Spring Framework: Overview of Spring Data

WHAT IS SPRING DATA?



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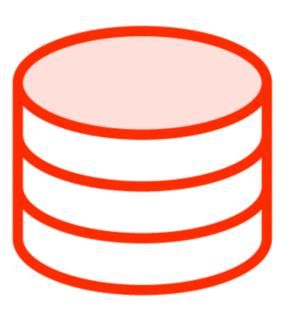
Overview

What is Spring Data?
The benefits of Spring Data
Choosing a Spring Data module
Setting up our first project

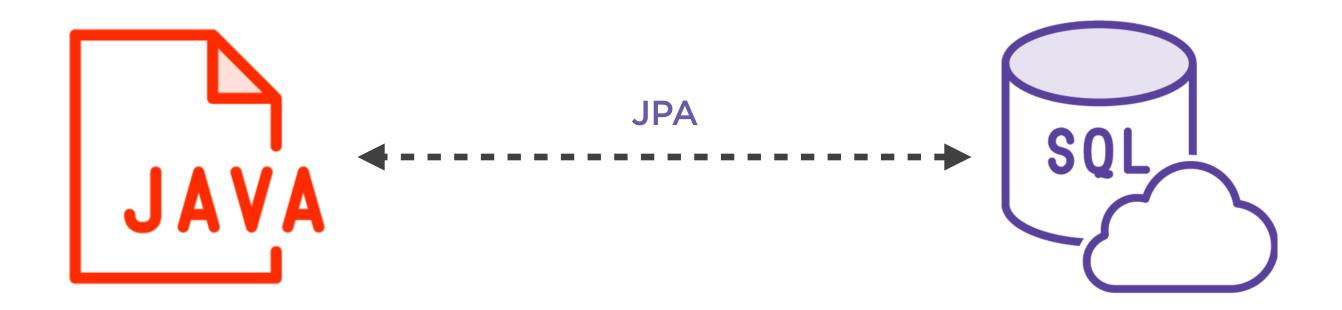
Spring Data is a collection of data-access projects that share a common programming model













The Spring Data Project



Spring Data Abstractions

CRUD Derived queries Transactions

Pagination Sorting More

The Benefits of Spring Data

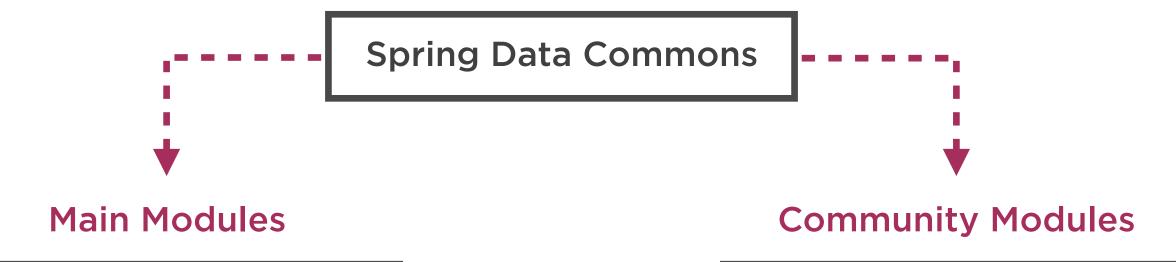


Consistent programming model

- Same abstractions for all modules
- Rarely touch underlying libraries
- Easy to learn additional modules

Reduces boilerplate

Integrations easily into Spring Boot



Spring Data JPA

Spring Data JDBC

Spring Data MongoDB

Spring Data Cassandra

Spring Data n

Spring Data Couchbase

Spring Data Elasticsearch

Spring Data Hazelcast

Spring Data Neo4j



Main Modules

Spring Data JPA

Spring Data JDBC

Spring Data MongoDB

Spring Data Cassandra

Spring Data n

Community Modules

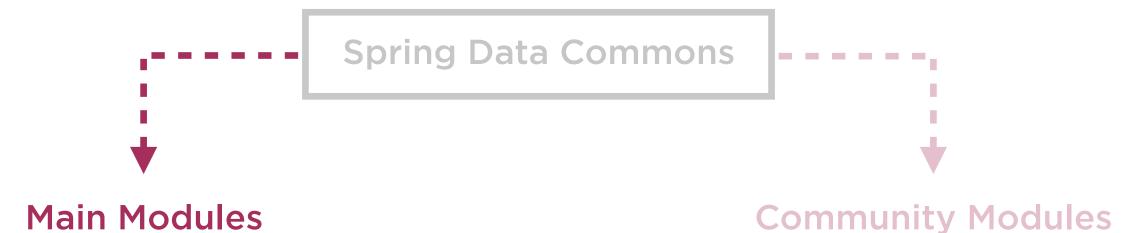
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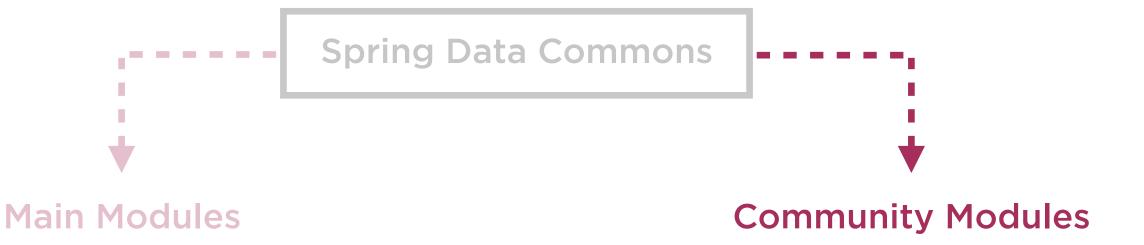
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What we'll be focusing on

- Spring Data commons
- Querying with the repository interface
- Using Spring Data JPA and MongoDB only as a POC
- Introduction to transactions

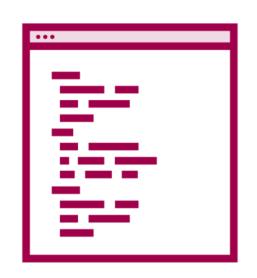
What this course is not about

- Hibernate, JPA, or any other ORM
- Core Spring or Spring Boot
- Batch processing

Demo Project Overview



Flight arrivals database



Spring Boot project



Will use Spring
Data JPA as POC



Embedded H2 database



Demo

Creating our project using Spring Initialzr

Creating a database schema

Mapping a flight entity

Verify our application boots with a test

Summary

Spring Data is an umbrella project for multiple data access modules

All modules implement the same abstractions

It reduces boilerplate

It has a gentle learning curve to help you get started quickly

We'll be focusing on Spring Data commons throughout this course