## What is Spring

Dependency Injection

Compliments JEE

Dependency Injection

```
class A{                                    class B{

    B b;

    doAStuff(){                                 doBStuff(){

        b.doBStuff();                               ..........

    }                                           }

}                                           }
```

Inversion Of Control

Spring and JEE

Struts/JSF Integration

Spring MVC

security

transactions

Spring JDBC

Spring ORM

UI Layer

↓

Services/Business Layer

↓

Data Access Layer

↓

DB

OrderController

↓

OrderService

↓

OrderDAO

Spring Modules

Data Access/Integration

JDBC

ORM

JMS

Transaction

Web

MVC

Portlet

WebSocket

Servlet

AOP

Aspects

Instrumentation

Messaging

Core Container

beans

core

context

SpEL

Test

Spring Container
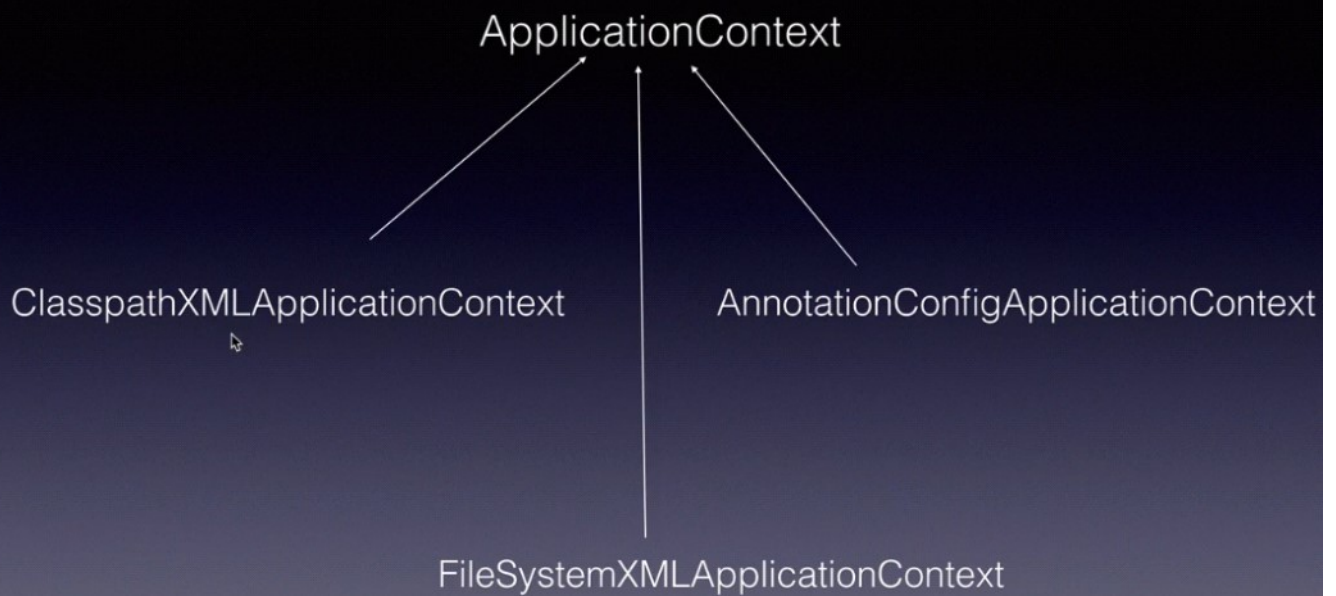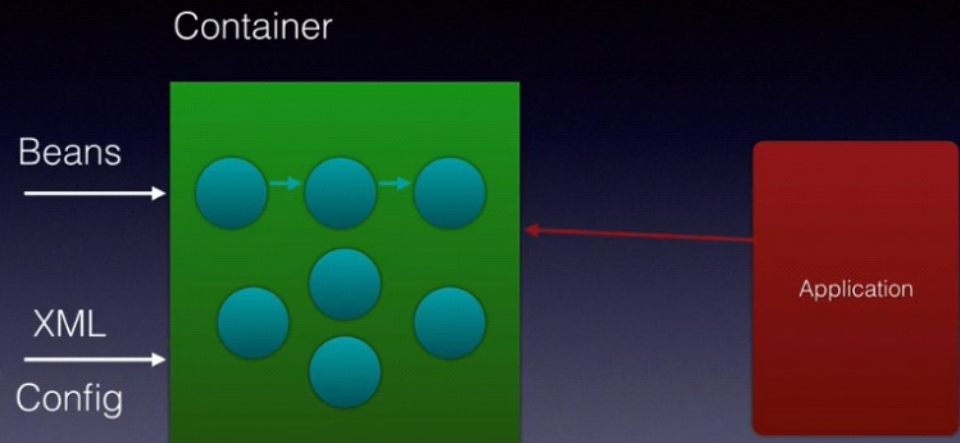
Container

Beans →

XML →
Config

Application →

ApplicationContext

ClasspathXMLApplicationContext

AnnotationConfigApplicationContext

FileSystemXMLApplicationContext

Two Types Of DI

Employee → Address

id   street
name   city
Address   state
         country
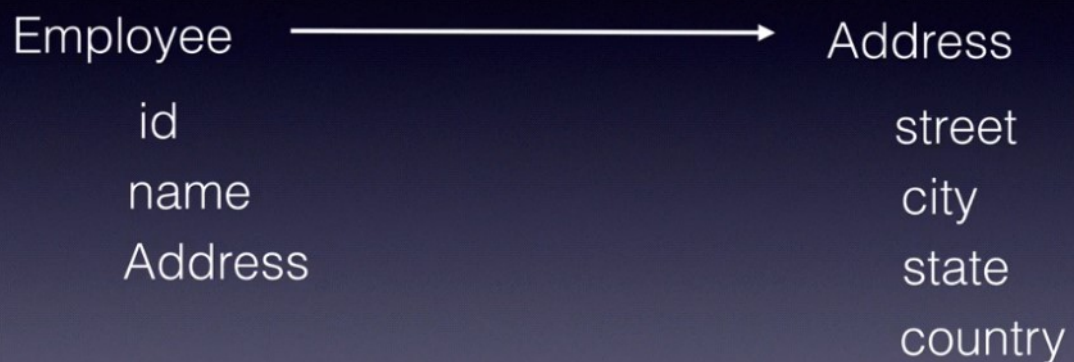
Setter

Employee   Address

    setId   setStreet

    setName   setCity

    setAddress   setState

                         setCountry

Constructor

Employee   Address

    Employee(Address(String Street,
       int id,   String city,
       String name,   String state,
       Address address)   String country)

Types of Data

Primitive Types Dependencies

byte

short

int

long

float

double

boolean

char

string

Collection

List

Set

Map

Properties

Reference

ProcessOrder ——————→ ShipOrder

Primitive Types

```
<bean class="Product">

    <property name="id">

        <value>10</value>
```

value as element

value as attribute

p schema/p namespace