

Java 8

Classical : Imperative

How

Object mutability

Java 8 : Declarative Style

What we want

Object immutability

Interface:

default method (definition)

static method (definition)

collection api

interface (10 functionalities + 2)
stream

Object Oriented approach : interface

Functional Interface :

Contain only one abstract method

might have static , default method in any count

Lambda:

anonymous function

no method param type, return type

not be encapsulated in any class

can be assigned to a variable of functional interface

```
() -> <single line>
```

```
()->{  
    // multi line  
}
```

```
(msg)->{}
```

```
msg -> {}
```

```
(a,b) -> {}
```

```
(a,b)->{  
    int sum = a+b;  
    return sum;  
}
```

```
(a,b)-> a+b; // by default associated with return statement
```

the method signature of the only abstract method of Functional interface must match with method signature of lambda expression

java.util.function

functional interface containing some very common prototype method

4 categories

Consumer

Predicate

Function

Supplier

Consumer :

void accept(<T>)

Predicate

boolean test(<T>)

Function

<R> apply(<T>);

Supplier

<T> get()

Variants

Consumer : BiConsumer (Generic)

void accept(<T>,<M>)

Primitive type implementation

IntConsumer()

Predicate:

BiPredicate, Primitive type implementation

Function : BiFunction

Functional programming remove overhead of creating objects and loading class files



Conveyer belt

