Maven

What is Maven™?

Maven is an automation tool made by the Apache Software Foundation used to develop Java application, simplifying the tasks of building and testing for developers.

Features

Maven provides developers with many different benefits:

- **Dependency Management**: Maven downloads and implements any library you specify. This allows developers to focus only on their code and avoid worrying about installing dependencies correctly.
- **Project Structure**: Maven enforces its own project structure, which helps maintain a standard in your projects.
- **Plugins**: Users can make their own plugins and extensions, and share them with other developers. This help customize the experience to the user's desires and needs.

How Does it Work?

To create a Maven project, you have to create a POM (Project Object Model) file. This file contains information about your current project and the installed dependencies.

When the Maven tool reads the POM file, it will download the necessary dependencies, making sure they are the correct version.

Finally, Maven can be used to build the current project, test it, and package it, among other tasks.

Example POM file

Why should you use it?

Tools like Maven help developers by automating the easy and repetitive task, which can save a lot of time as well as focus only on their current task.

This tool is also available in many different options, such being included in IDEs like Eclipse, as a VS Code extension, or even as a CLI tool (for terminal fans).