## B.1.9 The Set class

The abstract [Set](#Set) class represents a set data structure for storing objects. This data structure is unordered and contains unique elements.  
A new Instance can be created via the external function **createSet**.

External function and class methods:

* createSet  
  Factory function for creating a new Set instance. It may be passed an equalsFunction to determine equality and ensure uniqueness of the contained set elements. Per default, instance equality is used.
* add  
  Adds an element to the Set if this is possible.  
  Returns true if the element could be added, returns false if the element was already present in the set and so was not added (to ensure uniqueness).  
  Raises an exception in case of error, for example: running out of memory.
* remove  
  Removes the provided element from the Set if it is present in the set.  
  Returns true if the element was located in the Set, false otherwise.  
  Subclasses might raise an exception.
* contains  
  Returns **true** if the Set contains the element, **false** otherwise.  
  Subclasses might raise an exception.
* iterator  
  Returns an iterator over the elements of this Set.  
  The elements are not iterated in any particular order.
* size  
  Returns the number of elements stored in the Set.