COP 3330 10/21/26

1) Exams returned next Monday
   Come to Class!

2) Moving On
   Using Built-In Java Classes
   - how to use (in Java) all of these data structures you learn about in COP 3502
   - cognizant of internal run-times

(2a) I/O

how to be read by line
StringTokenizer
Integer.parseInt
Double.parseDouble

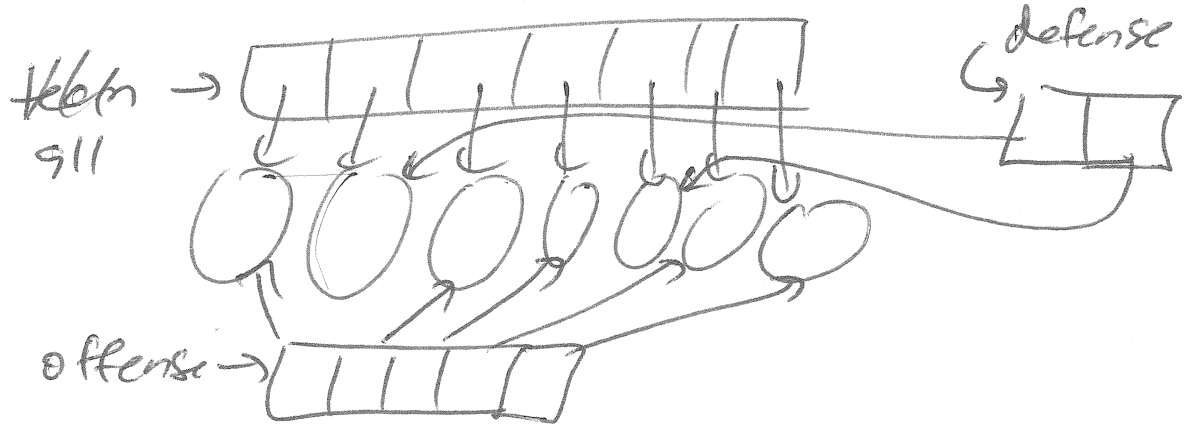
(2b) ArrayList, ArrayDeque

Small Example

team
- total # players
- offense
- defense

11 5 6

Name, ID, Experience → Integer



ArrayList<TYPE> list = new ArrayList<TYPE>();

creates empty list! TYPE can not be primitive.

int double float

Java has wrapper classes: Integer, Double, Float, Long, etc. Character

long char

- .add(E e) - fast end O(1)
- .add(int index, E e) - slow O(n), n = # elems
- .remove(Object) } → O(n) SLOW
- .remove(int index) }
- .size() — O(1)
- .toArray() → O(n)

Array Deque

addFirst
addLast
getFirst
getLast
pollFirst
pollLast
size



all is O(1)

Stack or a Queue