Lambda Expressions

J9

Lambda Expressions

Lambda expressions allow code to be passed as a parameter, just as data can be. Added to Java in version 1.8.

• Particularly useful for event handling; can pass *behavior* as an argument ('do *this* when x happens').

• Syntax

  – Comma-separated formal parameters (*x*)

  – Arrow (->)

  – Body (either single expression or statement block, which may contain return)

    x -> x > 100   *or*   x -> { ... **return true**; }

Functional Interfaces

A lambda expression implements a *functional interface*: an interface which only defines a single method.

Commonly-used functional interfaces are defined in package java.util.function, e.g.

- **public interface** IntPredicate {
    boolean test(int value);
  }

- **public interface** DoubleSupplier {
    double getAsDouble();
  }