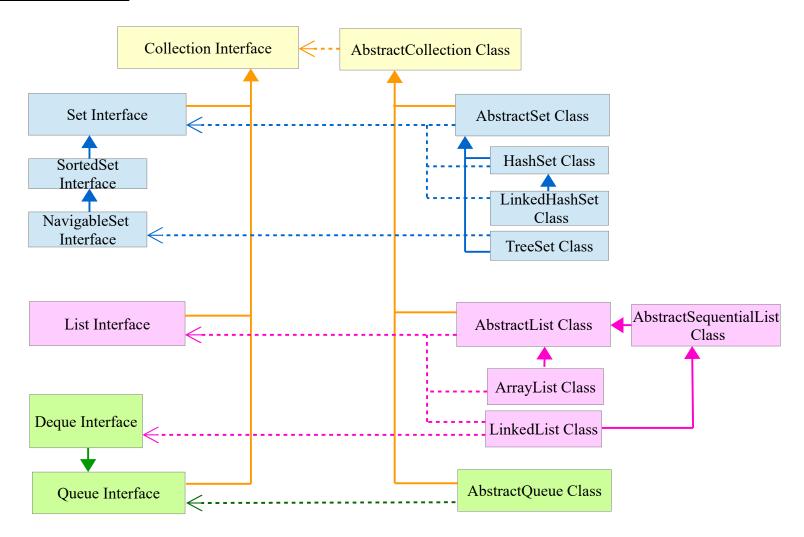
### **Collection Short notes**

### **Collection Framework:**



#### 1. Collection:

```
public abstract interface Collection<E> extends Iterable<E>
public abstract class AbstractCollection<E> implements Collection<E>
```

# 2. <u>Set</u>:

```
public abstract interface Set<E> extends Collection<E>
public abstract class AbstractSet<E> extends AbstractCollection<E> implements Set<E>
public abstract interface SortedSet<E> extends Set<E>
public abstract interface NavigableSet<E> extends SortedSet<E>
public class HashSet<E> extends AbstractSet<E> implements Set<E>, Cloneable, Serializable public class LinkedHashSet<E> extends HashSet<E> implements Set<E>, Cloneable, Serializable public class TreeSet<E> extends AbstractSet<E> implements NavigableSet<E>, Cloneable, Serializable
```

#### 3. <u>List</u>:

public abstract interface List<E> extends Collection<E>
public abstract class AbstractList<E> extends AbstractCollection<E> implements List<E>
public abstract class AbstractSequentialList<E> extends AbstractList<E>
public class ArrayList<E> extends AbstractList<E> implements List<E>, RandomAccess, Cloneable, Serializable
public class LinkedList<E> extends AbstractSequentialList<E> implements List<E>, Deque<E>, Cloneable, Serializable

## 4. <u>Queue</u>:

public abstract interface Queue<E> extends Collection<E>
public abstract class AbstractQueue<E> extends AbstractCollection<E> implements Queue<E>
public abstract interface Deque<E> extends Queue<E>

### 5. Map:

```
public interface Map<K, V>
public abstract class AbstractMap<K, V> implements Map<K, V>
public abstract interface SortedMap<K, V> extends Map<K, V>
public abstract interface NavigableMap<K, V> extends SortedMap<K, V>
public class HashMap<K, V> extends AbstractMap<K, V> implements Map<K, V>, Cloneable, Serializable
```

public class TreeMap<E> extends AbstractMap<E> implements NavigableMap<E>, Cloneable, Serializable

# **Order of Collections:**

	Unordered	Order of Insertion	Natural Order
List		ArrayList LinkedList	
Set	HashSet	LinkedHashSet	TreeSet
Мар	HashMap	LinkedHashMap	TreeMap

public class LinkedHashMap<K, V> extends HashMap<K, V> implements Map<K, V>