# Using Lambda Expressions in Java Code

## IMPLEMENTING LAMBDA EXPRESSIONS WITH FUNCTIONAL INTERFACES

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How to work with lambda expressions

- writing lambdas
- invoking a lambda
- identifying what lambda a method needs
- chaining and composing lambdas

This is a Java course

- basic knowledge of Java
- how to create and run a simple program
- basic knowledge of the Collection API

Java version 8+, 11+

# Agenda

First, what is a Functional Interface

How to write a lambda

How to implement classical interfaces with lambda expressions

# Implementing Functional Interfaces

# A Lambda Expression implements a Functional Interface

A Lambda Expression
is not
another way of writing
instances of anonymous classes

What is a functional interface?

An interface!

That has only one abstract method

- default and static methods do not count

- methods from Object do not count

That may be annotated
with @FunctionalInteface

```
public interface Supplier<T> {
    void accept(T t);
}


Consumer<String> consumer =
        (String s) -> "Hello!";
```

From a functional interface:

- identify the abstract method
- copy / paste the block of parameters
- draw the arrow
- add the implementation you need

# Demo

Let us write some code!

You will see simple examples of lambdas

How to write them

And how to invoke them

# Module Wrap Up

What did you learn?

What a lambda expression is in Java

What a functional interface is

A 3-steps method to write a lambda

How to invoke a lambda

Get to know the java.util.function toolbox