**MAVEN**

**What is maven?**

Maven is a build automation tool used primarily for Java projects. Maven addresses two aspects of building software: first, it describes how software is built, and second, it describes its dependencies.

**what is maven in spring framework?**

**Maven** is software project management tool. **Maven** is used to manage a project's build from a central piece of information. **Maven** is not mandatory for **spring mvc** application development.

**What is maven in Spring?**

Apache **Maven** is a popular open source tool that offers a convention-over-configuration approach to project build management. ... Even though you can use **Spring** without using **Maven**, there are many reasons to recommend its use to **Spring** developers.

**What is the purpose of Maven in Java?**

It is used for projects build, dependency and documentation. It simplifies the build **process** like ANT. But it is too much advanced than ANT. Maven is a build automation tool used primarily for Java projects.

**What is the use of POM XML in maven?**

A Project Object Model or **POM** is the fundamental unit of work in **Maven**. It is an **XML** file that contains information about the project and configuration details used by **Maven** to build the project. It contains default values for most projects.

**ant vs maven**

In short, though **Maven** and **ANT** are build tool but main **difference** is that **maven** also provides dependency management, standard project layout and project management. On **difference between Maven**, **ANT** and Jenkins, later is a continuous integration tool which is much more than build tool.

**which is better ant or maven?**

However, though more standardized than **Ant** files, **Maven** configuration files still tend to get big and cumbersome. **Maven's** strict conventions come with a price of being a lot less flexible than **Ant**. Goal customization is very hard, so writing custom build scripts is a lot harder to do, compared with **Ant**.

**MAVEN IMPLIMENTATION**

* To connect Eclipse with mysql we need mysql Connector that connector is called as the depencency
* To work on spring MVC we need libraries to work with it
* Yes! We can download libraries manually but we need to upgrade libraries frequently as new update comes
* To solve this **MAVEN** is used!
* Maven repository tells hey maven need spring dependencies and maven tells hey we need hibernate dependencies which maven makes works easy which gets all dependencies we need to work
* In which pom.xml file is very important which is defined as the project object model.
* In which it have project id, groupid, artifiedid. And package
* Once we downloaded maven it gets downloaded from remote repository and then we can use again and again . if we want to use that dependencies it will check local repository if the dependencies are their in local it will fectch the details and give it to you.
* If the dependencies are not their it moves to remote and saves to local and displayed to you and the cache will store in the local repository
* Maven is common to spring and hibernate
* In pom.xml file the core java application is used means it shows the jar file. If the web application is used means it shows war file
* If we paste spring dependencies in pom.xml it will automatically download all the jar files we need to work in the project.

**SPRING MVC**

**What is Spring mvc?**

**Spring MVC** is the web component of **Spring's** framework. It provides a rich functionality for building robust Web Applications. The **Spring MVC** Framework is architected and designed in such a way that every piece of logic and functionality is highly configurable

**What is Spring MVC flow?**

In **Spring** Web **MVC**, DispatcherServlet class works as the front controller. It is responsible to manage the **flow** of the **spring mvc** application. The @Controller or @RESTController annotation is used to mark the class as the controller in **Spring** 3. The @RequestMapping annotation is used to map the request url. It is applied on the method.

**What is dispatcher servlet in Spring MVC?**

Front controller is a typical design pattern in the web applications development. In this case, a single **servlet** receives all requests and transfers them to all other components of the application. The task of the **DispatcherServlet** is to send request to the specific **Spring MVC** controller

**Why Spring MVC is used?**

**[Spring](https://www.linkedin.com/pulse/20140926234011-126870701-why-springmvc-still-is-the-most-powerful-java-framework)**[is a powerful Java application framework,](https://www.linkedin.com/pulse/20140926234011-126870701-why-springmvc-still-is-the-most-powerful-java-framework)**[used](https://www.linkedin.com/pulse/20140926234011-126870701-why-springmvc-still-is-the-most-powerful-java-framework)**[in a wide range of Java applications. It provides enterprise services to Plain Old Java Objects (POJOs).](https://www.linkedin.com/pulse/20140926234011-126870701-why-springmvc-still-is-the-most-powerful-java-framework)**[Spring](https://www.linkedin.com/pulse/20140926234011-126870701-why-springmvc-still-is-the-most-powerful-java-framework)**[uses dependency injection to achieve simplification and increase testability.](https://www.linkedin.com/pulse/20140926234011-126870701-why-springmvc-still-is-the-most-powerful-java-framework)

**What is RequestMapping in Spring MVC?**

@**RequestMapping** is one of the most widely used **Spring MVC** annotation. org.springframework.web.bind.annotation.**RequestMapping** annotation is used to map web requests onto specific handler classes and/or handler methods. @**RequestMapping** can be applied to the **controller** class as well as methods.

**Why do we use Spring Framework?**

**Spring**, Hibernate and Struts are not a language, all these are **frameworks** that was **used** in Java Language. It is difficult to build the mobile application without Java **framework**. **Spring** is **used** to develop application from desktop to Web. Hibernate is **used** to access data layer and Struts is **used** for Web **frameworks**.

**Is Spring MVC rest?**

**Spring MVC** Framework and **REST**. **Spring's** annotation based **MVC** framework simplifies the process of creating **RESTful** web services. The key difference between a traditional **Spring MVC** controller and the **RESTful** web service controller is the way the HTTP response body is created

**SPRING IMPLIMENTATION**

* It Is easy to work with it
* Here client sends the request to the web.xml file in their they using spring framework so that it moves to the dispatcher servlet named as the frontController which then call the controller called which the call named @controller called annotation
* To create spring mvc application right click new maven project in which select web app architecture and create project
* And then in index.jsp we can create our content and want to add spring dependencies in pom.xml file and then in web.xml file we have to add servlet name servlet mapping through which the action is fixed.