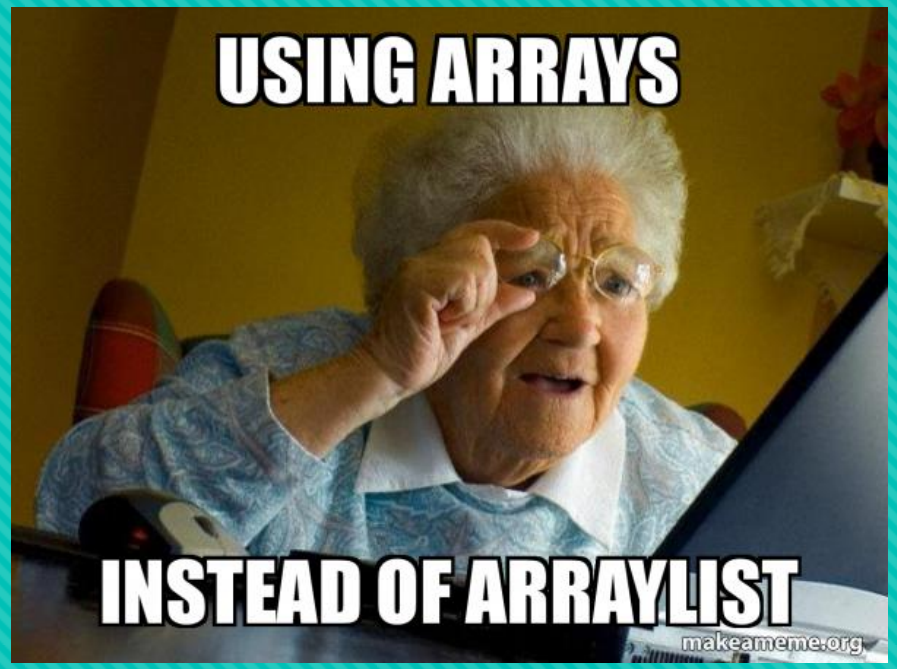
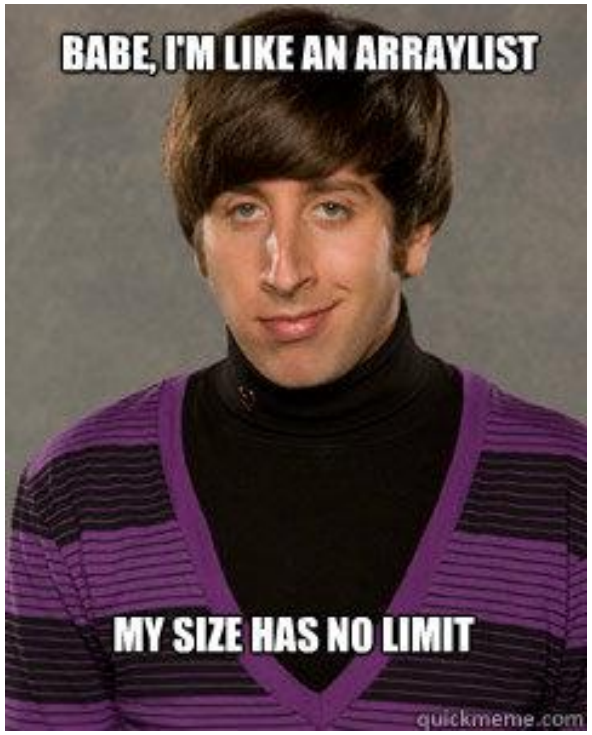
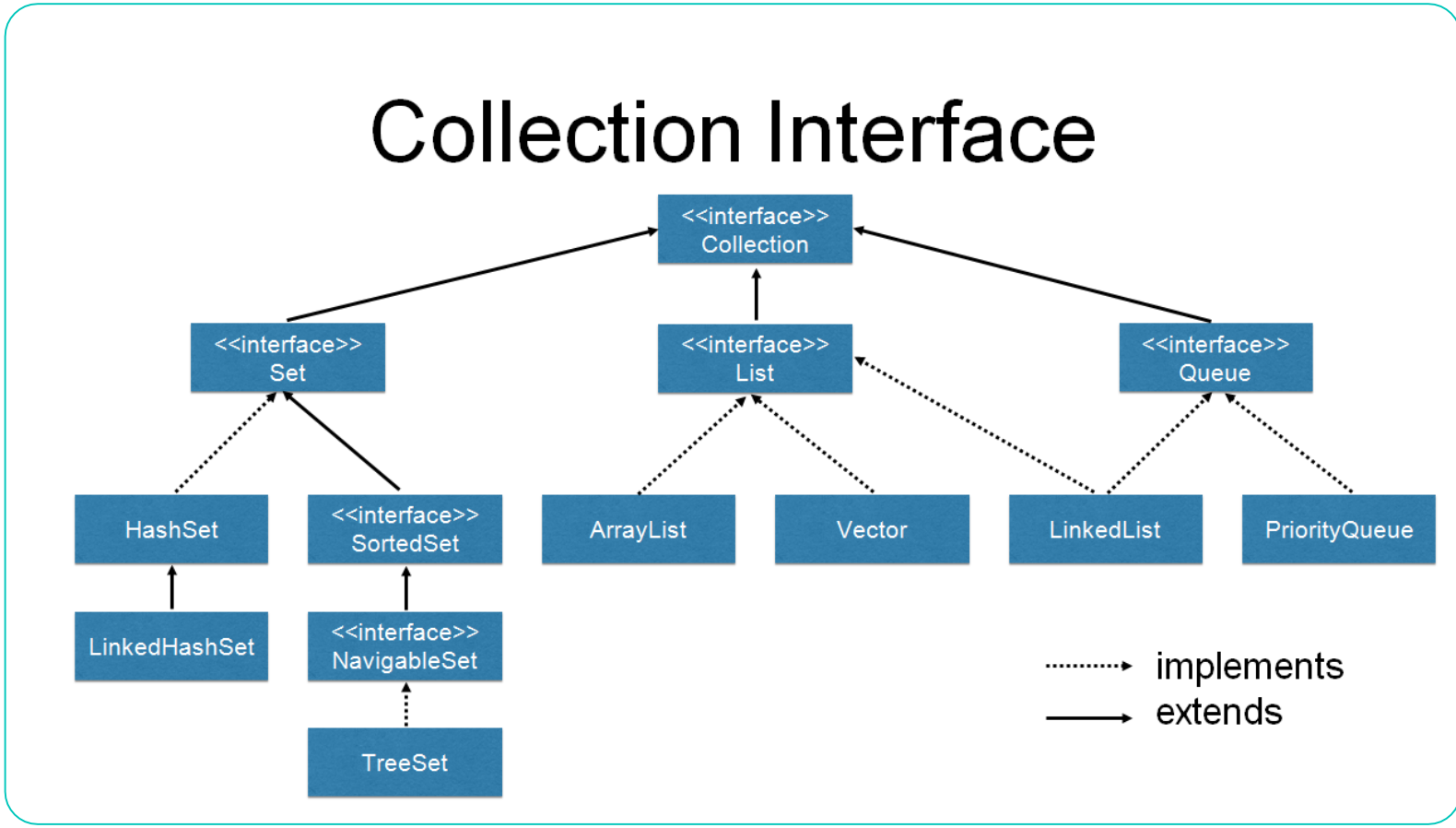


Java Collections

Why use static-size arrays. When you have collections…



Collection Interface



Compile?

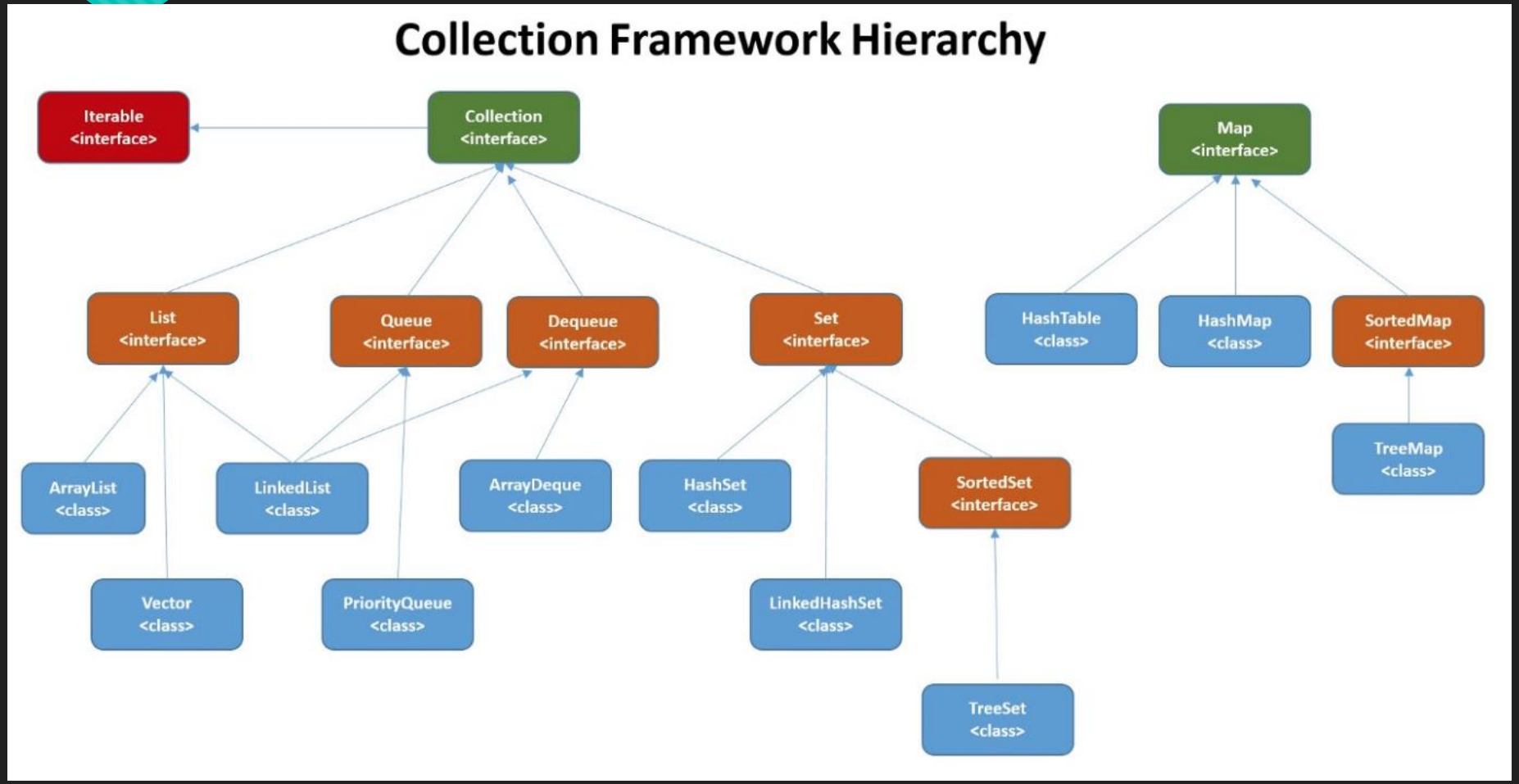
- Collection<int> collectionOfIntegers = new Collection<>(): ? →
- NO, Collection is an interface, the, it can not be instantiated (it does not work)

- List<int> integers = new List<>(); ? →
- NO (List is an interface)

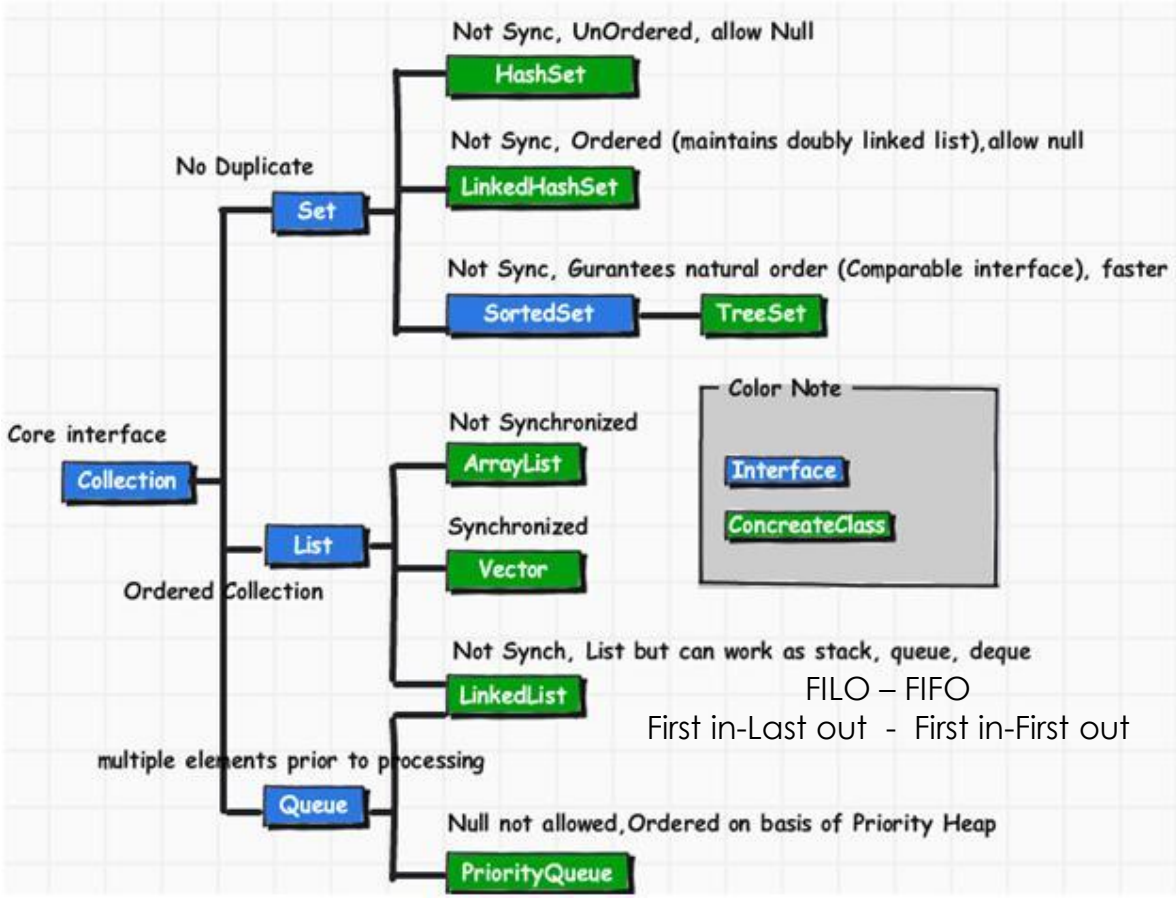
- ArrayList<int> integers = new ArrayList<>(); ? →
- OK

- ArrayList<Object> objects = new ArrayList<>(); ?

Source:
https://medium.com/@sivacynixit/java-collections-hierarchy-with-examples-3ff0b1c44d52



When to use them



FILO – FIFO

First in-Last out - First in-First out

Code snippet

```
Collection things;
things = new ArrayList();
System.out.println("size at the beginning: " + things.size());

things.add(18000);
things.add("hello Quito");
things.add(5000.25F);
things.add(person);
things.remove(5000.25F);
```

Code snippet

```
Collection<Integer> integers = new ArrayList<>();
integers.add(1);

Collection<Person> persons;
persons = new ArrayList<>();

for (int i = 0 ; i <5 ; i++ ) {
        persons.add(new Person(i+1, "Edison"+(i+1),(i+1)*1000));
}

persons.forEach((p) -> {
        System.out.println("Person --> " + p);
});
```

More code

```
public static void main(String[] args) {
    ArrayList<Book> books;
    int sizeBooks;
    books = new ArrayList<>();

    //initializing the elements
    for(int i=0; i<10;i++){
        books.add(i, new Book("title"+i, "Author"+i, "Editorial"+i, "2022"));
    }
    sizeBooks= books.size();

    //printing the elements
    for(Book book: books){
        System.out.println(book);
    }

    System.out.println("Quanty of book"+sizeBooks);
}
```