CSCI 2270 Lecture Notes

02/04/2019

* Destructor
  + gets called automatically when the object is no longer in scope
* Insert into a linked list
  + find a node containing given key (afterMe)
  + insert node containing new value (newValue) directly after
  + will be a void function
    - void insert(string afterMe, string newItem);
  + first, find(afterMe)
  + if afterMe is empty string, then make new node be the new head
  + if afterMe is not found, display error message
  + if afterMe is tail, append (function we already have defined)’
  + if afterMe is in the middle,
    - create a new node
    - write the newValue to key of the new node
    - relink nodes to preserve proper linked list
* delete from a linked list
  + void deleteNode(string sKey);
  + 3 cases
    - sKey is found in head
      * make head = head->next
      * delete the node (deallocate)
    - sKey is found in tail
      * keep track of last node while searching
      * use last node to set new tail
      * delete node (deallocate)
    - sKey is found in the middle
      * keep track of last node
      * use last node relink with temp->next