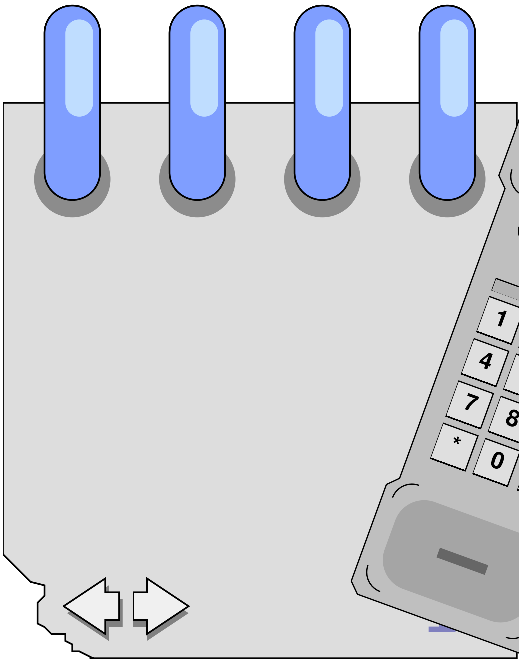
Product Information 1

Open windows with HyperLook[*]

Welcome to the exciting world of HyperLook user interface design. HyperLook is a powerful, easy to use development tool, and it's fun, too!

Figure 1

HyperLook is fun to use!



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[*]. HyperLook is a trademark of the Turing Institute Limited

Introducing HyperLook

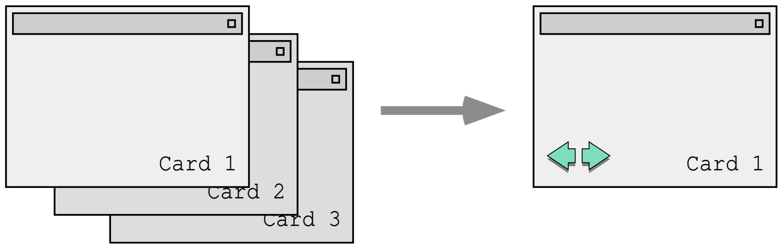
This document gives you a whistle-stop tour of HyperLook. From it you'll get an idea of the things you can do with HyperLook and you'll be introduced to some of the terminology of the HyperLook world.

Stacks and Cards

HyperLook uses the names **stacks** and **cards** instead of windows and window layouts. This widely used terminology was chosen to emphasize the fact that HyperLook stacks (windows) can have more than one card (layout).

Figure 2

Stacks can have multiple cards. You can get to them using the arrow buttons.



One card per window?

Or all cards in one stack!

Each window layout is called a card, and may contain graphics and user interface components such as buttons, text and sliders. You can flip between cards like turning pages in a book.

Desktop Management

HyperLook is an easy to use environment. Any user of OpenWindows[*] will find that it is easy to learn how to use HyperLook.

You are free to configure your working environment, and you can modify and extend the user interface.

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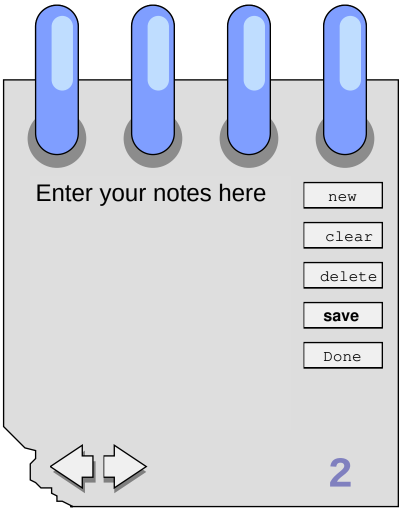
[*] OpenWindows is a trademark of Sun Microsystems Inc.

HyperLook provides a comprehensive set of desktop tools including a clipboard, color pallet, notepad and many others.



Enter your notes here

Figure 3

The HyperLook Notepad stack.

Graphics Editing

A powerful graphics editor comes with HyperLook. It lets you create sophisticated diagrams, graphics and other artwork, and it's simple to use.

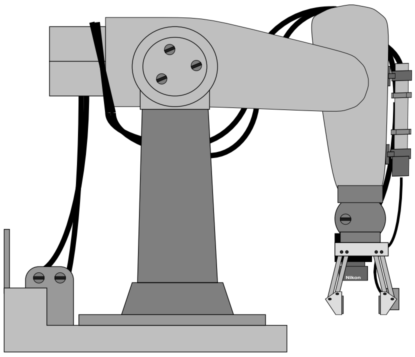


Figure 4

An example of a drawing created with the HyperLook graphics editor.

Graphics created with HyperLook can be incorporated into other environments and used with other tools. For example, most of the artwork and diagrams in this manual were created using the PostScript[*] graphics editor and were then imported into FrameMaker[†]. PostScript graphics can be imported into many desktop publishing tools.

Rapid Application Development

HyperLook simplifies the task of building user interfaces. You can prototype user interfaces quickly by direct manipulation, without restriction of the creative process.

HyperLook is not restricted to a single look and feel. You can create a new look and feel for your application, or adapt an existing look and feel.

My own design,
pretty huh!

Figure 5

HyperLook can have any look and feel.

Interactive Design

The interface designer can do much of the interface development by direct manipulation: by drawing, dragging and sizing objects with the mouse, without writing a line of code.

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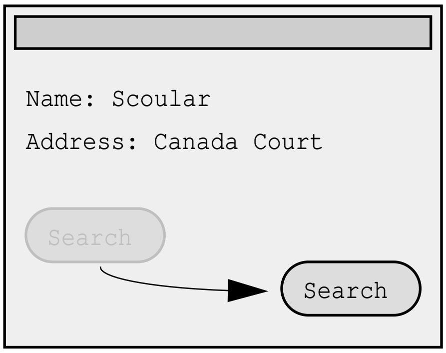
[*] PostScript is a registered trademark of Adobe Systems Inc.
[†] FrameMaker is a registered trademark of Frame Technology Corporation

One of the most time consuming aspects of creating interactive applications is the design of the interface. Even non-programmers can design applications using direct manipulation in HyperLook.

Figure 6

Design your interface by direct manipulation. Pick up a button, move it, and go!


Name: Scoular

Address: Canada Court

You can even modify the interface while the application is alive and running! Changes are instantaneous, no compilation is needed!

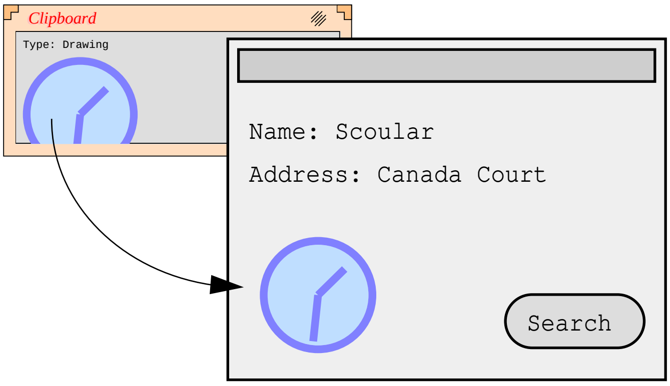
The editor can be removed from your application to stop users of your application from accidentally modifying the user interface. In this way you can deliver runtime systems to your customers.

Design by Example

Not only can you design your own user interface, but you can also use components designed by others. By copying and pasting components, you can insert them into your application, complete with their functionality.

Figure 7

Pasting a clock into your application.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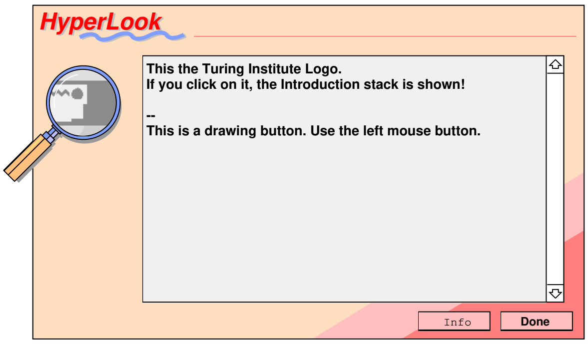
HyperLook provides example interfaces and components which you can plug right into your application.

Providing Help

Not only does HyperLook provide an on-line help system which helps you to navigate through the system, it also lets you define your own help for the users of your application. No programming is required!.



This the Turing Institute Logo.
If you click on it, the Introduction stack is shown!

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This is a drawing button. Use the left mouse button.

Figure 8

The HyperLook Help stack.

Help can be provided as text but you can also design your own help stack. It can use graphics and all the other functionality provided by the HyperLook system.

Extensibility

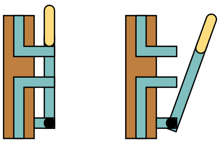
A comprehensive set of user interface components like buttons, scroll-bars and pull-down menus is provided. This set can be extended and tailored to the needs of any application.

HyperLook is not limited to the components it provides. You can modify existing components or add completely new ones. You can draw new components, customize existing ones, or create entirely new objects with their own interactive behaviour.

It is possible to design and implement a corporate style, or to design a new set of components for your environment. For example, you could make a set of components for use in a process control environment. Once tested they can be used to build industrial process control applications.

Figure 9

Designing a knife switch by drawing the on and off positions.

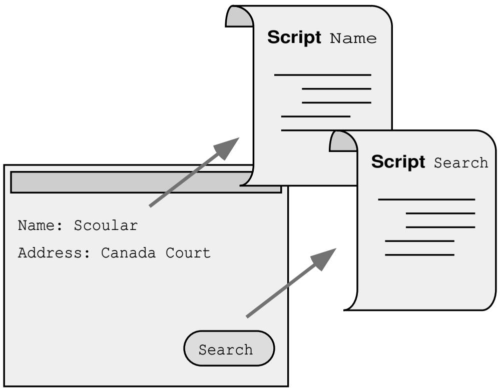


Customizing Components

Components can be customized using the PostScript programming language. Each component of the user interface can have a *Script* associated with it.

Figure 10

Every component can have a Script.



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Scripting (programming user interface components) lets you to change the component's look and feel.

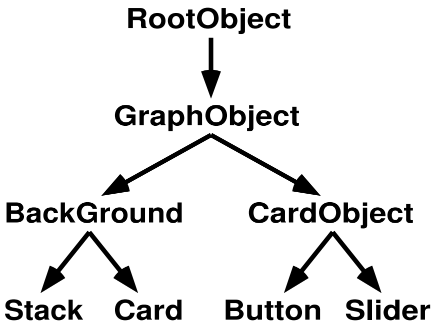
There is a C-like scripting language available for HyperLook, called PdB. PdB is the ideal scripting language if you are already familiar with C. You can write new component classes in PdB too!

Object Oriented

HyperLook is completely object oriented. All components are implemented as classes which are defined using a classing mechanism similar to that of SmallTalk.

Figure 11

Functionality is Inherited using classes.



An easy to understand message passing mechanism is used for communicating between objects and communicating with client programs.

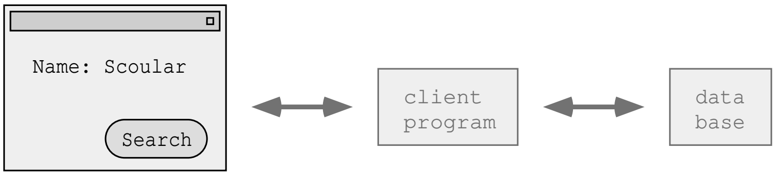
It is possible to add your own classes to the system. The classing mechanism provides multiple inheritance, persistent variables, dynamic loading, and other features useful for the creation of dynamic object oriented user interfaces.

Interfacing to Other Languages

HyperLook allows any UNIX[*] process to access it through an easy to use C programming interface. Interfaces to other languages such as C++, Prolog, Lisp and Perl are available.

Figure 12

Linking a database client to HyperLook.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[*] UNIX is a registered trademark of UNIX Systems Laboratories Inc.

Background

HyperLook

The development of HyperLook began in October 1987 at The Turing Institute, and the initial system was completed in April 1988.

The programming and detailed design of HyperLook was done by Arthur van Hoff of The Turing Institute.

After 5 years of development and testing, worldwide distribution and 300 sites using the system, HyperLook was released as a commercial product in June 1992.

The Turing Institute

The Turing Institute is an independent company specializing in the research, development and commercial exploitation of the latest advances in computer software. The company was formed in 1983 in honor of Alan Turing, whose pioneering work helped provide a formal basis for present day computing and artificial intelligence.

Figure 13

Alan M. Turing, 1912-1954

The Institute's activities are sharply focused on solutions which allow computers to interact with both humans and their environments. Such a strategy has led to a number of important developments and products in areas as diverse as user-interfaces, document image processing, decision support, fault diagnosis, machine learning, advanced robotics, computer vision and intelligent documentation.

Contact Information

HyperLook provides more functionality, with greater ease of use than any other OpenWindows tool. Earlier versions of the program have been in use at more than 300 sites worldwide. Its value is proven.

The examples show that HyperLook is useful to a wide range of people: from non-programmers to experts, all of whom want an environment which allows them to experiment with and develop useful tools and applications.

For more information about HyperLook contact:

The Turing Institute Limited
36 North Hanover Street
Glasgow G1 2AD
Scotland
Tel: +44 41 552 6400
Fax: +44 41 552 2985
Email: hyperlook@turing.com