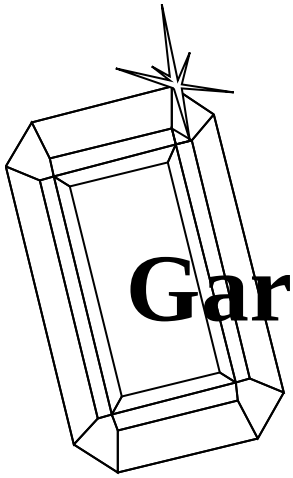

The Garnet Reference Manuals
Revised for Version 3.0

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Abstract

The Garnet User Interface Development Environment contains a comprehensive set of tools that make it significantly easier to design and implement highly-interactive, graphical, direct manipulation user interfaces. Garnet provides a high level of support, while still being Look-and-Feel independent and providing the applications with tremendous flexibility. The Garnet tools are organized into two layers. The toolkit layer provides an object-oriented, constraint-based graphical system that allows properties of graphical objects to be specified in a simple, declarative manner, and then maintained automatically by the system. The dynamic, interactive behavior of the objects can be specified separately by attaching high-level ‘‘interactor’’ objects to the graphics. This layer includes two complete widget sets, one with the Garnet look and feel, and the other with a Motif look and feel. The higher layer of Garnet includes three tools at this time. The first is an interface builder tool, called Gilt, which allows dialog boxes and other windows to be created. The second is C32, which is a spreadsheet interface for editing constraints among objects. Last is Lapidary, which allows the user interface designer to draw pictures of *all* graphical aspects of the user interface. Other tools are currently in production, such as Jade (which creates dialog boxes from a specification).

The Garnet toolkit layer software is available for unlimited distribution by anonymous FTP. Garnet uses Common Lisp and the X window manager, and is therefore portable across a wide variety of platforms. This document contains an overview, tutorial and a full set of reference manuals for the Garnet System.

Keywords: User Interface Development Environments, User Interface Management Systems, Constraints, Interface Builders, Object-Oriented Programming, Direct Manipulation, Input/Output, Garnet.

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