Worqference 2023

Systematically start Web Load Testing using Apache JMeter

**Instructor**: Sandeep Garg

Workbook & Estimated Schedule

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| **S. No.** | **Task(s)** | **Total Duration** | **Start Time** | **End Time** |
| 1 | Introduction(s) and agenda | 5 Mins | 02:15 PM IST | 02:20 PM IST |
| **2** | What ***might*** ***help*** building and influence our mental model(s) about load and load testing? | 5 Mins | 02:20 PM IST | 02:25 PM IST |
| **3** | What affects a software system performance badly?   * Some historical facts sharing | 5 mins | 02:25 PM IST | 02:30 PM IST |
| **4** | What ***seems*** NOT so systematic about Load Test Design and ***how to fix it?***   * Capturing and documenting requirements using   + A heuristic   + A principle   + A thinking tool | 15 Mins | 02:30 PM IST | 02:45 PM IST |
| **5** | A quick ***terminology*** and ***concept*** check?   * Types of Load Tests * Transaction * ***Virtual*** Users (Threads) * Correlation * Concurrency * Think Time * Ramp-up | 15 Mins | 02:45 PM IST | 03:00 PM IST |
| **6** | ***Scripting*** a bare minimum test plan by adding elements (***no code***)   * Config elements * Properties and variables * Threads & Samplers * Processors * Assertions & Listeners | 15 Mins | 03:00 PM IST | 03:15 PM IST |
| **7** | A double-edged sword - JMeter’s Record and Playback feature   * Man in the Middle - Proxy * Templates and Recorders - JMeter to capture Traffic * Generating a Web Load Test Plan | 15 Mins | 03:15 PM IST | 03:30 PM IST |
| **8** | Troubleshooting | 5 Mins | 03:30 PM IST | 03:35 PM IST |
| **9** | Script ready for execution?   * Validate and Baseline * Command line | parameterized execution * Distributed execution (Optional) * Cloud execution | 15 Mins | 03:35 PM IST | 03:50 PM IST |
| **10** | Measure what matters and how   * Latency * Response Time * Standard Deviation * Percentiles / Averages or? * Errors | 10 Mins | 03:50 PM IST | 04:00 PM IST |
| **11** | Reporting and Analysis   * The old v/s APDEX way | 10 Mins | 04:00 PM IST | 04:10 PM IST |
| **12** | Case studies   * Shallow tests often work and are useful before going deeper * Requirements dissection using ‘Mary had a Little Lamb’ heuristics | 5 Mins | 04:10 PM IST | 04:15 PM IST |

***Disclaimer:***

1. This schedule is best case and estimated based on past experience(s) of larger workshops.
2. A variance of + [5% - 10%] might be acceptable by The Test Tribe Administrative team, but if not operationally feasible, I assume to be allowed to cover in dedicated Session Q&A: 04:15 PM IST - 04:25 PM IST.