Overview of Spring & Spring Boot

Douglas C. Schmidt
d.schmidt@vanderbilt.edu
www.dre.vanderbilt.edu/~schmidt

Professor of Computer Science
Institute for Software Integrated Systems
Vanderbilt University
Nashville, Tennessee, USA
Learning Objectives in this Lesson

• Understand the structure & functionality of Sprint Boot

See [spring.io/projects/spring-boot](http://spring.io/projects/spring-boot)
Overview of Spring & Spring Boot
Overview of Spring & Spring Boot

- Spring is a dependency-injection framework & an inversion of control container for developing web apps on the Java platform.

See spring.io
Overview of Spring & Spring Boot

• Spring is a dependency-injection framework & an inversion of control container for developing web apps on the Java platform

• Dependency injection is a technique in which an object/service receives other objects/services that it depends on

See en.wikipedia.org/wiki/Dependency_injection
Overview of Spring & Spring Boot

• Spring is a dependency-injection framework & an inversion of control container for developing web apps on the Java platform

• Dependency injection is a technique in which an object/service receives other objects/services that it depends on

• With inversion of control (IoC) the framework runs the main execution thread(s)

See en.wikipedia.org/wiki/Inversion_of_control
Overview of Spring & Spring Boot

• Spring contains various projects

- **Spring Boot**
  Takes an opinionated view of building Spring applications and gets you up and running as quickly as possible.

- **Spring Framework**
  Provides core support for dependency injection, transaction management, web apps, data access, messaging, and more.

- **Spring Data**
  Provides a consistent approach to data access – relational, non-relational, map-reduce, and beyond.

- **Spring Cloud**
  Provides a set of tools for common patterns in distributed systems. Useful for building and deploying microservices.

- **Spring Cloud Data Flow**
  Provides an orchestration service for composable data microservice applications on modern runtimes.

- **Spring Security**
  Protects your application with comprehensive and extensible authentication and authorization support.

See [spring.io/projects](http://spring.io/projects)
Overview of Spring & Spring Boot

• Spring contains various projects
• We focus on Spring Boot 2.0

See www.baeldung.com/new-spring-boot-2
Overview of Spring & Spring Boot

The Spring Boot project makes it easy to create stand-alone, production-grade Web-based applications.

See spring.io/projects/spring-boot
Overview of Spring & Spring Boot

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See en.wikipedia.org/wiki/Client_(computing)
Overview of Spring & Spring Boot

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HTTP is a request–response protocol in the client–server computing model.

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Maps HTTP requests to endpoint methods that handle these requests.

See spring.io/guides/gs/rest-service
Overview of Spring & Spring Boot

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Provide the "business logic" to operate on data sent to & from the data access layer & the client.

See medium.com/stackavenue/why-to-use-service-layer-in-spring-mvc-5f4fc52643c0
Overview of Spring & Spring Boot

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Controllers & services can be connected to their dependent components automatically

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Provide access to persistent data that is mapped to JPA with model classes

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These interactions are typically just Java method calls

See blogs.oracle.com/javamagazine/mastering-the-mechanics-of-java-method-invocation
End of Overview of Spring & Spring Boot