

30/7/2020

Functional Interface \rightarrow Interface with only one abstract method

Lambda \rightarrow Object without an identity.

BiFunction $\langle T, U \rangle$

Interface BinaryOperator $\langle T \rangle$ extends BiFunction $\langle T, T, T \rangle$

Predicate $\langle \text{String} \rangle$ id = Predicate.isEqual(target);

Map/filter/reduce.

1st step: mapping.

List $\langle \text{Person} \rangle$ returns List $\langle \text{Integer} \rangle$
Size of both lists \rightarrow same.

2nd : Filtering

\hookrightarrow Some Elements have been filtered out in process

Reduce \rightarrow average
 \hookrightarrow reduction step.

typed Interface:

public Interface Stream $\langle T \rangle$ extends BaseStream $\langle T, \text{Stream} \langle T \rangle \rangle$

\hookrightarrow An object that does not hold any data

Stream $\langle \text{Person} \rangle$ filtered =

Stream.filter (person \rightarrow person.getAge() > 20)

Stream API defines
Intermediary operators
forEach (Consumer) (next long)
peek (Consumer) (longs)
filter (predicate) (")

3 categories:

forEach & Peek.

Integer sum = stream.reduce(0, (age1, age2) \rightarrow age1 + age2);

1st Argument - Identity Element of reduction operation

2nd Argument - reduction operation, type of Binary Operator < T, T >

Reductions:

Reduction

↳ max(), min() & count().

↳ aggregation

→ no limit on amount of data being processed

→ Stream cannot be reused

Duration → amount of time between two Instant.

Instant → Immutable

Methods:

↳ many cases where date is not an Instant.

LocalDate now = LocalDate.now();

LocalDate date = LocalDate.of(2014, Month.JULY, 24);

Period → Amount of time between two LocalDate.

DateAdjuster → Useful to add / subtract amount of time to an Instant / LocalDate.

LocalTime → time of day

ZoneId → Time Zones all over Earth

Set<String> allZoneIds = ZoneId.getAvailableZoneIds();

Format a Date:

New Methods on Collection API:

→ Stream() & ParallelStream().