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1  /*
2  Class: CPSC 122-01
3  Team Member 1: Zac Foteff
4  Team Member 2: None
5  Submitted by: Zac Foteff
6  GU Username: zfoteff
7  File Name: proj6.cpp
8  Program defines a Class List which is an example of a singly linked list
9  File defines public functions to be used in proj6Tst.cpp
10 To Build: g++ proj6.cpp proj6Tst.cpp
11 To Execute: ./a.out
12 */
13
14 #include "proj6.h"
15 #include <iostream>
16 using namespace std;
17
18 List::List(){
19     length = 0;
20     head = NULL;
21 }
22
23 List::~List(){
24
25 }
26
27 bool List::IsEmpty() const{
28     if(head == NULL){
29         return true;
30     }
31     return false;
32 }
33
34 int List::GetLength() const{
35     return length;
36 }
37
38 void List::PutItemH(const itemType newItem){
39     //assigning variables to dummy node
40     node* cur = new node;
41     cur->item = newItem;
42     cur->next = head;
43
44     head = cur; //sets head node = to cur node. Cur points to previous head
45     length++;
46     cur = NULL;
47 }
48
49 itemType List::GetItemH() const{
50     return head->item; // returns item stored in head node
51 }
52
53 void List::DeleteItemH(){
54     node* cur = new node;
55     cur = head->next; // cur = node pointed to by next
56     delete head; // head becomes null
57
58     head = cur; // head is set to cur, all pointers start at cur
59     cur = NULL;
60     length--;
61 }
62
63 void List::Print() const{
64     node* cur = new node;
65     cur = head;
66     while(cur != NULL){
67         cout<<cur->item<<endl; // output item stored in cur node
68         cur = cur->next; //sets cur equal to the node it points to/ next node
69     }

```

70 }

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