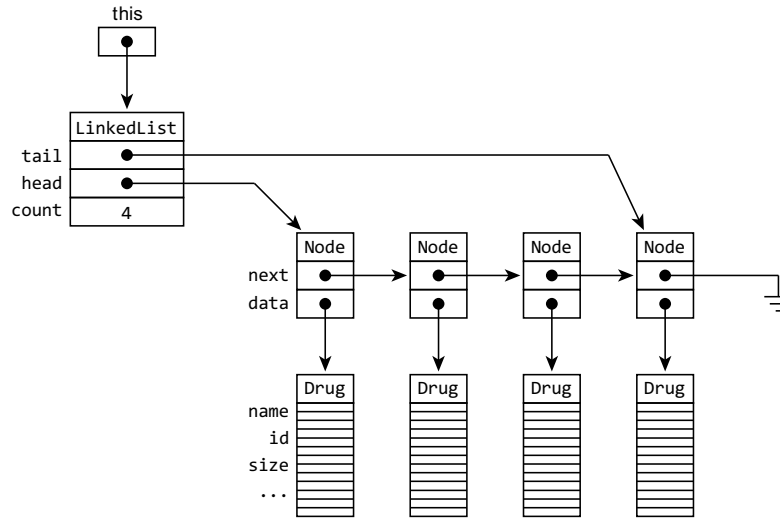


PA4

PROGRAMMING ASSIGNMENT 4 BME 121, FALL 2016

Due Fri Dec 2 at 4:30 pm

ASSIGNMENT



Consider a linked list of Medi-Cal drug records such as discussed in class and diagrammed above. The provided file “pa4-start.cs” contains a working program split across three namespaces. Namespace “MediCal” contains the “Drug” and “DrugRecords” classes. Namespace “DataStructures” contains the “LinkedList” class (which contains the “Node” class). Namespace “BME121.Pa4” contains the “Program” class (holding the “Main” method).

Add a “RemoveAll” method to the “LinkedList” class. Its task is to remove items from the list which match some criterion. The removed items are to be placed in a new linked list which the method should return as its result. The criterion should be specified by the caller passing a “Func< Drug, bool > method to “RemoveAll”.

Test your new method by creating a linked list of drug records from the file “RXQT1503-100.txt” and using the criterion that the drug name contains “VITAMIN”. You may also wish to test against some edge cases where one or more drug records with names containing “VITAMIN” appear as the first or last or only items in the list. You may also wish to test a case where the list is empty or does not contain any drug records matching the criterion. Your submitted program should include code which performs the first test and displays the list returned by “RemoveAll”.

SUBMISSION

Name your C# program file as pa4.cs. Use Bme121.Pa4 as your namespace identifier. Include the standard doc-comment block. Submit pa4.cs at the following url.

<https://georgefreeman.ca/fileuploader>