Test of Collection performance

# Add

The diagram shows how much time it takes to add x elements to the collection.

This clearly shows that a Sorted Dictionary performs badly when you start to add a lot of elements. A Dictionary is a lot better, but is still a lot slower than list.

# Contain

The diagram shows the amount contains operation and the milliseconds required to do the operations.

The List is much slow at using the contain method, if the list is shorted to 1/10 then it will run much faster (30 sec. for 100 contain calls). The Sorted Dictionary and Dictionary are so fast that it hasn’t been possible to measure the time.

# Binary search

I have tested the speed of binary search on the List and contain on Dictionary with 10 million int. It’s possible to make 1 million searches in both collections in less than a millisecond.

# Conclusion

The list is very suited for conditions where there is a lot of elements that is add, and little need to call the contain method. Sorted Dictionary or Dictionary handles calls to the contain method very well but are not that good at handling a huge amount of add operations, especial Sorted Dictionary.