

Spring

1. spring?

Spring java Spring

Java

J2EE web Spring Java

POJO

2. Spring

- Spring 2MB

- Spring

- (AOP) Spring

- Spring

- MVC Spring WEB

Web

- Spring

JTA

- Spring API

JDBC Hibernate or JDO

unchecked

3. Spring ?

Spring

- Core module
- Bean module
- Context module
- Expression Language module
- JDBC module
- ORM module
- OXM module
- Java Messaging Service(JMS) module
- Transaction module
- Web module
- Web-Servlet module
- Web-Struts module
- Web-Portlet module

4.)

Spring	spring
BeanFactory	spring
Spring	Spring

5. BeanFactory – BeanFactory

Bean

BeanFactory

XmlBeanFactory

6. XMLBeanFactory

org.springframework.beans.factory.xml.XmlBeanFac

tory

XML

beans

XML

7. AOP

AOP

Spring

AOP

Spring

AOP

Spring

8. JDBC

DAO

JDBC

DAO

Spring

AOP

Spring

9. /

Spring ORM JDBC

 / (ORM) Spring

 ORM Hibernate,JDO

iBATIS SQL Maps Spring

 ORM JDBC

10. WEB

Spring WEB application context

 web

 web

 Jakarta Struts

12. Spring

Spring XML

13. Spring IOC

Spring IOC

 DI

14. IOC

IOC

 JNDI

IOC

15. ApplicationContext ?

- FileSystemXmlApplicationContext

XML beans XML Bean

- ClassPathXmlApplicationContext

XML beans

classpath classpath bean

- WebXmlApplicationContext XML

WEB bean

16. Bean Application contexts

Application contexts

bean

bean

Application contexts

Application contexts

MessageSource

17. Spring

-
- Setter getter
- Spring AOP
- Spring XML
-

18. Spring IOC

IOC

19. IOC

-
- Setter Setter
static bean
bean setter setter

20.

Setter

Setter

setter

Spring Beans

21. Spring beans?

Spring beans

Spring

java

Spring IOC

beans

XML

<bean/>

Spring

beans

beans

bean tag

" singleton"

TRUE bean

prototype bean

TRUE

Spring

beans

22. Spring Bean

Spring Bean

bean

23.

Spring

?

Spring

XML

java

24.

?

<bean> Spring

bean

bean

scope

Spring

bean

bean

scope

prototype

bean

bean scope

singleton

25.

Spring

bean

Spring

bean

- singleton : bean Spring ioc

- prototype bean

- request http bean

web Spring ApplicationContext

- session HTTP Session bean
web

Spring ApplicationContext

- global-session HTTP Session
bean web

Spring ApplicationContext

Spring bean Singleton.

26. Spring bean ?

Spring bean

27. Spring bean

- Spring XML bean
bean

- Spring bean

- bean BeanNameAware Spring
bean ID setBeanName

- Bean BeanFactoryAware Spring
beanfactory setBeanFactory

- bean BeanPostProcessors
Spring postProcessorBeforeInitialization()

- bean InitializingBean
afterPropertySet bean
 - BeanPostProcessors bean bean
postProcessAfterInitialization()
 - bean DisposableBean
destroy()
28. bean

bean setup
bean
teardown

The bean init-method
destroy-method

@PostConstruct
@PreDestroy

29. Spring bean
bean bean
bean inner bean Spring
XML <property/>
<constructor-arg/> <bean/>

bean

Scope

prototype

30. Spring

java

Spring

- <list>
- <set>
- <map>
- <props>

String

31. bean ?

bean

Spring

bean

bean

32. bean

Spring

bean

<constructor-arg> <property>

Bean

bean

33.

Spring

- no ref

- byName Spring
bean autowire byname
bean

bean

- byType: Spring
bean autowire byType
bean

bean

bean

- constructor byType

- autodetect constructor
byType

34.

?

- <constructor-arg> <property>

-

String

•

35. Spring null

Spring

36. Java Spring ?

.

Java

Java

Spring

XML

@Configuration

bean

Spring IOC

@Bean

bean

Spring

37. ?

XML

xml

bean

38.

Spring

<context:annotation-config/>

39. @Required

bean

bean

@Required bean

BeanInitializationException

40. @Autowired

@Autowired

@Required

setter

/

PN

41. @Qualifier

bean

@Qualifier

@Autowire

bean

Spring

42. Spring

JDBC?

SpringJDBC

statements

queries

JDBC

Spring

JdbcTemplate here

43. JdbcTemplate

JdbcTemplate

44. Spring DAO

Spring DAO

JDBC Hibernate or JDO

45. Spring Hibernate?

Spring Hibernate

- Hibernate Template Callback
- HibernateDAOSupport AOP

46. Spring ORM

Spring ORM

- Hibernate
- iBatis
- JPA (Java Persistence API)
- TopLink
- JDO (Java Data Objects)

- OJB

47. HibernateDaoSupport Spring

Hibernate

 Spring SessionFactory

 LocalSessionFactory

- the Hibernate SessionFactory

- HibernateDaoSupport DAO

- AOP

48. Spring

Spring

-

-

XML

49. Spring

- API JTA JDBC Hibernate JPA

 JDO

- API

 API

-

- Spring

50.

Spring

Spring

AOP

51. AOP

AOP

52. Aspect

AOP

API

AOP

Spring AOP

@Aspect

52. Spring AOP

54.

AOP

Spring AOP

55.

SpringAOP

Spring

- before
- after:
- after-returning:
- after-throwing:
- around:

56.

57. ?

58. ?

advised

59. ?

60.

BeanNameAutoProxyCreator

DefaultAdvisorAutoProxyCreator

Metadata autoproxing

61.

62. XML Schema

XML

63.

(@AspectJ)

java5 java

Spring MVC

64. Spring MVC

Spring Web MVC

Spring MVC

Struts Spring MVC

65. DispatcherServlet

Spring MVC DispatcherServlet

HTTP

66. WebApplicationContext

WebApplicationContext ApplicationContext

WEB

ApplicationContext

servlet

67. Spring MVC

Spring

68. @Controller

Spring

Servlet API

69. @RequestMapping

URL