Working with Sets

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Reviewing Data Collections

Data Collections in Other Languages

Python

Lists
Tuples
Dictionaries

Java

Lists
Sets
Maps
Queues

Ruby

Hashes
Arrays

ECMAScript 6

Released 17 June 2015

New features

New data collections

Data Collection

Stores and structures large amounts of data types for easy access. Provides methods to access that data.

Before and After ES6

Before	ECMAScript
Arrays	Sets
Objects	Maps
	WeakSets
	WeakMaps

8 Data Types

Boolean

Null

Undefined

Number ⎤

BigInt ⎥ — Primitives

String

Symbol ⎦

Objects

Objects

Value in memory which could be referenced by an identifier.

Introducing Sets

Sets

Enables you to store unique values of any type, whether primitive values or object references.

Unique Values

Any Type

Properties and Methods for Sets

Properties	Methods
Size	Add
	Clear
	Delete
	Entries
	forEach
	Has
	Keys
	Values

Adding and Removing Values to a Set

Iterating a Set

Updating the Graphs

Differences between a Set and WeakSet

WeakSet

Only contain objects

NO primitive data types
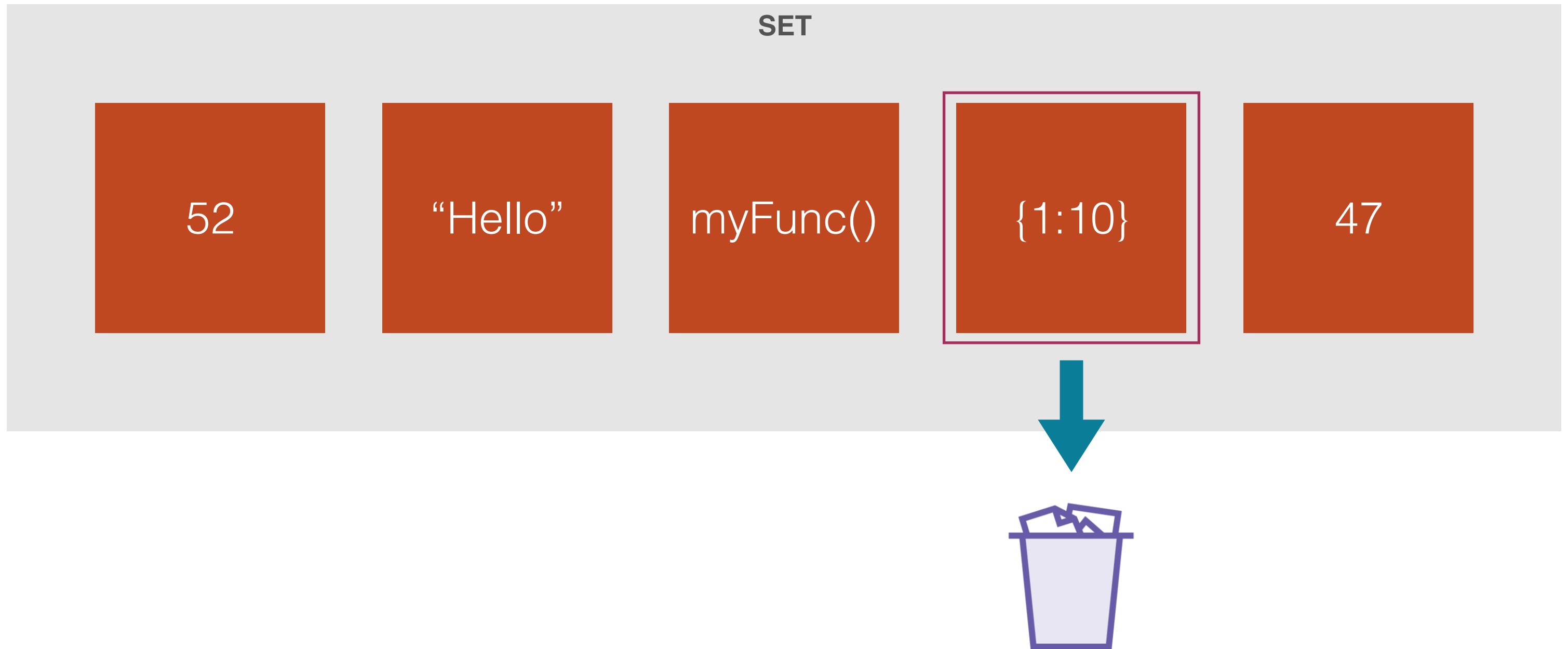
Objects are held "weakly"

Not iteratable

No access to size property

Garbage collected

Garbage Collection

Monitor memory allocation and determine when a block of allocated memory is no longer needed and reclaim it.

Garbage Collection

SET				
52	"Hello"	myFunc()	{1:10}	47

Set vs. WeakSet Methods

Set	WeakSet
Add	Add
Clear	Delete
Delete	Has
Entries	
forEach	
Has	
Keys	
Values	

Working with WeakSets

Conclusion

Summary

Data collections

Intro to Sets

Adding/removing values

Iterating sets

Differences between Sets and WeakSets

WeakSets