**API End Points and Communication**

**Day 3: 27 Feb. 25**

**Annotation base DI**

1. @Component : This annotation we write on class level. The class is a type of POJO or JavaBean class. it is equal to

<bean class=”com.Address”></bean>

By default id is class name using camel naming rules. If class contains one word then it must be in lower case. If class contains more than one word then 2nd word onward first letter upper case.

If class name is Address : then id is address.

If class name is AddressDetails then id is addressDetails.

1. @Autowired : this annotation we need to use on object level or complex property level.
2. @Scope : this annotation we need to use on class level. By default scope is singleton

By default @Component annotation is not enable. To enable this annotation we need to use

1. Using xml file configuration
2. Using pure java classes.

BeanFactory : BeanFactory is core interface which provide only DI using XML configuration.

ApplicationContext : ApplicationContext a specific type of interface which internally extends BeanFactory. Which provide annotation base DI.

4. @Value annotation : This annotation we can use on property level. It is use to set the default value for that property.

Using Spring Framework improved model layer

Java Bean class or POJO class @Component scope prototype.

Service class @Service : this annotation we need to use to service class. this is service layer annotation. It must singleton.

Dao class @Repository: this annotation we need to use on DAO layer class. this is dao layer specific annotation. It must singleton

Resource class: it provide the data base connection

1. We can get from xml file/property file or configuration class.

Spring JDBC module provide set of classes which help to improve DAO layer means jdbc code improvement.

1. DriverManangerDataSource : this class provide data base connection. So we need to do DI for this class with min 4 property as drivername, url, username and password.

We need to create maven project.

1. Dependency need to add

Spring Core, spring context, @Component, @Service, @Repository and @Autowired

Spring jdbc : it provide database related classes.

mysql connector : to connect mysql database.

@Configuration : This annotation is class level annotation. This annotation is replacement of xml file.

@ComponentScan: this annotation is use to enable @Compoennt annotation. This is a class level annotation.

AnnotationConfigApplicationContext : This class help us to load configuration class and provide method to do DI using annotation base.