

## template<elemType> listType

```
-maxSize: int  
-length: int  
-list*: elemType  
-----  
+isEmpty() const : bool  
+isFull() const : bool  
+getLength() const : int  
+getMaxSize() const : int  
+sort(): void  
+print() const : void  
+insertAt(const elemType&, int) : void  
+getAt(int) : elemType&  
+clear() : void  
+listType(int)  
+~listType()
```



## stockListType

```
-t : listType<stockType>  
-totalAssetsValue : double  
-fileName : string  
-----  
+stockListType()  
+populateList() : void  
+clearList() : void  
+getFileName() : string  
+getTotalAssetsValue() : double  
+setFileName(string) : void  
+createFileReport() : void  
+printScreenReport() : void  
+printScreenReportByGain() : void  
+createFileReport() : void  
+addToList(stockType) : void  
+createHeader(ostream&) : void  
+createFooter(ostream&) : void  
+sortGainLoss() : int*  
+countLines() : int
```

## stockType

```
-symbol : string  
-totalValue : double  
-numberOfShares : int  
-openingPrice : double  
-closingPrice : double  
-highPrice : double  
-lowPrice : double  
-previousPrice : double  
-percentGainLoss : double  
-----  
<<friend>> operator<< (ostream&, stockType&) : ostream&  
<<friend>> operator>> (istream&, stockType&) : istream&  
+stockType()  
+getSymbol() : string  
+getTotalValue() : double  
+getNumOfShares() : int  
+getOpeningPrice() : double  
+getClosingPrice() : double  
+getHighPrice() : double  
+getLowPrice() : double  
+getPreviousPrice() : double  
+getPercentGainLoss() : double  
+setSymbol(string) : void  
+setNumOfShares(int) : void  
+setOpeningPrice(double) : void  
+setClosingPrice(double) : void  
+setHighPrice(double) : void  
+setLowPrice(double) : void  
+setPreviousPrice(double) : void  
+operator== (stockType&) : bool  
+operator!= (stockType&) : bool  
+operator<= (stockType&) : bool  
+operator< (stockType&) : bool  
+operator>= (stockType&) : bool  
+operator> (stockType&) : bool
```

## stockApp

```
-lst : stockListType  
-----  
+stockApp()  
+execute() : void  
+menu() : void  
+getSelection(string) : void  
+changeFileName() : string
```