

AvailableList class

This class is used to build the single linked list that maintains the available record spaces in the `_messages.dat` file.

private variables

head is a pointer to a node of the **Available** class

tail is a pointer to a node of the **Available** class

constructors

default

public AvailableList(Available h, Available t) sets **head** to h and **tail** to t

methods

access methods to get and set the private variables

toString() method returns a string that contains all the record numbers in each node of the list, separated by spaces; if the list is empty, the method returns the word "empty"

public void addRecord(int recordNumber) adds a new node at the end of the list; the private integer variable in the node is set to recordNumber

public int getNextRecord() returns the recordNumber of the first node of the list and removes the node from the list; if the list is empty the method returns Globals.EMPTY_AVAILABLE_LIST (a constant with a value of -1)

Testing

Write a `main()` method that instantiates an object of the `AvailableList` class. Call the object **`availableList`**

Add one node to the list

Print the list

declare an integer called **`n`** and obtain the first element of **`availableList`** by making a call to **`getNextRecord()`**
print the list

Add 5 elements randomly, for example: 45, 56, 87, 12, 38
print the list

get each element and print the list every time. the first element of the list should not display in the print since it is removed with the **`getNextRecord()`** method