```
// Dalton Wright
// CSCI 301 01
// Project #6
// UML Charts
```

Class Event -eventType: char -eventArrivalTime: int -eventTransactionTime: int +Event(); +Event(const char& type, const int& time); +Event(const char& type, const int& time, cons tint& length); +getEventTime(): int +getEventType(): char +getEventLength(): int +setEventType(): void +setEventType(): void +setEventLength(): void

```
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
```

```
class SL_PriorityQueue
-slistPtr: LinkedSortedList<ItemType>*

+SL_PriorityQueue();
+SL_PriorityQueue(const SL_PriorityQueue& pq);
+~SL_PriorityQueue();
+isEmpty() const: bool
+add(const ItemType& newEntry): bool
+remove(): bool
+peek(): ItemType
```

Class PriorityQueueInterface

- +virtual isEmpty() const=0: bool
- +virtual add(const ItemType& newEntry)=0: bool
- +virtual remove()=0: bool
- +virtual peek() const= 0: ItemType

Class Node

- -nodeItem: 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 = "");