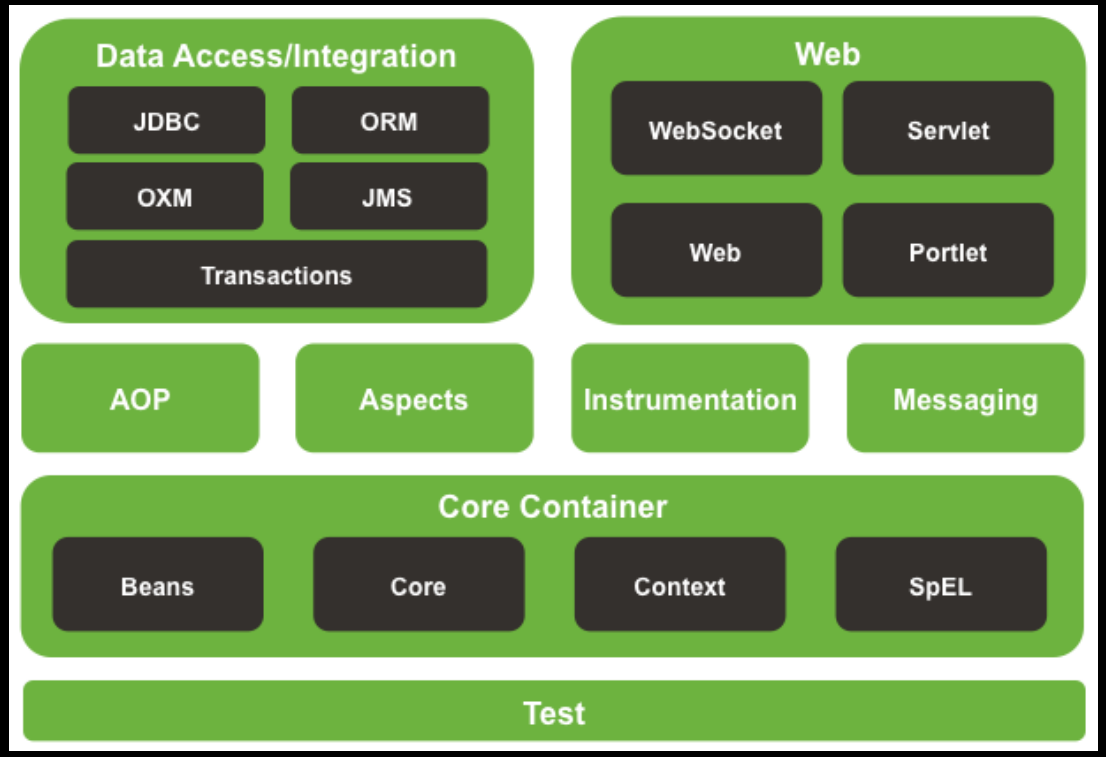
Spring Framework Introduction

The Spring Framework is everywhere

The Spring Framework Modules



Spring is huge. In fact, this is a whole container of frameworks that allow you to perform tasks of any complexity - from working with the database to testing procedures.

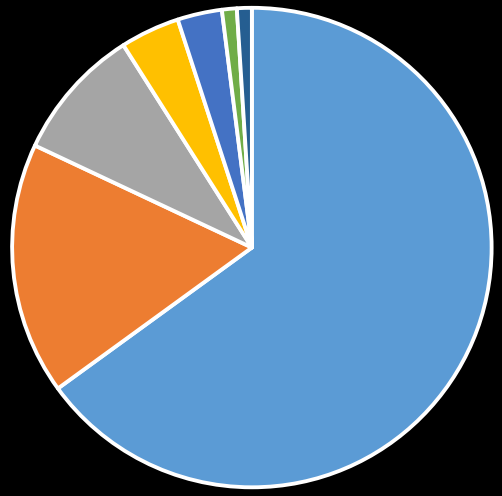
The Spring Framework 5.0 consists of features organized into about 20 modules.

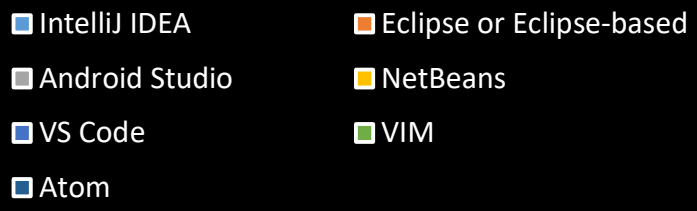
These modules are grouped into:

- Core Container,
- Data Access/Integration,
- Web,
- AOP (Aspect Oriented Programming),
- Instrumentation,
- Messaging,
- Test.

65% of Java developers choose IntelliJ IDEA

Which IDE / editor do you use the most for Java development?





Spring Initializr

Spring Initializr provides a simple and intuitive web UI to create and configure and generate Spring based application. This tool makes it easy for developers to generate an initial project structure without worrying much about the project structure and dependencies. On a high-level *Spring Initializr tools* take cares of the following points for any Spring based application

- Project structure;
- Dependencies required to start the work;
- build script (Maven or Gradle) to build the application;
- Language and version (Initializr will add correct dependencies based on the version);
- packaging (war or jar);
- *Spring Initializr* is available on the web, most of the IDE has a built-in integration with the *Initializr*.

Initial project setup

This is the simplest Initializr view with minimal options to build your project. Let's quickly discuss these fields for a basic understanding.

- **Project** – This gives us the option to select the project as *Maven* or *Gradle* based. In this post, we choose Maven. This selection generates a *pom.xml* file for our project.
- **Language** – The programming language to use. You have the option to select *Groovy* or *Kotlin*.
- **Spring Boot** – *Spring Boot* version.
- **Group** – The groupId attribute in *Apache Maven*, also known as the id of the project's group.
- **Artifact** – The name of the project, also known by the artifactId attribute in Apache Maven.
- **Description** – Description of the project.
- **Package Name** – Root package of the project. If not specified, the value of the ***Group*** attribute used.
- **Java** – the *Java* version to use.

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