Introduction to Spring

Agenda

1. What is Spring?
2. Why Spring?
3. Spring Architecture

Objectives

At the end of this session, you will be able to:

- Understand What Spring Framework is
- Understand Spring Architecture and it uses

What is Spring?





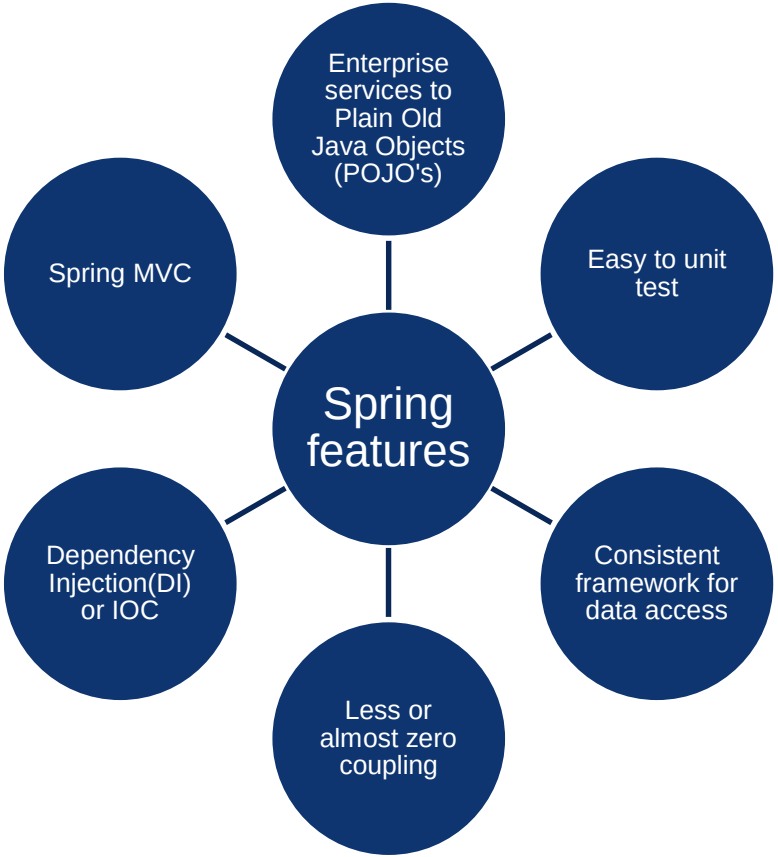
What is Spring ?

- Do you know to make a Simple bean Java class? If yes, Then your ready for Spring
- In Spring all business modules are simple Bean class or popularly called POJO (Plain OLD Java Object)

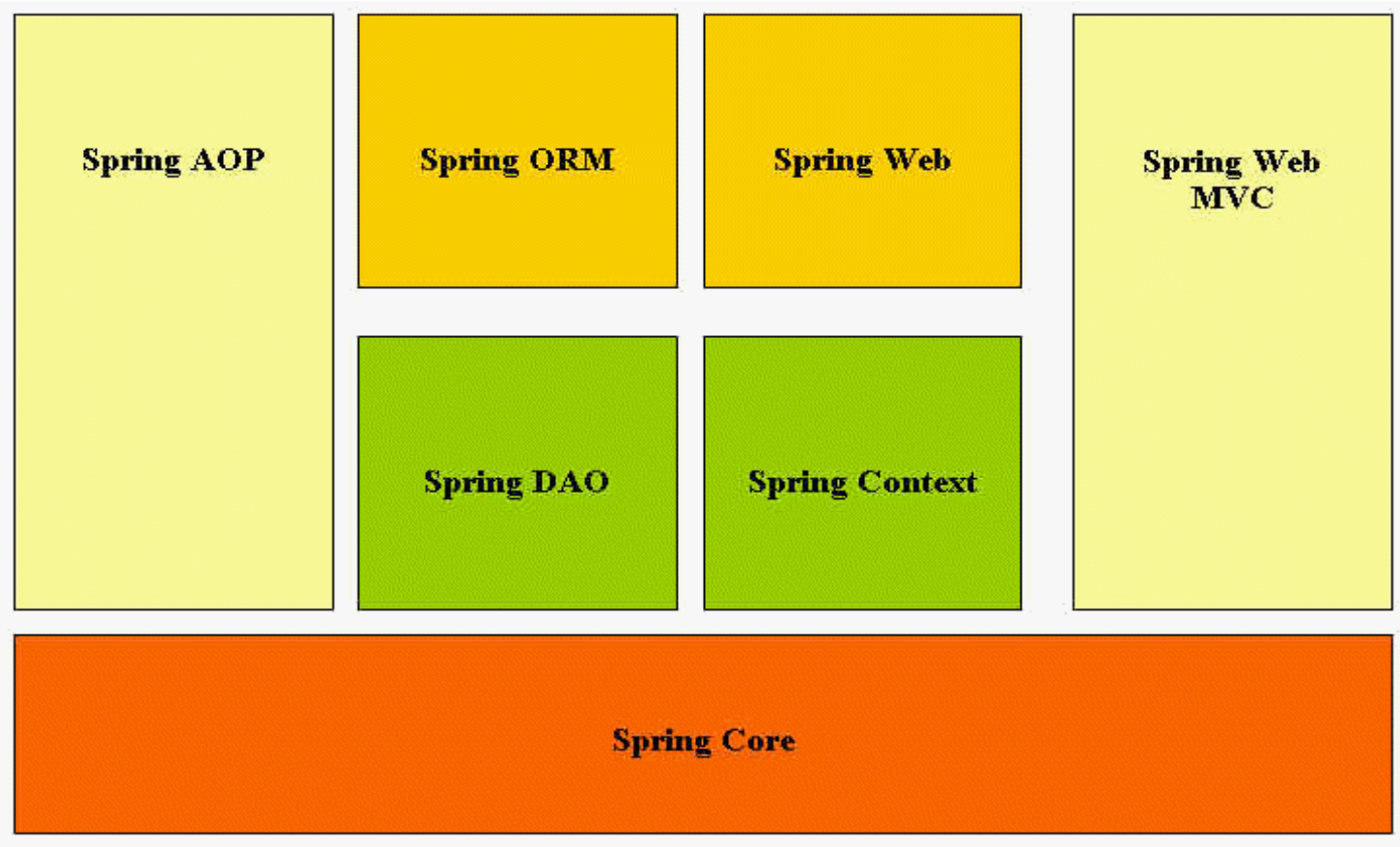
Spring is a popular open source application framework that can make J2EE development easier by enabling a POJO-based programming model

- Spring is not J2EE Application framework but it well integrates with selective J2EE specifications like Servlet API, JPA etc

Why Spring ?


Enterprise services to Plain Old Java Objects (POJO's)
Spring MVC
Easy to unit test
Spring features
Dependency Injection(DI) or IOC
Consistent framework for data access
Less or almost zero coupling

Spring Architecture



Spring Architecture

- **Spring Core**: Contains the most fundamental part of Spring Framework
- Among them the most basic and important one is DI (dependency Injection) or IOC (Inversion Of Control)
- It's a process where IOC *container takes the responsibility of providing (injecting) the dependencies of an Object* either through the constructor or setter methods.
- **Spring AOP**: Spring has its own Aspect Oriented Programming technology framework
- This enables *modularization of concerns* for enterprise services, declarative transaction management services, logging and securities (*crosscutting concerns)* etc.
- **Spring ORM**: The ORM package provides *integration layers for* popular *object-relational mapping*(ORM) *APIs*, including JDO, Hibernate and iBatis
- **Spring Web**: The Spring Web module is part of Spring's *web application development stack*, which includes Spring MVC
- **Spring DAO**: The DAO (Data Access Object) support in Spring is primarily for *standardizing the data access* work using the technologies like JDBC, Hibernate or JDO

Summary

- In this module, we have learnt:
  - Spring as Framework
  - Features of Spring
  - Architecture of Spring
  - Various Modules of Spring

Thank you