

WHAT TYPE OF OBJECTS CAN A COLLECTION HOLD?

THIS IS AN IMPORTANT QUESTION

IN SOME LANGUAGES LIKE PYTHON,
A COLLECTION CAN HOLD OBJECTS OF
ANY TYPE

JAVA ENFORCES TYPE-SAFETY

IN JAVA, ALL VARIABLES HAVE DECLARED TYPES

THIS HELPS AVOID ERRORS OF THE SORT
WHERE A PROGRAMMER EXPECTS AN OBJECT
TO BE A NUMBER, BUT ITS ACTUALLY A STRING

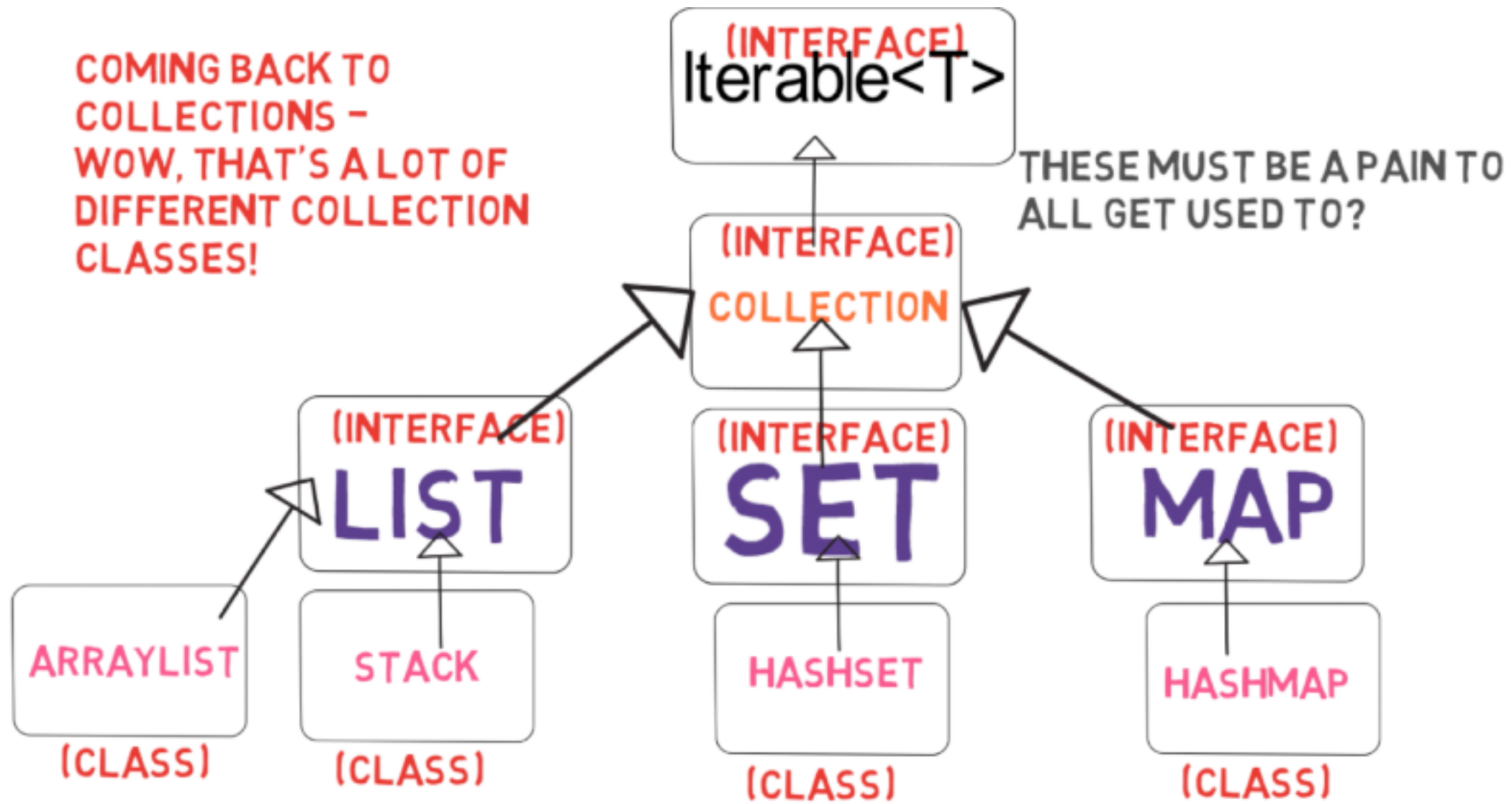
BUT IT DOES MEAN DECLARING UPFRONT
THE TYPE OF A VARIABLE

TYPE-SAFETY FOR COLLECTIONS

COLLECTIONS – LISTS, MAPS, SETS – SATISFY
JAVA TYPE SAFETY RULES VIA

GENERIC

COMING BACK TO
COLLECTIONS -
WOW, THAT'S A LOT OF
DIFFERENT COLLECTION
CLASSES!



ACTUALLY NOT, BECAUSE THERE IS A
UNIFORM AND INTUITIVE WAY TO WORK
WITH THEM ALL.

IT INVOLVES

THE ITERATOR PATTERN

EVERY JAVA COLLECTION IMPLEMENTS
THE INTERFACE

`Iterable<T>`

THIS INTERFACE HAS A SINGLE
METHOD

`Iterator iterator()`

IN OTHER WORDS, EVERY JAVA COLLECTION
OFFERS A WAY TO GET A CORRESPONDING

ITERATOR OBJECT