spring boot

**ChatGPT said:**

Yesss! 🔥 Now that you're getting comfy with **Spring Core**, it’s the **perfect time** to level up into **Spring Boot** 🚀

**🔰 What is Spring Boot?**

**Spring Boot** is like the **fast track** version of Spring.  
It simplifies setup, configuration, and deployment — so you can focus on building features, not boilerplate.

**🌱 Spring Core vs Spring Boot**

| **Topic** | **Spring Core 💡** | **Spring Boot ⚡** |
| --- | --- | --- |
| Config Style | XML or Annotation (manual) | Auto-config (mostly annotation) ✅ |
| Bean Declaration | Manual in bean.xml | Auto via @Component, @Service, etc. |
| Setup | Needs lots of boilerplate | **Minimal setup** |
| Server | You deploy to external Tomcat | Comes with **embedded server** |
| Dev Speed | Slower | Way faster ⚡ |

**🛠️ What to Learn in Spring Boot (Step-by-Step)**

**1️⃣ Basics**

* ✅ What is Spring Boot?
* ✅ How it simplifies Spring Core?
* ✅ Structure of a Spring Boot app (@SpringBootApplication)

**2️⃣ Create Your First App**

* Using Spring Initializr
* Write Hello World REST API
* Understand application.properties

**3️⃣ Build REST APIs**

* @RestController, @GetMapping, @PostMapping
* JSON request/response using Jackson
* Path variables, query params

**4️⃣ Connect with Database (JPA + H2/MySQL)**

* Spring Data JPA
* @Entity, @Repository, @Service
* CRUD operations

**5️⃣ More Cool Stuff**

* Exception handling (@ControllerAdvice)
* DTO + Validation
* Logging, Profiles
* Lombok usage

**⚙️ Tools You’ll Use**

* ✅ Spring Initializr (<https://start.spring.io/>)
* ✅ IntelliJ or VS Code
* ✅ Postman or curl
* ✅ H2 Console (for testing DB)

**✨ Bonus Tips:**

* Learn by **building small projects** (ToDo App, Student API, Book Store API)
* Understand how **Spring Boot builds on top of Spring Core**