

Spring Interview Questions

Spring interview questions and answers are frequently asked because it is now widely used framework to develop enterprise application in java. There are given a list of top 40 frequently asked spring interview questions.

1) What is Spring?

It is a lightweight, loosely coupled and integrated framework for developing enterprise applications in java.

2) What are the advantages of spring framework?

1. Predefined Templates
2. Loose Coupling
3. Easy to test
4. Lightweight
5. Fast Development
6. Powerful Abstraction
7. Declarative support

[More details...](#)

3) What are the modules of spring framework?

1. Test
2. Spring Core Container
3. AOP, Aspects and Instrumentation
4. Data Access/Integration
5. Web

[More details...](#)

4) What is IOC and DI?

IOC (Inversion of Control) and DI (Dependency Injection) is a design pattern to provide loose coupling. It removes the dependency from the program.

Let's write a code without following IOC and DI.



```
public class Employee{  
    Address address;  
    Employee(){  
        address=new Address();//creating instance  
    }  
}
```

Now, there is dependency between Employee and Address because Employee is forced to use the same address instance.

Let's write the IOC or DI code.

```
public class Employee{  
    Address address;  
    Employee(Address address){  
        this.address=address;//not creating instance  
    }  
}
```

Now, there is no dependency between Employee and Address because Employee is not forced to use the same address instance. It can use any address instance.

5) What is the role of IOC container in spring?

IOC container is responsible to:

- create the instance
- configure the instance, and
- assemble the dependencies

[More details...](#)

6) What are the types of IOC container in spring?

There are two types of IOC containers in spring framework.



1. BeanFactory
2. ApplicationContext

[More details...](#)

7) What is the difference between BeanFactory and ApplicationContext?

BeanFactory is the **basic container** whereas ApplicationContext is the **advanced container**. ApplicationContext extends the BeanFactory interface. ApplicationContext provides more facilities than BeanFactory such as integration with spring AOP, message resource handling for i18n etc.

8) What is the difference between constructor injection and setter injection?

No.	Constructor Injection	Setter Injection
1)	No Partial Injection	Partial Injection
2)	Doesn't override the setter property	Overrides the constructor property if both are defined.
3)	Creates new instance if any modification occurs	Doesn't create new instance if you change the property value
4)	Better for too many properties	Better for few properties.

[More details...](#)

9) What is autowiring in spring? What are the autowiring modes?

Autowiring enables the programmer to inject the bean automatically. We don't need to write explicit injection logic.

Let's see the code to inject bean using dependency injection.

```
<bean id="emp" class="com.javatpoint.Employee" autowire="byName" />
```

The autowiring modes are given below:

No.	Mode	Description
1)	no	this is the default mode, it means autowiring is not enabled.
2)	byName	injects the bean based on the property name. It uses setter method.
3)	byType	injects the bean based on the property type. It uses
4)	constructor	It injects the bean using constructor

The "autodetect" mode is deprecated since spring 3.

10) What are the different bean scopes in spring?

There are 5 bean scopes in spring framework.

No.	Scope	Description
1)	singleton	The bean instance will be only once and same instance will be returned by the IOC container. It is the default scope.
2)	prototype	The bean instance will be created each time when requested.
3)	request	The bean instance will be created per HTTP request.
4)	session	The bean instance will be created per HTTP session.
5)	globalsession	The bean instance will be created per HTTP global session. It can be used in portlet context only.

11) In which scenario, you will use singleton and prototype scope?

Singleton scope should be used with EJB **stateless session bean** and prototype scope with EJB **stateful session bean**.

12) What are the transaction management supports provided by spring?

Spring framework provides two type of transaction management supports:

1. **Programmatic Transaction Management:** should be used for few transaction operations.
2. **Declarative Transaction Management:** should be used for many transaction operations.

» Spring JDBC Interview Questions

13) What are the advantages of JdbcTemplate in spring?

Less code: By using the JdbcTemplate class, you don't need to create connection, close connection to execute different queries. You can execute the query directly.

[More details...](#)

14) What are classes for spring JDBC API?

