Class *Wmr*

WebMapReduce Library

Superclass: None

State Variables for Class Wmr:

Constructors for Class Wmr:

Methods for Class Wmr:

> `emit`
>
> > *Arguments:*
> >
> > `key`   A string containing no `TAB` characters.
> > `value`   String.
> >
> > *State Change:* A key-value pair constructed from the arguments is appended to output
> >
> > *Return Value:* None.

Class *WmrIterator*

Iterator class for WebMapReduce reducers.
An *iterator* provides a sequence of values, one at a time, in order. That sequence may be arbitrarily long, even too large to store in memory. This iterator class is designed for use in reducers, to provide values from the key-value pairs produced by mappers.

Superclass: None.

State Variables for Class WmrIterator:

Constructors for Class WmrIterator:

Methods for Class WmrIterator:

> `hasNext`
>
> > *Arguments:* None.
> >
> > *State Change:* None.
> >
> > *Return Value:* Boolean, `true` if another value remains in the sequence, and `false` if there are no more values remaining.

> `next`   This method delivers one value from the iterator's sequence, *then* advances to prepare for delivering the next value, if any.
>
> > *Arguments:* None.

State Change: After returning a value, prepare to deliver the *following* value from the stream of key-value pairs, if there is one.

Return Value: `String`, the first value from a key-value pair that has not yet been returned by this method.

Exceptions thrown: `NoSuchElementException` is thrown if there are no remaining elements to return from this `WmrIterator`.

Class *Mapper*

Class containing mapper method for a map-reduce computation

Superclass: None

State Variables for Class Mapper:

Constructors for Class Mapper:

Methods for Class Mapper:

mapper

Arguments:

key   A `String` object containing no `TAB` characters.

value   A `String` object.

State Change: 0 or more new key-value pairs are emitted for the "mapper" step of a map-reduce computation, using the method `Wmr.emit()`.

Return Value: None.

Class *Reducer*

Class containing reducer method for a map-reduce computation

Superclass: None

State Variables for Class Reducer:

Constructors for Class Reducer:

Methods for Class Reducer:

reducer   Reducer method for a map-reduce computation

Arguments:

key   A `String` object containing no `TAB` characters.

value   A `WmrIterator` object consisting of strings.

State Change: 0 or more new key-value pairs are emitted for the "reducer" step of a map-reduce computation, using the method `Wmr.emit()`.

Return Value: None.