What is Build Lifecycle?

A build life cycle consists of a sequence of build phases, and each build phase consists of a sequence of goals.

When you run Maven you pass a command to Maven.

This command is the name of a build life cycle, phase or goal.

If a life cycle is executed, all build phases in that life cycle are executed.

If a build phase is executed, all build phases before it are executed too.

Phase	Description
prepare-resources	Resource copying.
Compile	Source code compilation.
Package	Creates JAR file mentioned in packaging in POM.xml.
Install	Installs the package in maven repository.

A **goal** represents a specific task which contributes to the building of a project.

Clean Lifecycle

1. pre-clean
2. clean
3. post-clean

Its *clean:clean* goal deletes the output of a build by deleting the build directory. Thus when *mvn clean* command executes, Maven deletes the build directory.

Site Lifecycle

Maven Site plugin is generally used to create fresh documentation to create reports, deploy site etc.

Phases

pre-site

site

post-site

site-deploy

Default (or Build) Lifecycle

Lifecycle Phase	Description
validate	Validates whether project is correct and all necessary information is available to build.
initialize	Initializes build state, for example set properties
compile	Compile the source code of the project.
test-compile	Compile the test source code into the test destination directory.
test	Run tests using a suitable unit testing framework(Junit is one).
package	Take the compiled code and package it in its distributable format, such as a JAR, WAR, or EAR file.
verify	Run any check-ups to verify the package is valid and meets quality criteria.
install	Install the package into the local repository, which can be used as a dependency in other projects locally.
deploy	Copies the final package to the remote repository for sharing with other developers and projects.