COM S 213 – Fall 2002

ASSIGNMENT #3: MenuBar and Menus

DATE GIVEN: 9/16/02
DATE DUE: 9/26/02

PURPOSE:
To gain experience with using arrays and pointers. To begin attempts at designing classes from more abstract descriptions.

ASSIGNMENT:
Consider two classes named MenuBar and Menu that are used to represent a graphical menu bar and the menus contained in it. The MenuBar class contains a static array of Menu objects. As such it may only contain a predetermined maximum number of Menu objects. We’ll arbitrarily set that maximum to 10 items. The class will provide routines to do the following:

- Add a new Menu into the menu bar, at the “end”
- Insert a new menu before an existing one
- Remove a Menu
- Get the total number of Menus in the MenuBar
- Display all of the Menus (print something out to the console)

The Menu class will also need to be implemented. The Menu class is similar, only it has an array of C++ Strings which represent the menu items in the array. It has the same set of routines available:

- Add a menu item into the menu at the “end”
- Insert a new menu item before an existing one
- Remove a menu item
- Get the total number of menu items in the Menu
- Display all of the menu items

Your job is to implement these two classes and test the functionality you implement. You may provide your own test data.
**SUGGESTIONS:**
Make sure you test for error conditions. There will be a good amount of leeway in how you implement what is described above, but please keep in mind everything we’ve learned in class to date.