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Lab 06

This program builds off the previous program written for Lab 5 but puts the doubly linked list into a class. The class contains two private variables and multiple public functions. The private variables are the structs from the previous lab and the List pointer to indicate the beginning of the list. The public functions are all the same from the previous lab. These include adding an entry, deleting an entry, printing the list, searching the list, and deleting the list. The only new public function is to search the list by year and print the entry. This is used in another function to search both lists at the same time by year. A constructor function was also created to instantiate a new list object when it is created. This fills in the information for the first time a winner is added to the list.

Multiple new functions were created to accommodate two lists. The populate function from the previous program was changed to populate based on what list is being created. The main difference is that the new populate function takes parameters to create a list given one of the two text files and the size of the text files.

This program allows the user to access and manipulate information from either the Grammy winner list or Eckert-Mauchly list. The functionality for each list is the same as the previous lab, allowing the user to add, remove, print, search, or delete. It also allows the user to search both lists by year and prints each winner from that year. If a winner is not found, it will print “Not found”.

