

CS 201

Lab 14

Linked Lists

In Chapter 12 of your textbook, you studied a linked list of **Magazine** objects called **MagazineList**. In this lab session you will add new methods to **MagazineList.java** and test your methods with the program **testMagazineList.java**.

First notice that the name of the **add** method in **MagazineList.java** has been changed to **addBack**. Now add the following methods:

- * **public void addFront (Magazine mag)** -- puts the Magazine object on the front of the list
- * **public Magazine removeFront()** -- removes the first Magazine object value from the front list and returns a reference to it.
- * **public int count()** – returns the number of magazines in the list, by traversing the linked list and counting the number of MagazineNode objects.

Test your methods by adding various magazine titles to the front and back of the list; then remove them from the front. Display the count and contents of the list before adding the first magazine and then after adding or removing each magazine.

Notice that if you always add and remove from the front of the list, it becomes a **stack** of Magazine nodes.