Types in Java: Primitives = Built in types & Reference types (Strings)

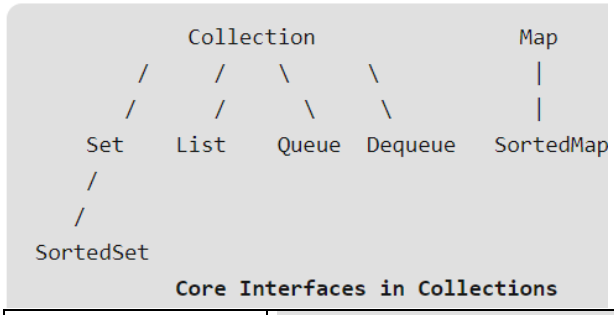
-A **Class** in OOP = most fundamental mechanism to build (ADTs) Abstract Data Types.

-**ADTs** are used to somehow physically construct a concept.

-A Class type creates a single entity Values (Properties) & Functions (Methods)

-**Properties** = Attributes & States. **Methods** = Actions

Hierarchy of Collection Framework



Core Interfaces in Collections

Collection : Root interface with basic methods like add(), remove(), contains(), isEmpty(), addAll(), ... etc.

Set	Doesn't allow duplicates. Set interface = HashSet (Hashing based) & TreeSet (balanced BST based). TreeSet implements **SortedSet.**
List	Contain duplicates & elements are ordered. = LinkedList (linked list based) and ArrayList (dynamic array based)
Queue	Typically FIFO elements except exceptions like PriorityQueue.
Deque	Elements are inserted & removed at both ends. Allows both LIFO and FIFO.
Map	Contains Key value pairs. No duplicates. = HashMap and TreeMap. TreeMap implements **SortedMap.**

Sets = Keys & No Duplicates

List = Duplicates & Ordered -> LinkedList & ArrayList

Queue= FIFO Elements || PriorityQueue

Dequeue= LIFO & FIFO with Insertion/Removal

Map= Key Value Pairs (Key/Lock) & No Duplicates