```
// Dalton Wright
// CSCI 301 01
// Project #7
// UML Charts
```

-listPtr: LinkedList<ItemType>* +FrontList1(); +FrontList1(const FrontList1<ItemType>& aList) +virtual ~FrontList1(); +insert(const ItemType& newEntry): bool +remove(): bool +isEmpty(): bool +const getLength (): int +clear(): void +peek(): ItemType +getEntry(const int& position) throw(PrecondViolatedExcep): ItemType

Class FrontList2 +FrontList2(); +FrontList2(const FrontList2<ItemType>& aList) +virtual ~FrontList2(); +insert(const ItemType& newEntry): bool +insert(int newPostion, const ItemType& newEntry) throw(PrecondViolatedExcep): bool +remove(): bool +remove(int position): bool +peek(): ItemType +setEntry(int& position, const ItemType& newEntry) throw(PrecondViolatedExcep): void

```
Class FrontList3

+FrontList3();
+FrontList3(const FrontList3<|temType>& aList)
+virtual ~FrontList3();
+insert(const ItemType& newEntry): bool
+remove(): bool
+isEmpty(): bool
+const getLength (): int
+clear(): void
+peek(): ItemType
+getEntry(const int& position) throw(PrecondViolatedExcep): ItemType
```

```
Class LinkedSortedList
-headPtr: Node<ItemType>*
-itemCount: int
-getNodeBefore(const ItemType& anEntry) const: Node<ItemType>*
-getNodeAt(int position) const: Node<ItemType>*
-copyChain(const Node<ItemType>* origChainPtr): Node<ItemType>*
+LinkedSortedList();
+LinkedSortedList(const LinkedSortedList<ItemType>& aList);
+virtual ~LinkedSortedList();
+insertSorted(const ItemType& newEntry): void
+removeSorted(const ItemType& anEntry): bool
+getPosition(const ItemType& newEntry) const: int
+isEmpty() const: bool
+getLength() const: int
+remove(int position): bool
+clear(): void
```

+getEntry(innt position): ItemType

-nodeltem: ItemType -previous: Node<ItemType>* -next: Node<ItemType>* +Node(); +Node(const ItemType& anItem); +Node(const ItemType& anItem, Node<ItemType>* nextNodePtr); +Node(const ItemType& anItem, Node<ItemType>* nextNodePtr, Node<ItemType>* prevNodePtr); +setItem(const ItemType& anItem): void +setNext(Node<ItemType>* nextNodePtr): void +setPrev(Node<ItemType>* prevNodePtr): void +getItem() const: ItemType +getNext() const: Node<ItemType>* +getPrev() const: Node<ItemType>*

Class PrecondViolatedExcep : public logic_error +PrecondViolatedExcep(const string& message = " ");