

# Developer WorkBench


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Document History				
Date	Course Version No.	Software Version No.	Developer / SME	Change Record Remarks
21/11/2011	1.0	Maven-3.0	Rathnajothe Perumalsamy	Content Creation
16/05/2016	1.1	Maven-3.3.9	Zainab	Modified as per TOC for ELTP

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## Course Goals and Non Goals

- Course Goals

- Enabling Java/JEE projects to be build efficiently
- To understand PMD Tool with Eclipse

- Course Non Goals

- Generating reports and continuous integration of projects using Maven



## Pre-requisites

### Course Pre-reqs:

- Learners should possess the following Technical Skills:

- Java
- Servlets
- JSP
- XML
- Working knowledge in Eclipse Luna

- Lab should have the following Software Requirements:

- Java 8
- Eclipse Luna
- pmd-eclipse-site-3.2.3.v200712041040.zip
  - Can be downloaded from <http://pmd.sourceforge.net/index.html>

## Intended Audience

- Developers.



## Day Wise Schedule

### ■ Day 1

- Lesson 1: Introduction to Maven and Benefits
- Lesson 2: Maven Basics
- Lesson 3: Getting started with Maven
- Lesson 4: Creating applications using Maven in Eclipse Luna
- Lesson 5: PMD Tool

## Table of Contents

- Lesson 1: Introduction to Maven

- 1.1. Maven Overview
- 1.2. Maven's Principles
- 1.3. Benefits of Maven

- Lesson 2: Maven Basics

- 2.1. POM
- 2.2. Standard Directory Layout
- 2.3. Plugins
- 2.4. Build Life Cycle
- 2.5. Dependency Management
- 2.6. Resolving Dependency Conflicts
- 2.7. Repositories

## Table of Contents

- Lesson 3: Getting started with Maven
  - 3.1. Installation and setup Maven
  - 3.2. Creating your First Project using Maven Commands
- Lesson 4: Creating Applications using Maven
  - 4.1. Testing your Application
  - 4.2. Setting Maven in Eclipse Environment
  - 4.3. Generating Java Projects using Maven in Eclipse Luna
  - 4.4. Creating Web application projects using Maven



## Table of Contents

- Lesson 5: PMD
  - 5.1: What is PMD?
  - 5.2: PMD Rule Sets
  - 5.3: PMD Usage
  - 5.4: Integration with IDE
  - 5.5: PMD in Action
  - 5.6: Customizing PMD

## References

### ■ Books

- Apache Maven2 Effective Implementation by Maria Odea Ching and Brett Porter.
- Better Builds with Maven by Vincent Massol and Jason van Zyl
- The Maven Handbook by Tim O'Brien, Stuart McCulloch and Brian Demers. (Sonatype)
- Apache Maven 3.0 Cookbook by Srirangan



## References

- Websites

- <http://www.maven.apache.org>
- Maven 2 Plugins Project
- <http://mojo.codehaus.org/>
- <http://maven.apache.org/plugins/index.html>
- <http://pmd.sourceforge.net/>

- Popular Repository

- <http://repo1.maven.org/maven2/>

- Repository for Jboss

- <http://repository.jboss.org/maven2>



## Other Parallel Technology Areas

- Ant
- Gradle
- Buildr