

Negating a Predicate in Java

📅 Last Updated: March 4, 2022 👤 By: Lokesh Gupta 📁 Java 8 🔖 Java Predicate, Java Stream Basics

Learn to create a [Predicate](#) with the negating effect that will match all the elements **not matching** the original predicate. The *negated predicate* acts as a *pass function* and selects all the elements from the stream that were filtered out by the original predicate.

Table Of Contents

- 1. [Predicate negate\(\) Method](#)
- 2. [Predicate not\(\) Method – Java 11](#)

1. Predicate negate() Method

The [Predicate.negate\(\)](#) method returns the **logical negation** of an existing predicate.

```
Predicate<Integer> isEven = i -> i % 2 == 0;  
  
Predicate<Integer> isOdd = isEven.negate();
```

Use these predicates as follows with the [Stream filter\(\)](#) method.

```
List<Integer> list = Arrays.asList(1, 2, 3, 4, 5, 6, 7, 8, 9, 10);  
  
Predicate<Integer> isEven = i -> i % 2 == 0;  
  
Predicate<Integer> isOdd = Predicate.not( isEven );  
  
List<Integer> evenNumbers = list.stream()  
    .filter(isEven)  
    .collect(Collectors.toList());  
  
List<Integer> oddNumbers = list.stream()  
    .filter(isOdd)  
    .collect(Collectors.toList());
```

2. Predicate not() Method – Java 11

In Java 11, **Predicate** class has a new method **not()**. It returns a *Predicate* that is the negation of the supplied predicate.

Internally, this is accomplished by returning the result of the calling **predicate.negate()**.

```
Predicate<Integer> isEven = i -> i % 2 == 0;  
  
Predicate<Integer> isOdd = Predicate.not( isEven );
```

Drop me your questions related to *Java stream predicate negate examples*.

Happy Learning !!

[Sourcecode on Github](#)

Was this post helpful?

Let us know if you liked the post. That's the only way we can improve.

Yes

No

Recommended Reading:

1. [Java Regex as Predicate using Pattern.compile\(\) Method](#)
2. [Chaining Multiple Predicates in Java](#)
3. [Applying Multiple Conditions on Java Streams](#)
4. [Java Stream distinct\(\)](#)
5. [Using 'if-else' Conditions with Java Streams](#)
6. [Java Stream sorted\(\)](#)
7. [Java Stream peek\(\)](#)
8. [Java Stream findFirst\(\) vs findAny\(\) API With Example](#)
9. [Sorting Streams in Java](#)
0. [Java Stream – Get Object with Max Date From a List](#)



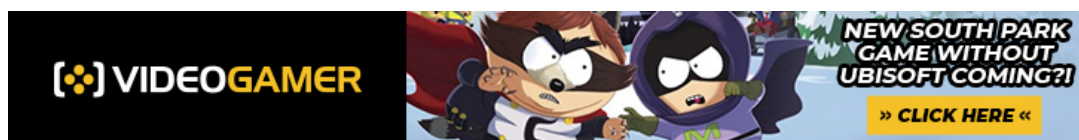
Join 7000+ Awesome Developers

Get the latest updates from industry, awesome resources, blog updates and much more.

Email Address

Subscribe

** We do not spam !!*



Leave a Comment

Name *

Email *

Website

☐ Add me to your newsletter and keep me updated whenever you publish new blog posts

Post Comment

Search ...



HowToDoInJava

A blog about Java and related technologies, the best practices, algorithms, and interview questions.

Meta Links

- [About Me](#)
- [Contact Us](#)
- [Privacy policy](#)
- [Advertise](#)
- [Guest Posts](#)

Blogs

[REST API Tutorial](#)



Copyright © 2022 · Hosted on [Cloudways](#) · [Sitemap](#)