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Maven Fundamentals

- transitive dependencies & its management
- Repeatable builds
- IDE & standalone
- Consistency
- Steeper learning curve

For Unit tests: Pom.xml

src/main/java

Compilation Directory

Four different parts:

Project Information

GroupId same as the Package names

artifactId same as name of application

Version should be 1.0, 2.0, 3.0...

Dependencies are imported by naming

Conventions, groupId, artifactId, version &

Dependencies Section

Goals → Clean, Compile, Package, install, deploy

→ Avoids duplication

Version → release number of Artifacts we use

latest one → SNAPSHOT

Packaging Types

↳ pom, jar, war, ear, maven-Plugins

Default jar

Dependency pom

Scopes → Compile, provided & runtime, test, System, import

Repository → http locations, Super pom.xml, Default location, Default Maven Installation, Multiple repositories allowed, Corporate Repository, Devnet

Dependency Repository:

↳ identical to plugin Repository

Releases/Snapshots → Same repo, Snapshots, Milestones

Plugins → what Maven uses to build &

Release Candidate
Release policies

Super pom has goals defined inherited from pom.xml

phases →
Validate → validate project & structure
Compile → Compile any source in project
Test → Test compiled code
Package → Packages the code in specified package type

Jar Plugin:
↳ Package, Package phase, Configuration, includes/excludes manifest

Source Plugin → Package source code

Javadoc plugin → Package javadocs, Package phase

Pom Viewer → Default View, Highlevel elements

Maven lifecycle:
three inbuilt lifecycles:

default → handles Project deployment

clean → handles project cleaning

site → handles creation of your project's site documentation