTP Requests
- ❖ Adding Post-Processor for Correlation
- ❖ Adding a Listener to View/Store the Test Results

- ❖ Saving the Test Plan
- ❖ Running the Test Plan

Recording Tests Using JMeter:

- ❖ Creation of Thread Group
- ❖ Adding HTTP Proxy Server
- ❖ Configuring HTTP proxy server
- ❖ Configuring the browser for recording the test script
- ❖ Capturing the test steps using JMeter

Handling the dynamic server values:

- ❖ Handling User Sessions with URL Rewriting
- ❖ Using a Header Manager
- ❖ Handling the dynamic server values
- ❖ Parameterize the user sessions

Parameterize with test data:

- ❖ Identifying the test data on AUT
- ❖ Open a csv file with JMeter
- ❖ Reading the data from CSV files
- ❖ Using the parameters in JMeterTests

Adding Assertions to the test script:

- ❖ Validating the response data related issues
- ❖ Validating the response size related issues
- ❖ Validating the threshold for the server response times
- ❖ Running the tests and analyzing the Assertion results

Building a Monitor Test Plan:

- ❖ Adding Server
- ❖ Adding HTTP Requests
- ❖ Adding Constant Timer
- ❖ Adding a Listener to View/Store the Test Results
- ❖ Adding Monitor Results
- ❖ Saving the Test Plan
- ❖ Running the Test Plan

Running Mutiple Scripts with JMeter:

- ❖ Creating multiple test thread groups
- ❖ Calling the multiple thread groups from a test plan
- ❖ Configuring the threads groups with respective users numbers and ratios
- ❖ Running the load test for multiple thread groups from a Single Test
- ❖ Analyze the user group specific issues
- ❖ Analyze the Test plan specific issues for all user groups

Reporting and Analyzing the Results:

- ❖ Adding the Assertion Results and monitoring
- ❖ Configuring and Generating the Distribution Graph
- ❖ Configuring and Generating the Graph Full Results
- ❖ Generating the Monitor Results
- ❖ Saving the data through Simple Data Writer
- ❖ Configuring and Generating the Spline Visualizer
- ❖ Generating the Aggregate Graph for multi group test
- ❖ Generating the Aggregate Report for multi thread group test
- ❖ Generating the Summary Report

Best Practices:

- ❖ Limit the Number of Threads
- ❖ Where to Put the Cookie Manager
- ❖ Where to Put the Authorization Manager
- ❖ Reducing resource requirements
- ❖ BeanShell server
- ❖ Distributed Testing