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ITERABLE

new_cursor *

ITERATION_CURSOR [G]*

feature -- Access
item: G
-- Item at current cursor position.
require
valid_position: not after
feature -- Cursor movement
forth
-- Move to next position.
require
valid_position: not after
feature -- Status report
after: BOOLEAN
-- Are there no more items to iterate over?

ENTRY [V,K]

create
make
feature
is_equal (other: like Current): BOOLEAN
-- Is `other` attached to an object considered
-- equal to current object?
feature -- Attributes
key: K
value: V
feature -- Constructor
make (v: V; k: K)
end

ENTRY[V,K]

ENTRY_ITERATION_CURSOR [V, K]

feature
make (va: ARRAY [V]; li: LINKED_LIST [K])
feature --Features
after: BOOLEAN
forth
item: ENTRY [V, K]
invariant
consitent_data_structures: values.lower = keys.Lower and values.count = keys.count
end

TUPLE_ITERATION_CURSOR [V,K]

create
make
feature
make (va: ARRAY [V]; li: LINKED_LIST [K])
feature --Features
after: BOOLEAN
-- Are there no more items to iterate over?
forth
-- Move to next position.
item: TUPLE [V, K]
-- Item at current cursor position.
invariant
consitent_data_structures: values.lower = keys.Lower and values.count = keys.count
end -- class TUPLE_ITERATION_CURSOR

Instructor

INSTRUCTOR_DICTIONARY_TESTS

feature -- Add tests
make
feature -- Setup
d: DICTIONARY [STRING_8, INTEGER_32]
setup
teardown
feature -- Tests
test_another_cursor: BOOLEAN
test_array_comarison: BOOLEAN
test_get_keys: BOOLEAN
test_iterable_dictionary: BOOLEAN
test_iteration_cursor: BOOLEAN
test_remove: BOOLEAN
test_setup: BOOLEAN
end

d

DICTIONARY

create
make
feature -- Alternative Iteration Cursor
another_cursor: ITERATION_CURSOR [ENTRY [V, K]]
feature -- Commands
add_entry (v: V; k: K)
require
non_existing_key: not exists (k)
ensure
entry_added: values [values.count] ~ v and keys [keys.count] ~ k
remove_entry (k: K)
require
existing_key: exists (k)
ensure
dictionary_count_decremented: values.count = (old values.twain.count) - 1
key_removed: not exists (k)
feature -- Constructor
make
ensure
empty_dictionary: (values.count = 0) and (keys.count = 0)
object_equality_for_keys: keys.object_comparison
object_equality_for_values: values.object_comparison
feature -- Queries
count: INTEGER_32
ensure
correct_result: Result = values.count
exists (k: K): BOOLEAN
ensure
correct_result: across
1..1 keys.count as i
some
keys [i.item] ~ k
end
get_keys (v: V): ITERABLE [K]
ensure
correct_result: across
Result as c
all
values.at (keys.index_of (c.item, 1)) ~ v
end
get_value (k: K): detachable V
ensure
case_of_void_result: keys.has (k) = False implies Result ~ Void
case_of_non_void_result: True
keys.has (k) = True implies Result /= Void
feature --Iterable method
new_cursor: ITERATION_CURSOR [TUPLE [V, K]]
invariant
consistent_counts_of_keys_and_values: keys.count = values.count
consistent_counts_of_imp_and_adt: keys.count = count
end -- class DICTIONARY

new_cursor *