3-2 Assignment: Vector Sorting

Fred Wahab

CS-300

**Code Reflection**

This code implements the Append(), Prepend(), PrintList(), Remove(), and Search() methods from within the LinkList.cpp. Everything in this project revolves around the Bid struct and the LinkedList class. It begins by initializing the housekeeping variables in the default constructor and building out the different methods. The methods are small and straightforward so the logic did not give me much trouble. I had a couple of syntax issues involving cout which I resolved by going through the search resolution option in the error list. There was also an issue of prevNode being called and potentially being empty. This was also resolved by using the search resolution in the error list (simple syntax change).

**Pseudocode**

Void **Append**(bid) {

Create new node

newNode-> bid = bid;

newNode ->next == nullptr;

if (head == nullptr) {

Set head and tail to newNode;

Increment size

}

else {

tail->next = newNode;

tail = newNode;

Increment size

}

}

Void **Prepend**(bid) {

Create new node

newNode-> bid = bid;

newNode ->next == nullptr;

if (head == nullptr) {

Set head and tail to newNode;

Increment size

}

else {

newNode->next = head;

head = newNode;

Increment size

}

}

Void **PrintList**() {

Create temp node

while (temp != nullptr) {

Output node’s data

Set current node to next node

}}

Void **Remove**(bidId) {

Create temp node to track current node

Create temp node to track previous node

if (head node bidId equals bidId) {

Set head to next;

Decrement size;

return

}

while (current does not equal nullptr) {

if (current node bidId equals bidId) {

Set previous node next equal to current node next

Decrement size

return

}

Set previous node to current node

Set current node to next node

}

}Bid Search(bidId) {

Create temp node for current node

Create an empty node with empty bidId

while (current does not equal nullptr) {

if (current bidId equals bidId) {

Return current bid

}

Set current node to next node

}

Return empty bid

}