***Description:***

***Create different examples according to your choice for the following:***

***1. @Component***

***2. @CompnanetScan***

***3. @Configuration***

***4. @Bean***

***5. @Autowaired***

***6. @Value***

***7. @Required***

***8. @Qualifier***

***9. @Primary***

***10. @Scope***

***\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*SOLUTION\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\****

***//POJO class***

**package** com.godigit.annotations.milestone3\_2;

**import** org.springframework.beans.factory.annotation.Value;

**import** org.springframework.context.annotation.Scope;

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

//Component annotation use

@Component

//Scope annotation use

@Scope("prototype")

**public** **class** ImplClass {

//value annotation use

@Value("Tania")

**private** String name;

@Value("Pathankot")

**private** String city;

@Value("123")

**private** **int** id;

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** String getCity() {

**return** city;

}

**public** **void** setCity(String city) {

**this**.city = city;

}

**public** **int** getId() {

**return** id;

}

**public** **void** setId(**int** id) {

**this**.id = id;

}

//override annotation use

@Override

**public** String toString()

{

**return** "ImplClass [name=" + name + ", city=" + city + ", id=" + id + "]";

}

}

***//Main class(FinalTest.java)***

**package** com.godigit.annotations.milestone3\_2;

**import** org.springframework.context.ApplicationContext;

**import** org.springframework.context.support.ClassPathXmlApplicationContext;

**public** **class** FinalTest

{

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

ApplicationContext context=**new** ClassPathXmlApplicationContext("com/godigit/annotations/milestone3\_2/config.xml");

ImplClass impl=(ImplClass)context.getBean("implClass",ImplClass.**class**);

System.***out***.println(impl);

System.***out***.println(impl.hashCode());

ImplClass impl2=(ImplClass)context.getBean("implClass",ImplClass.**class**);

System.***out***.println(impl2.hashCode());

}

}

***//Bean 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:beans=*"http://www.springframework.org/schema/beans"*

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

xmlns:tx=*"http://www.springframework.org/schema/tx"*

xsi:schemaLocation=*"http://www.springframework.org/schema/mvc* [*http://www.springframework.org/schema/mvc/spring-mvc.xsd*](http://www.springframework.org/schema/mvc/spring-mvc.xsd)

[*http://www.springframework.org/schema/beans*](http://www.springframework.org/schema/beans)[*http://www.springframework.org/schema/beans/spring-beans.xsd*](http://www.springframework.org/schema/beans/spring-beans.xsd)

[*http://www.springframework.org/schema/context*](http://www.springframework.org/schema/context)[*http://www.springframework.org/schema/context/spring-context.xsd*](http://www.springframework.org/schema/context/spring-context.xsd)

[*http://www.springframework.org/schema/aop*](http://www.springframework.org/schema/aop)[*http://www.springframework.org/schema/aop/spring-aop-4.0.xsd*](http://www.springframework.org/schema/aop/spring-aop-4.0.xsd)

[*http://www.springframework.org/schema/tx*](http://www.springframework.org/schema/tx)[*http://www.springframework.org/schema/tx/spring-tx-4.0.xsd*](http://www.springframework.org/schema/tx/spring-tx-4.0.xsd)*"*>

<context:component-scan base-package=*"com.godigit.annotations.milestone3\_2"*/>

</beans>

***//OUTPUT***



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***//Main class***

package com.example.demo;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

//SpringBootApplication annotation use

@SpringBootApplication

public class Milestone33Application {

public static void main(String[] args) {

SpringApplication.run(Milestone33Application.class, args);

}

}

***//Service class***

package com.example.demo.service;

public interface AnimalService {

public String traits();

}

***// Bean class(DogClass.java)***

package com.example.demo.service;

//import org.springframework.context.annotation.Primary;

import org.springframework.stereotype.Service;

//Primary annotation use

//@Primary

//Service annotation use

@Service

public class DogClass implements AnimalService{

@Override

public String traits() {

// TODO Auto-generated method stub

return "Dog barks";

}

}

***//Bean class(CatClass.java)***

package com.example.demo.service;

import org.springframework.context.annotation.Primary;

import org.springframework.stereotype.Service;

@Primary

@Service

public class CatClass implements AnimalService {

@Override

public String traits()

{

return "Cat say Meow-Meow";

}

}

***// Controller class(AnimalCtrl.java)***

package com.example.demo.Controller;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.beans.factory.annotation.Qualifier;

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.RequestMapping;

import org.springframework.web.bind.annotation.RestController;

import com.example.demo.service.AnimalService;

//RestController annotation use

@RestController

//RequestMapping annotation use

@RequestMapping("/animal")

public class AnimalCtrl {

//Qualifier annotation use

//@Qualifier("DogClass")

//Autowired annotation use

@Autowired

AnimalService animalService;

@GetMapping

public String getDogCharacterstics()

{

return animalService.traits();

}

}

***//OUTPUT***



