

SearchName.cpp

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1 /*****
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3 * STUDENT ID  : 1103126 - 1112261
4 * LAB #10    : Creating an Ordered List
5 * CLASS      : CS 1B
6 * SECTION    : MW - 7:30 pm
7 * DUE DATE   : 11/05/2019
8 *****/
9 * SearchName
10 *****/
11 * This function Allows the user to input a name and will output the node as
12 * described.
13 *****/
14
15 #include "MyHeader.h"
16
17 void SearchName(PersonNode *head)
18 {
19     PersonNode *persPtr;    //Proc - stores the target name
20     PersonNode node;        //Proc & In - passes the info into persPtr
21
22     bool found;             //Proc - condition value for the searched name
23
24     //CHECKS FOR EMPTY LIST
25
26     found = false;
27
28     if (head == NULL)
29     {
30         cout << endl;
31         cout << "Search operation is not available for an empty list.";
32         cout << endl;
33     }
34
35     else
36     {
37         //NEW NODE
38
39         persPtr = new PersonNode;
40
41         //INPUT
42
43         cout << endl;
44         cout << "Who would you like to search for? ";
45         getline(cin, node.name);
46
47         *persPtr = node;
48
49         cout << endl;
50         cout << "Searching for " << persPtr -> name << "...";
51         cout << endl;
52
53         //GOES ATHROUGH THE LIST
54
55     }
```

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56
57 while ((head -> next != NULL) && !found)
58 {
59     //IF FOUND
60
61     if (head -> name == persPtr -> name)
62     {
63         cout << endl;
64         cout << "Name:    " << head -> name << endl;
65         cout << "Gender:  " << head -> gender << endl;
66         cout << "Age:     " << head -> age << endl;
67
68         found = true;
69     }
70
71     else
72     {
73         head = head -> next;
74         found = false;
75     }
76
77
78
79 }
80
81 if (head -> next == NULL && head -> name == persPtr -> name)
82 {
83     cout << endl;
84     cout << "Name:    " << head -> name << endl;
85     cout << "Gender:  " << head -> gender << endl;
86     cout << "Age:     " << head -> age << endl;
87
88     found = true;
89 }
90
91 //IF NOT FOUND IN THE LIST
92
93 else if (!found)
94 {
95     cout << endl;
96     cout << "I'm sorry, \"" << persPtr -> name;
97     cout << "\" was NOT found!";
98     cout << endl;
99 }
100
101 }
102
103 persPtr = NULL;
104 }
105

```