Pre-requisites:

OOP, classes, interfaces, exception handling, collection framework, inheritance

SpringBoot

Why?

Purpose: To build java application

Must installed:

JDK -> JDK 17 or higher because we are going to use springboot 3.

IntelliJ IDE

The Problem with spring:

Traditional Spring development was tedious Qs:

- 1. Which JAR dependencies do I need?
- 2. How do I set up the configuration? (xml or java)
- 3. How do I install the server? (Tomcat or jboss or etc)
 - & this is just getting started.

SpringBoot is the Solution for this:

- Easier for development
- Provides the embedded server
- It resolves the dependency conflict
- Minimizes the manual configuration part(there is auto configuration.)
- SpringBoot and Spring
 - SpringBoot uses spring BTS
 - SB makes it easier for us
- Spring Initializer (Provide by SpringBoot) start.spring.io
 - Quickly creates a starter spring project.
 - Select dependencies
 - Select build tool (maven/gradle)
 - Import project in IDE
- SB embedded server:
 Provide the embedded server
 - Tomcat , Udertow, JBoss No need to install server separately

Q - Does SB replace Spring MVC, Spring REST,?

ANS: NO, It uses these technologies

Q - Does SB run code faster than regular code?

No, SB uses same code of spring framework.

Maven:

When building our project, we may require additional JAR.

Ex. Spring, Hibernate, JSON, etc

firstApp.jar

OurCode Tomcat

JAR file includes our application code & the server

Self-contained unit

1st Approach:

Download the JAR files manually from each project website.

Manually add the JAR file to our classpath.

Mayen is the Solution:

- Tell maven the projects we are working on (dependencies)
- Maven will go out and download the JAR file for our project.
- Maven will make these JAR files available
 during the execution(compile/run)
- Maven is like our personal helper or shopper (shopping list)

Development Process:

- 1. Configure our project at spring initializer (dependency: Spring Web)
- 2. Download the zip file
- 3. Unzip file
- 4. Import project into our IDE.