**Spring-Frame-Work**

**What is Dependency Injection?**

**What is Maven?**

* Maven is a build tool.
* Maven is also a network ready application.

**How to make simple program in Spring Maven-Project (Setup):**

**Step-1: Create a maven-project**

**Step-2: Go to pom.xml file and add spring dependencies**

<!-- https://mvnrepository.com/artifact/org.springframework/spring-context -->

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-context</artifactId>

<version>5.1.5.RELEASE</version>

</dependency>

**Step-3 : Make sure jre should be java 1.8**

**Step-4: Go to your src/main/java create one spring.xml file**

<?xml version="1.0" encoding="UTF-8"?>

<beans

xmlns = "http://www.springframework.org/schema/beans"

xmlns:xsi = "http://www.w3.org/2001/XMLSchema-instance"

xmlns:context="http://www.springframework.org/schema/context"

xsi:schemaLocation = "http://www.springframework.org/schema/beans

http://www.springframework.org/schema/beans/spring-beans-4.0.xsd

http://www.springframework.org/schema/context

http://www.springframework.org/schema/context/spring-context-4.0.xsd">

<!-- <bean id="vehicle" class="com.ansar.ansartech.Car"></bean> -->

<!-- <bean id="vehicle" class="com.ansar.ansartech.Bike"></bean> -->

</beans>

**Step-5: Create One package and create some file**

**Vehicle.java**

package com.ansar.ansartech;

public interface Vehicle {

void drive();

}

**Car.java**

package com.ansar.ansartech;

public class Car implements Vehicle{

@Override

public void drive() {

System.out.println("Car is Running !!!!");

}

}

**AppMain.java:**

package com.ansar.ansartech;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

public class App

{

public static void main( String[] args )

{

ApplicationContext applicationContext= new ClassPathXmlApplicationContext("spring.xml");

Vehicle vehicle= (Vehicle) applicationContext.getBean("vehicle");

vehicle.drive();

}

}

**Step 6: Annotation:**

**import org.springframework.stereotype.Component;**

**@Component**

**And go to spring.xml file and write some code :**

<context:component-scan base-package="com.ansar.ansartech.Car"></context:component-scan>

**Com.ansar is a package name followed by project.class name**

**Annotaion Component AutoWired Primary Qualifier:**

**@Component**

* BY default we will get object of particular class

**@ComponentScan(basePackages="com.ansar.spring\_annotation")**

* It will scan all the components and without bean annotation it will work

**@Autowired**

* It will take the object

**@Primary**

* It will give the authority to particular class for execution

**@Qualifier("MediaTek")**

* It will work same as but we can provide class name

**Spring-MVC:**

You can't send request to multiple controller

Main controller is also known as front controller

When you will click on submit button then request will go to web.xml file

**What is Front Controller in MVC?**

Front Controller in mvc is dispatcher or surblet