DAY-50

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COLLECTIONS

DRAWBACKS OF ARRAY

- FIXED IN SIZE.
- ONLY HOMOGENOUS ELEMENTS CAN BE STORED.
- MEMORY IS NOT UTILIZED EFFICIENTLY BECAUSE OF CONSECUTIVE MEMORY ALLOCATION.
- IT DOESN'T PROVIDE ANY READYMADE METHOD, FOREVERY OPERATION ON ARRAY USER WRITE LOGIC.
- ARRAY DOEN'T IMPLEMENT ANY STANDARD **DATA STRUCTURE (DS).**

WHY COLLECTIONS ?

- TO OVERCOME DRAWBACK OF ARRAY

ARRAY	COLLECTIONS
• FIXED IN SIZE	• GROWABLE IN SIZE/EXPANDABLE IN SIZE
• ONLY HOMOGENOUS DATA CAN BE STORED.	• BOTH HOMOGENOUS AND HETEROGENOUS DATA CAN BE STORED.
• PERFORMANCE IS BETTER WHEN COMPARED TO COLLECTIONS.	• MEMORY UTILIZATION IS BETTER THAN ARRAY
• NO READYMADE METHODS ARE AVAILABLE	• LOTS OF READYMADE METHODS ARE AVAILABLE
• IT DOESN'T IMPLEMENT ANY STANDARD DATA STRUCTURE	• EVERY COLLECTION IS IMPLEMENTED ON SOME STANDARD DATA STRUCTURE.
• PRIMITIVE ALLOWED	• ONLY NON PRIMITIVE (OBJECT)

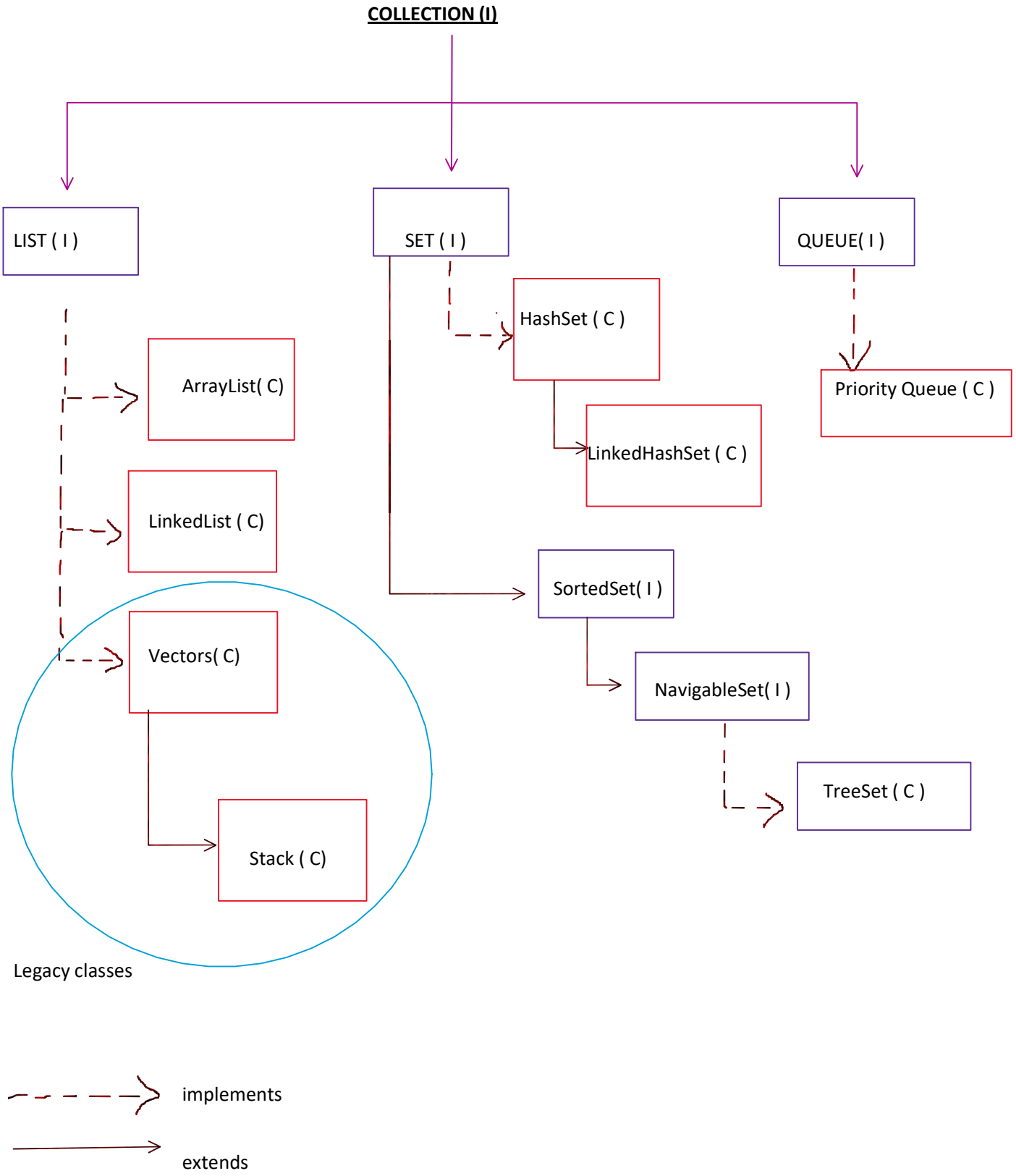
WHAT IS COLLECTIONS ?

IT IS GROUP OF **OBJECTS** OR IT IS USED TO REPRESENT MANY INDIVIDUAL OBJECTS AS A SINGLE ENTITY.

JAVA
COLLECTION
CFL (COLLECTION FRAMEWORK LIBRABRY)

CFL (COLLECTION FRAMEWORK LIBRARY)

- IT IS A LIBRARY WHICH DEFINES SEVERAL CLASSES AND INTERFACES TO OVERCOME THE DRAWBACKS OF JAVA.
- THIS LIBRARY IS PRESENT IN JAVA.UTIL PACKAGE



COLLECTIONS (I)

- IT IS SUPERMOST INTERFACE IN CFL.
- IT WAS INTRODUCED IS 1.2 V OF JAVA.
- IT CONTAINS MOSTLY COMMONLY USED METHODS WHICH ARE APPLICABLE FOR MOST OF THE COLLECTIONS.
- IT DOESN'T HAVE ANY DIRECT IMPLEMENTATION CLASS.

METHODS OF COLLECTIONS (I)

- public boolean add(Object obj);
- public boolean remove(Object obj);
- public boolean contains(Object obj);
- public boolean addAll(collection c);
- public boolean removeAll(collection c)
- public boolean containsAll(collection c)
- public boolean retainAll(Collection c)
- public boolean clear();
- public boolean isEmpty();
- public int size();
- public object[] toArray();
- public Iterator iterator();