Trainer: Nilesh Ghule

Wake up from Hibernate, Spring up!!!

Agenda

- Spring Boot Introduction
- Spring Data Architecture
- Spring Data JPA
- Spring Test
- Spring REST services

Spring Boot

Java — Java is simple.
Spring — Simplify Java development (DI).
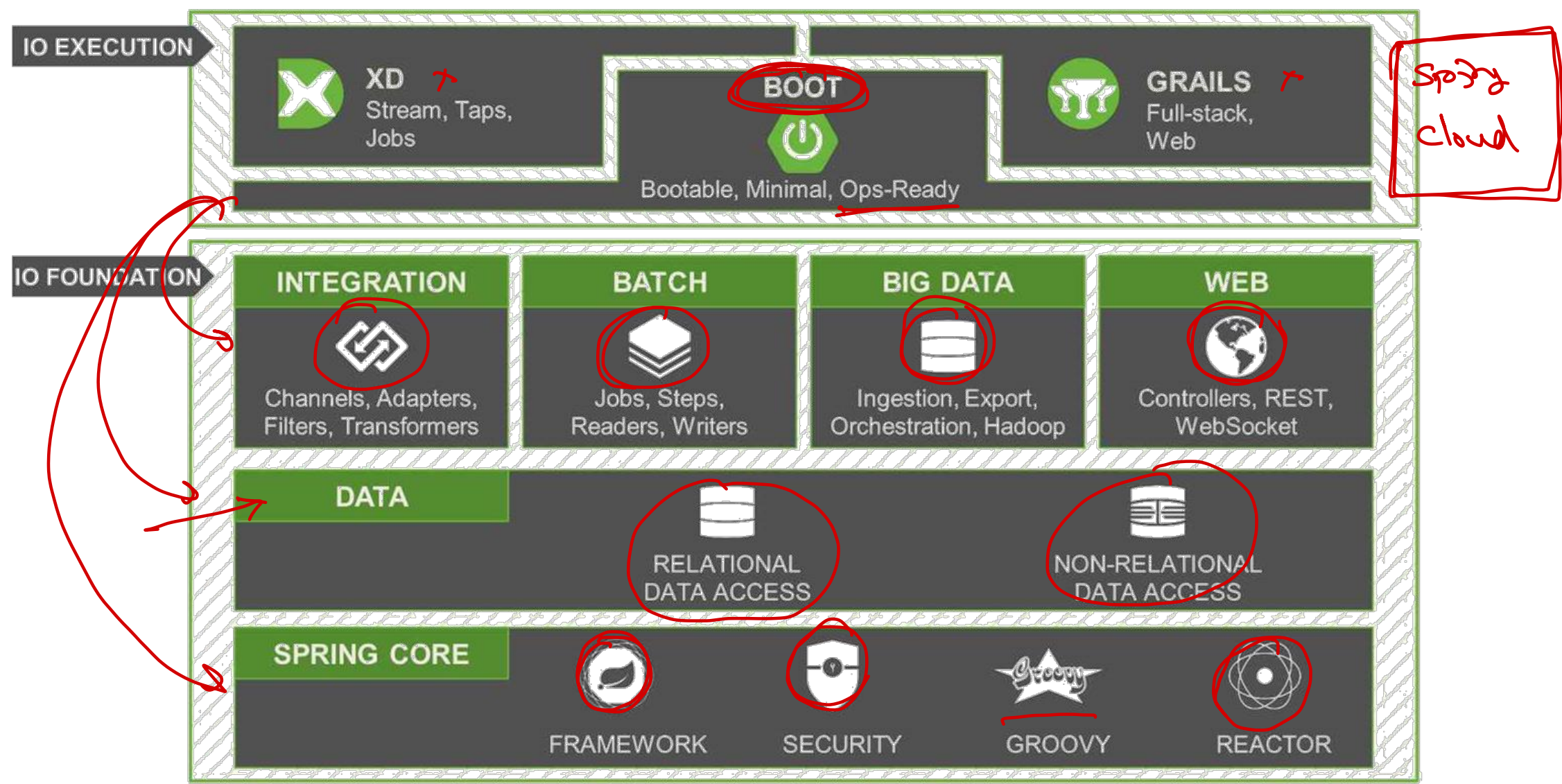*Boot — Simplify Spring Config.*

- Spring Boot is NOT a new standalone framework. It is combination of various frameworks on spring platform i.e. spring-core, spring-webmvc, spring-data, …

- Spring Boot makes it easy to create stand-alone, production-grade Spring based Applications that you can "just run".

  easy deployment
  docker

- Spring Boot take an "opinionated view" of the Spring platform and third-party libraries. So most of applications need minimum configuration.

  Spring — hibernate
  Spring web — tomcat
  conpool — hikari

- Primary Goals/Features:
  - Provide a radically faster and widely accessible "Quick Start".
  - Opinionated config, yet quickly modifiable for different requirements.
  - Managing versions of dependencies with starter projects.
  - Provide lot of non-functional common features (e.g. security, servers, health checks, ...).
  - No extra code generation and XML config. *→ fully ann config + property file.*
  - Embedded Web Server for web applications.
  - No code generation (provide lot of boilerplate code) or XML configuration.

    lombok
    write POJOs
    Code generator
    auto getter/setter.

- Not good for porting existing applications.

Spring IO Platform

Spring Boot

→ started project

maven → jar
→ war
→ pom

- Latest spring boot: 2.3.1
  - spring framework – 5.2.6
  hibernate – . . .

- @SpringBootApplication
  - @Configuration + @EnableAutoConfiguration + @ComponentScan

- @EnableAutoConfiguration → for web appln
  - spring-boot-starter-web → web-mvc + tomcat

- SpringApplication.run(DeptappApplication.class, args)
  - Start embedded web server
  - Deploy MVC application

Scan current package

pom.xml

1. content
2. webserve
3. pom
4. hibernate
5. mysql
6. test/junit
7. test/mockito
8. jackson

+ @PropertySource

application.properties

@Conditional → condition based on classpath

Create appln ctx & beans → Ann
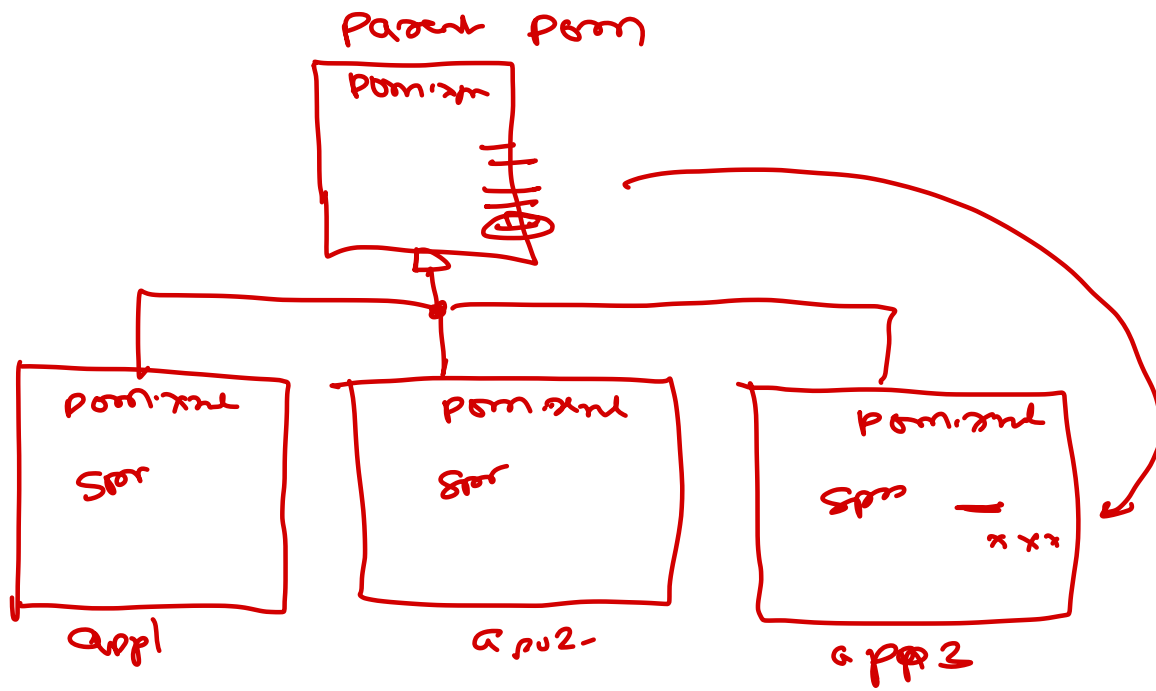→ Ann web config context

Create beans & init them

Conditional configs based on jars added in classpath → which props are available

Parent Pom

Pom.xml

Spring
boot

Starter

↓

Parent Pom

+

boilerplate
Code.

Pom.xml
Stor
app1

Pom.xml
Stor
app2

Pom.xml
Sps — xxx
app 3

Course Evaluation & Certificate

- Mini-projects
  - Book Shop Spring MVC application
    - Customer functionalities
    - Admin functionalities
  - Online Pizza Spring MVC application
    - Customer functionalities
    - Admin functionalities

- Implement and share code with Lab mentors Yogesh and Akash sir.
  - Push code on gitlab repository and give access as developer.
  - Email code.

- Mini-projects will be evaluated and certificates will be issued on weekend.

- **Deadline: 9th Aug 2020**

- **Feel free to talk to us, if you need any help for project completion.**

Thank you!

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