**Lighthouse Design's Foundation Classes**
Class Inheritance Hierarchy:

```
                                        ┌── FCBag
                  ┌── FCUnorderedCollection
                  │                     └── FCSet
                  │
                  │                                         ┌── FCList
    ┌── FCCollection                                        ├── FCOrderedSet
    │             │                    ┌── FCUnsortedCollection
    │             │                    │                    ├── FCStack
Object            └── FCOrderedCollection                   └── FCQueue
    ├── FCString                       │
    │                                  │                    ┌── FCSortedList
    │                                  └── FCSortedCollection
    └── FCError                                             └── FCSortedSet
```

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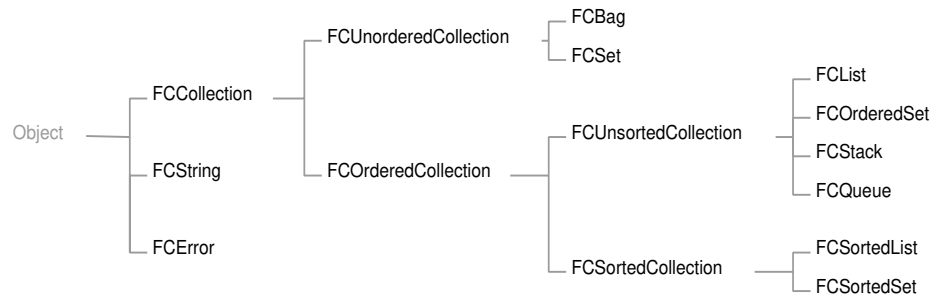
The three main classes in the Foundation library include: FCCollection, FCString and FCError:

**FCCollection**     FCCollection is an abstract superclass for a family of collection classes, including sets, bag, lists stacks and queues. Listed below are the instantiable FCCollection subclasses, their features, and a representative sample of such a collection.

| Class | Ordered | Sorted | Unique | Example representation |
|-------|---------|--------|--------|------------------------|
| FCBag | No | No | No | A grocery bag, where being able to quickly add and remove objects multiple times is most important, and the order doesn't matter. |
| FCSet | No | No | Yes | Customers in your customer list—no individual is represented more than once, and there is not necessarily a notion of order. |
| FCList | Yes | No | No | The words in this document—some appear multiple times, and there is a need for a specific order. |
| FCOrderedSet | Yes | No | Yes | Subviews for a view, which are required to be unique and maintain a sense of order (which is on top, which is on the bottom). |
| FCStack | Yes | No | No | A last in, first out (LIFO) structure, like a stack of plates—add plates to the top, remove them from the top. |
| FCQueue | Yes | No | No | A first in, first out (FIFO) structure, like a queue at the butcher shop—people are added at the rear, and leave from the front. |
| FCSortedList | Yes | Yes | No | All words in this document, sorted alphabetically. |
| FCSortedSet | Yes | Yes | Yes | Unique words in this document, sorted alphabetically. |

**FCString**     FCString takes the drudgery out of dealing with character strings in C by providing a convenient way to create and manipulate them, similar to standard C, but without the usual concern over memory allocation.

**FCError**     FCError offers an object-oriented wrapper for exception handling—offering a simple and efficient way to announce errors to the user, while providing developers with the flexibility to easily change how a given error condition should be handled.

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**PRODUCT AVAILABILITY:**
- Available now for NEXTSTEP 3.1 or later
- Available in both binary and source code form
- Includes complete and standardized reference manual
- Technical support contracts are available
- Site license and runtime licensing available

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**FOR MORE INFORMATION:**
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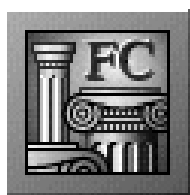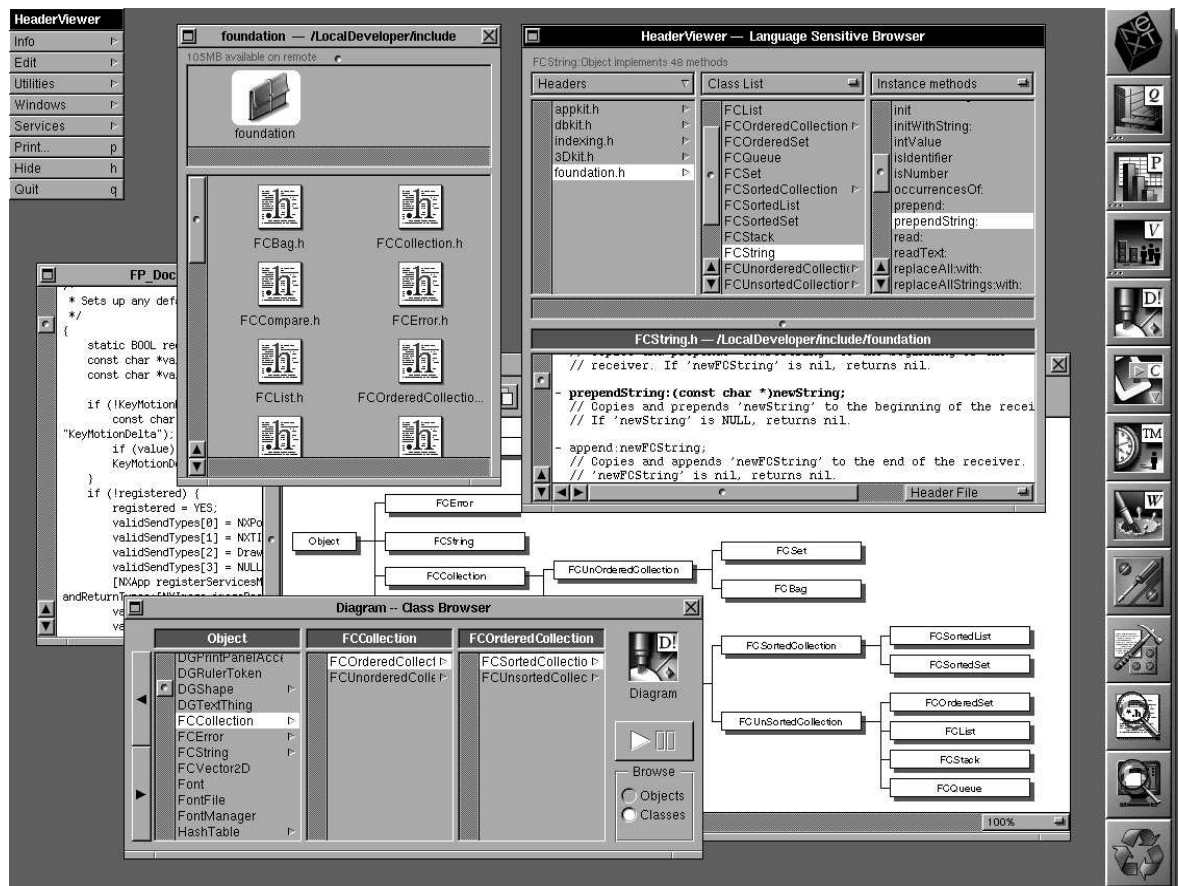
**Lighthouse Design's Foundation Classes**™ offer corporate developers an indispensable suite of industrial-strength software components. Time-tested in Lighthouse Design's own commercial applications, as well as by independent consultants, the Foundation Classes provide a safe and reliable opportunity to save development time and money in deploying in-house mission-critical applications.

For corporate developers transitioning from mainframes or Microsoft® Windows™ to object-oriented programming, the Foundation Classes offer an immediate return on that investment: reusability of well-tested code. The Classes ship in every Lighthouse Design commercial application—and are therefore among the safest ObjectWare available for NEXTSTEP®.

Leveraging years of Lighthouse Design's experience and quality assurance, the Foundation Classes provide a well-documented library of Objective-C data structures, string handling and error classes.

The Foundation Classes are appropriate for a wide variety of development tasks and are in use by object-oriented developers in the financial services, telecommunications, retail, health care, and defense industries.

If you're looking to ship custom applications on-time and on-budget, the Foundation Classes are an invaluable addition to your arsenal of developer tools.

*For corporate developers building mission-critical, custom applications, the Foundation Classes are an invaluable addition to your arsenal of developer tools—helping to ensure on-time and on-budget deployment.*

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