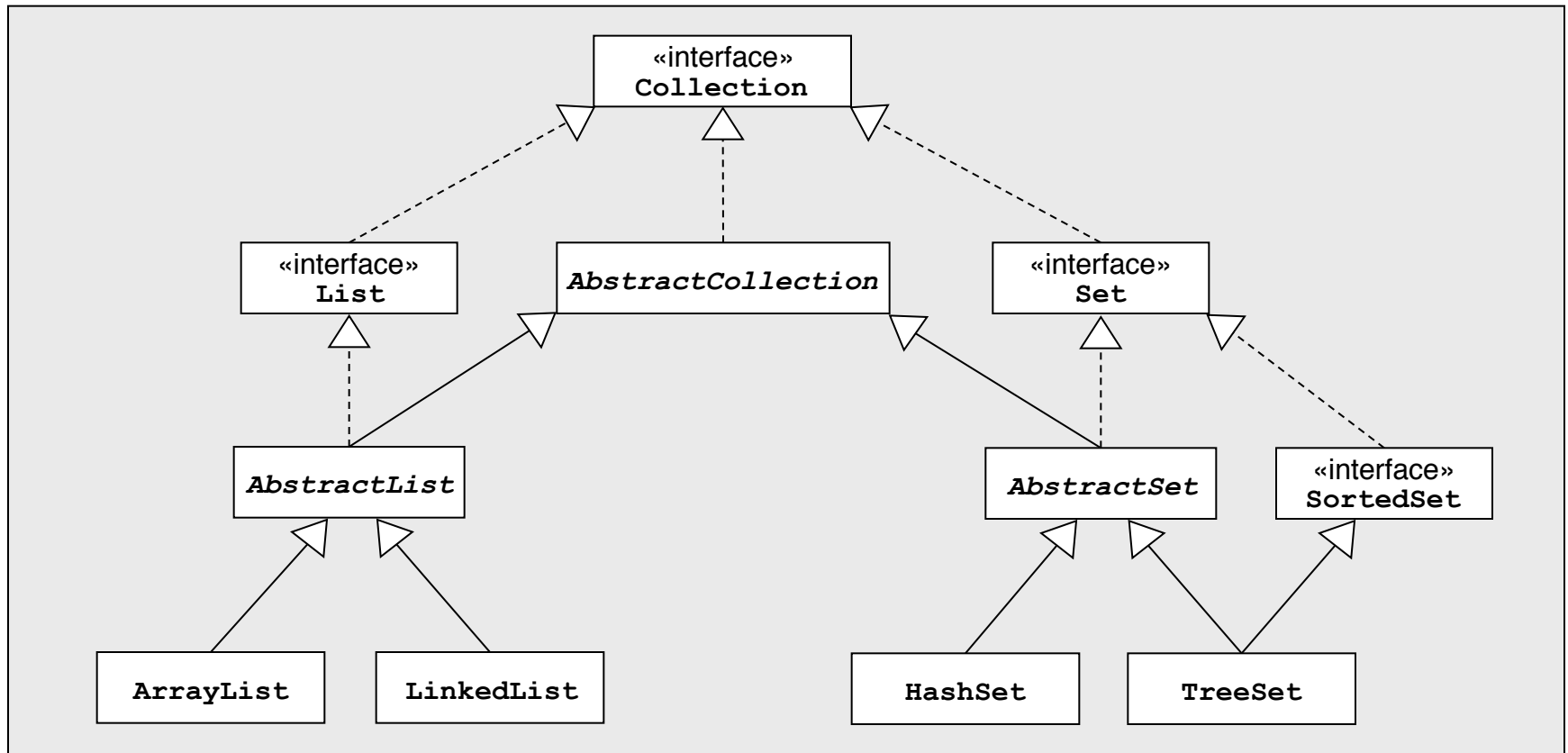




# The **Collection** Hierarchy

The following diagram shows the portion of the Java Collections Framework that implements the **Collection** interface. The dotted lines specify that a class implements a particular interface.



# Useful Methods of Collection

- Classes that implement the **Collection** interface, such as **ArrayList** or the key set of a **HashMap**, provide the following useful methods:

**boolean add(<T> value)**

Adds a specified value to the collection. Returns **true** if the collection changes.

**boolean remove(<T> element)**

Removes the first instance of **element**, if it appears; returns **true** if a match is found.

**void clear()**

Removes all elements from the collection.

**int size()**

Returns the number of elements in the collection.

**boolean contains(<T> value)**

Returns **true** if the collection contains the specified value.

**boolean isEmpty()**

Returns **true** if the collection contains no elements.

**Iterator iterator()**

Returns an iterator that allows the client to step through the values in the collection.