Spring Boot

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Topics

- Spring Boot
- Spring WebFux
- SpringFox
- Spring Data
- Spring Cloud Stream

@SpringBootConfigurationApplication

- Component scanning
- Configuration class
  - java-based Configuration
  - Override Spring Boot's default configuration
- Autoconfiguration

Spring WebFlux

- Reactive, non-blocking, HTTP clients and services
  - WebClient vs. RestTemplate
- Based on Project Reactor
- Styles:
  - Annotation-based imperative
  - Function-oriented on routers and handlers
- Embedded Tomcat or Netty
- spring-boot-starter-webflux

SpringFox

- Swagger

Spring Data

- Relational DB, NoSQL database, document database (MongoDB), key-value database (Redis), graph database (Neo4J)
- JPA (Java Persistence API)
- Entities and repositories
- No portable between SQL and non SQL DB

`Repository`

- CrudRepository
- ReactiveCrudRepository: non-blocking IO
    - Mono (0..1) and Flux (0..m) objects
    - Must have reactive database driver
    - Spring Data MongoDB supports
    - Spring Data JPA does not support

Spring Cloud Stream

- Streaming abstraction over messaging
- publish-subscribe integration pattern
- Support Apache Kafka and RabbitMQ
- Message, Publisher, Subscriber, Channel, Binder (like jdbc driver)