Java Interview Questions for Software Developers With 5 Years of Experience

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A position as a senior Java developer at a top tech firm requires at least 5 to 8 years of experience. Recruiters will expect you to be well-versed in Java concepts. When it comes to interviews, the Java interview questions for software developers with 5 years of experience are more sophisticated and project management-focused than those for entry-level candidates.

As a Java developer with 5+ years of experience, you should be well-versed in all of Java programming's fundamentals and trickiest concepts.

In this article, we will cover the key topics that you should prepare for your interview. We also share some tips that will help you ace the interview.

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Topics to Prepare for a Java Interview for Professionals With 5 Years of Experience

To prepare for an advanced Java interview, you need to cover a wide range of topics. Some of them are:

Core Java	Advanced Java	Frameworks
 String Handling OOPs Concepts Multithreading Loops and Data Types Generics Collection Framework Synchronization Serialisation & Description 	 JSP JDBC (Java Database Connectivity) Servlets 	 Struts Spring (MVC, Core, JDBC) Web Services (SOAP and REST) JSF Hibernate ORM Framework

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Core JavaString Handling

JSP

Advanced Java

Frameworks

OOPs Concepts

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Struts

- Multithreading
- Loops and Data Types
- Generics
- Collection
 Framework
- Synchronization
- Serialisation & De-serialisation

- JDBC (Java Database Connectivity)
- Servlets
- Spring (MVC, Core, JDBC)
- Web Services (SOAP and REST)
- JSF
- Hibernate ORM Framework

Here are some Java concepts explained in detail to help you prepare for your interview:

- <u>LinkedList in Java</u>
- Removing all non-alphanumeric characters from a string in Java
- Scanner reset()
- PriorityQueue in Java
- Substring in Java
- Overriding in Java
- Reversing a String in Java
- HashMap in Java with examples
- Math Random Method

Top Java Interview Questions for Developers With 5 Years of Experience

We have curated the top Java interview questions for professionals holding 5 years of experience and categorized them according to work experience and important topics such as OOP and thread handling.

Here are some of the most commonly asked <u>Java Interview Questions and Answers</u> for 5 years of Experience.

Q1. Which, According to You, Are the Most Significant Features of Java 8?

Answer: Most developers have stuck to the 2014 release, Java 8. It is free for commercial use and has many significant features such as functional interfaces and static methods. It has made programming more simplified and efficient with functional interfaces to object-oriented interfaces.

Q2. What is a Java Class? Can You Tell Us About Some of the Common Classes of Java?

Answer: You can answer this Java interview question for software developers by stating that a Java Class is a category for Java objects presenting similar properties or methods. It is commonly used as a blueprint for design in object-oriented languages. The most common classes of Java used in app development are static, final, concrete, inner, abstract, and POJO.

Q3. What are the Essential Concepts to Understand in Wrapper Classes?

Answer: The most significant concepts to understand in wrapper classes are the eight primitive types of wrapper classes and where they are best used. It is important to note that it is final and immutable once a wrapper class is assigned.

Q4. What are the Four Access Modifiers in Java, and Where Are They Used?

Answer: The four access modifiers in Java are default, public, private, and protected. They are used in determining access levels to keywords or information stored in a class.

Q5. Differentiate Between JVM and JDK.

Answer: You can answer this Java interview question for software developers by stating that a JVM, or a Java Virtual Machine, runs Java on a device. A JDK, or Java Development Kit, is a software development package used to create tools that can be run on phones and tablets.

Q6. What is Platform Independence?

Answer: Platform independence implies that your program can run on any operating system. This adaptability trait makes Java a superior programming language.

Q7. What is the Main Reason Why Strings Are Made Immutable?

Answer: An immutable string is thread-safe. If one does not make a string immutable, then a change in one reference will inevitably affect the values of other references.

Q8. What is the Difference Between an Abstract Class and an Interface?

Answer: There are some basic differences between an abstract class and an interface. The first is method implementation. While an abstract class can have method implementation but an interface can not. An abstract class can implement an interface.

Q9. What do You Understand About a Ternary Operator?

Answer: You can answer this Java interview question for software developers by stating that Java has several conditional operators. A ternary operator is a conditional operator responsible for deciding which values will be assigned to a variable.

Q10. Let's Talk About Serialization and Deserialization a Little.

Answer: You can answer this Java interview question for software developers by stating that serialization and deserialization are data-handling concepts related to stream handling in Java. Serializing an object means converting it to a byte stream to save or relocate it to another device. Deserializing is the process of undoing the serialization process.

Java Interview Questions for Developers with 3 to 5 Years of Experience

These are some frequently asked Java interview questions for software developers with 3-5 years of experience:

- i. What is a public class?
- ii. What is a local variable?
- iii. How will you create a thread in Java?
- iv. What do you understand about design patterns?
- v. Which design pattern have you used in your past projects?
- vi. Explain double-level locking in a singleton design pattern.
- vii. How will you use BlockingQueue to implement a producer-consumer problem?
- viii. What are the ways to detect memory leaks in an application?
- ix. How will you print odd-even numbers using threads in sequence?
- x. On what basis will you decide the young generation and old generation size for an application?

Some More Sample Java Interview Questions for Developers With 5 Years of Experience

i. Explain method overloading Java.

- ii. Let's talk about the equals methods.
- iii. Explain the concept of a catch block.
- iv. Describe what it's like working with threads in Java.
- v. How will you attain thread safety in Java?
- vi. Explain if it is possible to call a run() method of a Thread class.
- vii. How is a program's Java Thread Dump found?
- viii. Describe the process of multithreading in Java.
- ix. What is the one thing you would keep in mind when multithreading in Java?
- x. What is context-switching?
- xi. What will be the output of the program given below?

```
class A
```

```
{
    synchronized void m1()
    {
        System.out.println("In m1 A");
    }
    void m2()
    {
        System.out.println("In m2 A");
    }
}
```

Java OOPs Interview Questions for Developers With 5 Years of Experience

Here are some <u>Java OOPs interview questions</u> for developers who have 5 years of experience::

- Is Polymorphism supported in Java?
- ii. Can you implement a class with two interfaces where both the interfaces include a method having the same name and signature?
- iii. How much memory is occupied by a class?
- iv. Do you always need to create objects from class?
- v. What possible challenges can you face when implementing the concept of multiple inheritances in Java?
- vi. Name the types of constructors in Java.
- vii. Explain the concept of a ternary operator in Java.
- viii. How is an interface different from an abstract class?
- ix. Can you declare a constructor private in Java?
- x. What is exception handling?
- xi. What is Garbage Collection in OOPs?
- xii. Why is encapsulation also called Data Hiding in Java?
- xiii. Can a Java application be run without the implementation of OOPs?
- xiv. What is 'super super' in java?
- xv. What will be the output in the code below?

public class Demo{

public static void main(String[] arr){

```
System.out.println("Main1");
}
public static void main(String arr){
    System.out.println("Main2");
}
```

Java Thread Interview Questions for Developers with 5 Years of Experience

When preparing for your Java Advanced interview, you should also practice some Java Thread interview questions and answers. Here are some sample Java Thread interview questions:

- i. How will you create a daemon thread in Java?
- ii. Demonstrate a portfolio that will include multithreading.
- iii. Explain how a task is scheduled to run after an interval in Java.
- iv. Describe thread implementation in Java.
- v. What is time slicing?
- vi. What is a thread schedule?
- vii. What is the difference between a synchronized block and a synchronized method?
- viii. Describe the steps of calling wait(), notify() and notifyAll().
- ix. Explain the concept of ThreadLocal.
- x. How will you fix (a given) Java multithreading implementation?

- xi. What is ThreadGroup? Why do companies not use it anymore?
- xii. What will happen in a scenario where you do not override the thread class run() method?
- xiii. Discuss the concept of a ThreadPool.
- xiv. Describe the method of ensuring that three threads (T1, T2, T3) run in sequential order.
- xv. Describe the concepts of Future and Callable.
- xvi. Differentiate between thread and process.
- xvii. Describe the concept of atomic classes in Java Currency API.
- xviii. In what ways was the Currency API updated in Java 8?

Leave no stone unturned for your Java interview preparation

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FAQs: Java Interview Questions for Professionals with 5 Years of Experience

Q1. How Important is Understanding Java 8 Features for Interviews?

Very important. Java 8 introduced significant features such as functional interfaces, lambda expressions, the Stream API, and new Date and Time APIs which are commonly asked in interviews.

Q2. What is the Difference Between JVM, JDK, and JRE?

The JVM (Java Virtual Machine) runs Java bytecode on any device, while JDK (Java Development Kit) is a software development package used to create Java applications. On the other hand, the JRE (Java Runtime Environment) provides libraries, Java Virtual Machine, and other components to run applications written in Java.

Q3. How can you Achieve Thread Safety in Java?

Thread safety can be achieved using synchronized blocks/methods, using volatile keyword, and atomic classes from java.util.concurrent package.

Q4. What is a Ternary Operator in Java?

The ternary operator is a shorthand for the if-else statement. It is used to evaluate a boolean expression and return one of two values. Syntax: condition? value1: value2.

Q5. Can you Explain Method Overloading in Java?

Method overloading is a feature that allows a class to have more than one method with the same name but different parameters.