10. Chapter Overview

1. We will learn the following in this chapter.
   1. Configuring inheritance b/w projects. b. Modifying projects using profiles. c. Setup Project using the archetype plug-in.

11. Project Setup

1. **4 Required tags:**
   1. **<modelVersion>:** for maven 2, 3, it’s 4.0.0. Required. b. **<groupId>** c**. <artifactId>:** d. **<version>:**
2. **NOTE**: Dot can used in **groupId** whereas that conversion is discouraged when defining the **artifactId**.

12. Additional Project Information

1. 4 required tags describe our pro & **<arctifactId>, <groupId>** = **pro Address** & <**version**> = **timestamp**
2. **Operational Elements**:<packaging> default jar.
3. **Informational Elements: *<name>*** Informal name to use among developers, **<description>:** of pro**,** **<url>:** Info of pro, **<licences><lecense>,** 
   1. **<organization><developers><developer><name><email>**
   2. These all tags info can be used to create **web site of pro.**
4. **mvn site**: site phase within **site life cycle.**

13. Standard Directory Structure

1. Maven uses **Convention over Configuration**. Maven Standard Directory Layout ( Standard Directory Structure) :Pre-defined Directory Structure.
2. **<sourceDirectory>**: Folder having the source codes. **<directory>**: The folder having compiled code (all). Both can have relative or absolute path.

14. Inheritance

1. **Super pom file**: inside **maven-model-builder-3.6.3.jar** (installation), maven-model-builder-3.6.3\org\apache\maven\model\pom.xml
2. **Effective Pom = Super Pom + Your Pom. Command: mvn help:effective-pom**
3. **<packaging>pom**
4. **mvn install: put** pom file and the corresponding jar file under m2/repository.
5. **The child pom:**
   1. Must have at least <artifactId>, <parent> (coordinates of the parent pro)
6. Profiles
7. **Profile**: To make our build process configurable so that our pro can be built on different environments (dev, testing, production):
8. <profiles><profile><id>myId 🡺 mvn compile –PmyId **To run the build with this profile. mvn compile -PmyId**
9. <profiles><profile><activation><property><name>env.MY\_ENV\_VARIABLE><value>itsValue> env. is prefix and MY\_ENV\_VARIABLE is env var (must be CAPITAL)

16. Generating Projects

1. mvn **archetype:generate where** archetype🡸 plugin & generate 🡸 Goal
2. **archetype:** Predefined projects (templates)
   1. when creating project with achetype:generate, give 🡺 groupId (necessary), archifactId(necessary), version