J9

Lambda Expressions

Lambda Expressions

From Java version 8, lambda expressions allow code to be passed as a parameter, just like data.

- 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 x > 100; }
    ```

Functional Interfaces

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

Common functional interfaces are defined in package `java.util.function`, e.g.

```java
public interface IntPredicate {
    boolean test(int value);

}

public interface DoubleSupplier {
    double getAsDouble();

}
```