

Introduction to Spring Framework



Agenda

- **What is Sprint?**
- **Spring Features**
- **IoC**
- **Traditional DI**
- **IoC DI**

What is spring?

- **Open Source Java based framework for enterprise and internet applications.**
- **Provides a comprehensive programming and configuration model for modern Java-based enterprise applications - on any kind of deployment platform.**

Features

- 1) **Open Source**
- 2) **Enterprise and Internet support-**
Not only J2EE but cloud, mobile and other platforms as well
- 3) **Lightweight-** Bring only required JAR's in classpath
- 4) **Annotation Support-** Support for all java annotations and spring annotations

Features

- 5) **No need for heavy application servers**- like weblogic or websphere, Tomcat or Jetty are sufficient
- 6) **Provides abstractions** for enterprise applications- messaging, SMTP, data base access etc.
- 7) **Reusable client platform** can be built to inject in other components
- 8) **Focus on Business logic**

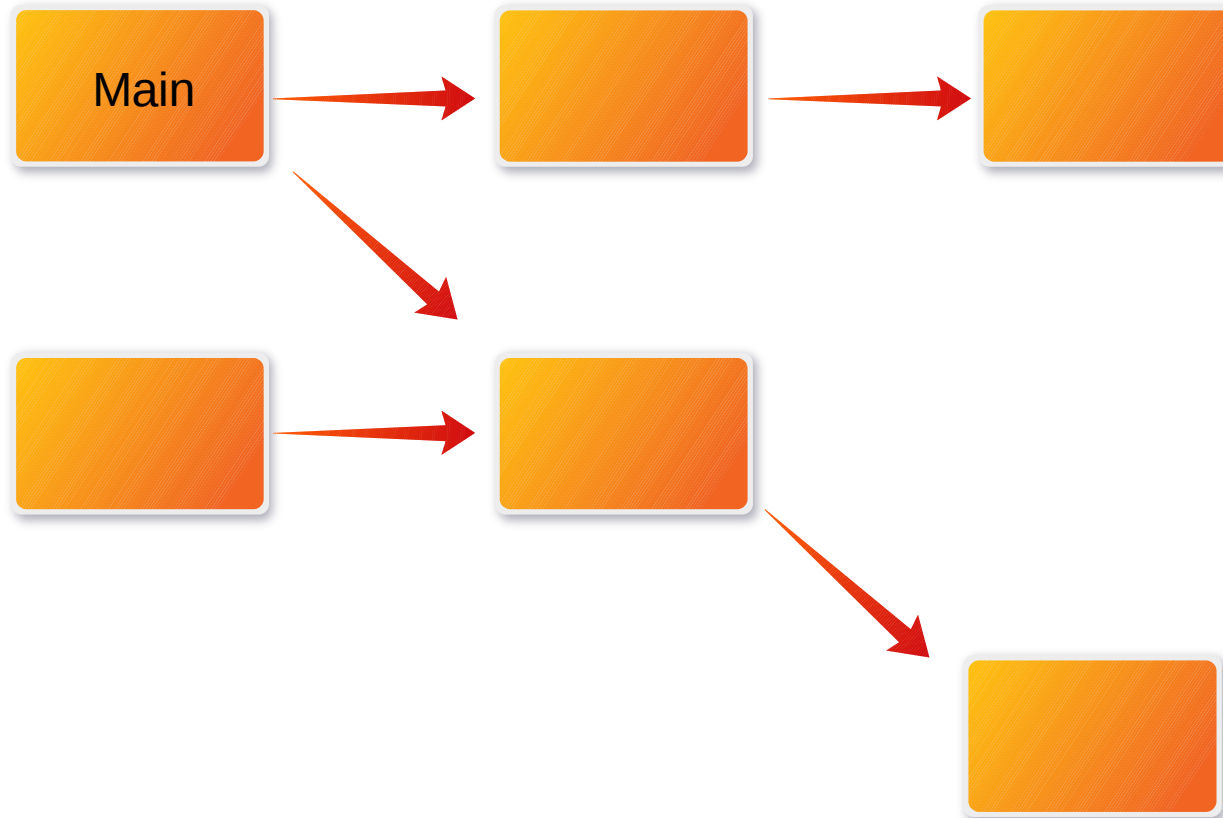
Features

- **9) Dependency Management System(IOC)- run time dependency management**

Inversion of Control(IOC)-

- Way of dependency management
- IOC container injects objects at **run time not at compile time**
- An object does not construct dependent object, just accepts required information(dependencies)
- Reduces amount of code & no repetition
- Reduces object coupling

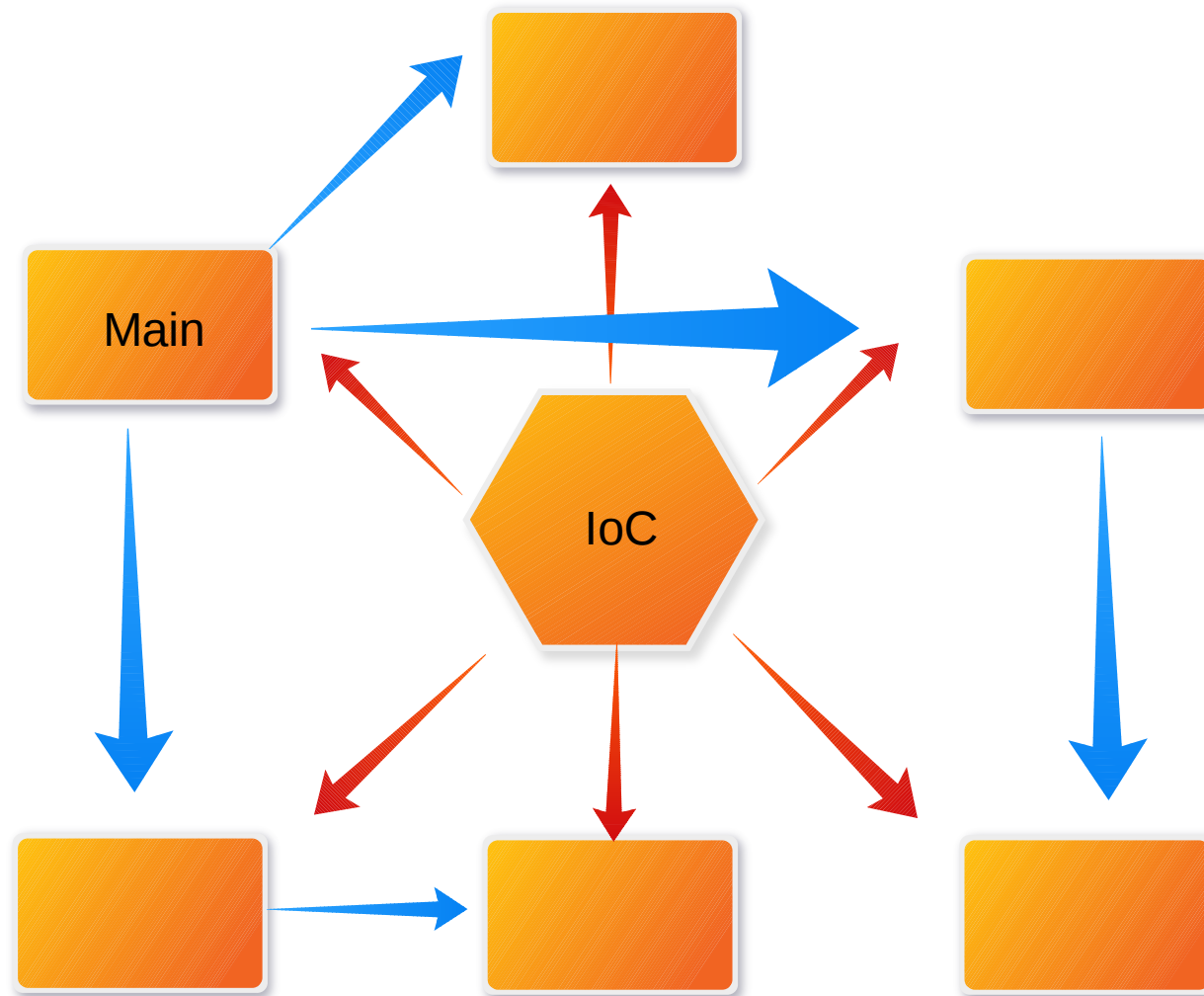
Traditional DI



IoC Dependency Management

- **Central IOC builds reference to each of class in system and passes as needed**

IoC Dependency Management



References

- [**https://spring.io/projects/spring-framework**](https://spring.io/projects/spring-framework)

