

Code Contract Samples

March 23, 2012

1 Building

The Samples folder is a zip file installed under %ProgramFiles%. In order to build and use the sample, please copy the folder(s) of interest to a writable directory and open the solution there. Each folder contains a Visual Studio 2010 solution targetting the .NET Framework v4. Inside each solution is an individual documentation file for that sample.

2 Overview

- Rational: Shows how to use different levels of runtime checking.
- Invariants: Shows how to use runtime checking of object invariants.
- GCD: Shows how to use the static checker to prove simple arithmetic properties.
- BinarySearch: Shows how to use the static checker on a binary search example, checking for implicit non-null and array bound obligations.
- LeapYear: Shows how to use the static checker to prove termination and proper functioning of a date computation.
- InterfaceContracts: Shows how to declare interface contracts and how the static checker uses them.
- Chunker: Shows an example of using object invariants together with static checking.
- ApiProtocols: Shows how to declare API protocols as contracts.
- NonNullStack: Shows object invariants using quantifiers (ForAll) and using caching to avoid reanalysis.