INTERACTIVE DESIGN

OPERATING SYSTEM INTERFACE DESIGN BETWEEN 1981-2009

BY WDD STAFF | MAR. 11, 2009

A Graphical User Interface (GUI for short) allows users to interact with the computer hardware in a user friendly way.

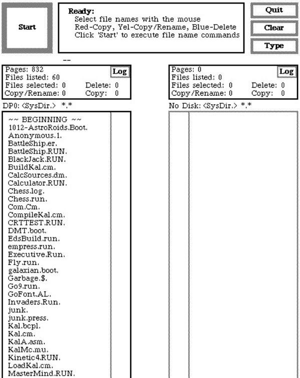
Over the years a range of GUI's have been developed for different operating systems such as OS/2, Macintosh, Windowsamiga, Linux, Symbian OS, and more.

We'll be taking a look at the evolution of the interface designs of the major operating systems since the 80's.

I should mention that this article showcases only the significant advances in GUI design (not operating system advances) and also not all of the graphical user interfaces and operating systems existing today.

The first GUI was developed by researchers at Xerox Palo Alto Research Center (PARC) in the '70s. This research opened a whole new era of computer graphic innovations.

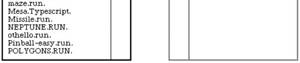
The first personal computer which used a modern graphical user interface was the Xerox Alto, developed in 1973. This was not a commercial product and was intended mainly for research at universities.


Start
Quit
Clear
Type
Log
Log

```
Ready:
  Select file names with the mouse
  Red-Copy, Yel-Copy/Rename, Blue-Delete
  Click 'Start' to execute file name commands

Pages: 832                              Pages: 0
Files listed: 60                        Files listed: 0
Files selected: 0     Delete: 0         Files selected: 0     Delete: 0
Copy/Rename: 0        Copy:   0         Copy/Rename: 0        Copy:   0
DP0: <SysDir.>  *.*                     No Disk: <SysDir.> *.*

 ~~ BEGINNING ~~
 1012-AstroRoids.Boot.
 Anonymous.1.
 BattleShip.er.
 BattleShip.RUN.
 BlackJack.RUN.
 BuildKal.cm.
 CalcSources.dm.
 Calculator.RUN.
 Chess.log.
 Chess.run.
 Com.Cm.
 CompileKal.cm.
 CRTTEST.RUN.
 DMT.boot.
 EdsBuild.run.
 empress.run.
 Executive.Run.
 Fly.run.
 galaxian.boot.
 Garbage.$.
 Go9.run.
 GoFont.AL.
 Invaders.Run.
 junk.
 junk.press.
 Kal.bcpl.
 Kal.cm.
 KalA.asm.
 KalMc.mu.
 Kinetic4.RUN.
 LoadKal.cm.
 MasterMind.RUN.
```



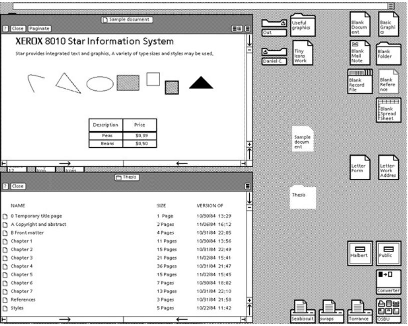
maze.run.
Mesa.Typescript.
Missile.run.
NEPTUNE.RUN.
othello.run.
Pinball-easy.run.
POLYGONS.RUN.

Source: toastytech.com

1981-1985

Xerox 8010 Star (released in 1981)

This was the first system that was referred to as a fully integrated desktop computer including applications and a GUI. It was known as *"The Xerox Star"*, later renamed *"ViewPoint"* and later again renamed to *"GlobalView"*.


Sample document
?
Close
Paginate
Thesis
Out
Useful graphics
Daniel C.
Tiny Icons Work
Blank Document
Basic Graphics
Blank Mail Note
Blank Folder
Blank Record File
Blank Reference
Blank Spread Sheet
Sample document
Letter Form
Letter-Work Addres
Thesis
Halbert
Public
Converter
Seabiscuit
swaps
Torrance
OSBU

XEROX 8010 Star Information System

Star provides integrated text and graphics. A variety of type sizes and styles may be used.

Description	Price
Peas	$0,39
Beans	$0,50

NAME	SIZE	VERSION OF
0 Temporary title page	1 Page	10/30/84 13:29
A Copyright and abstract	2 Pages	11/06/84 16:12
B Front matter	4 Pages	10/31/84 22:05
Chapter 1	11 Pages	10/30/84 13:56
Chapter 2	15 Pages	10/31/84 22:49
Chapter 3	21 Pages	11/02/84 15:41
Chapter 4	36 Pages	10/31/84 21:47
Chapter 5	15 Pages	11/02/84 15:45
Chapter 6	7 Pages	10/30/84 18:02
Chapter 7	13 Pages	10/31/84 22:10
References	3 Pages	10/31/84 21:58
Styles	5 Pages	10/22/84 11:42

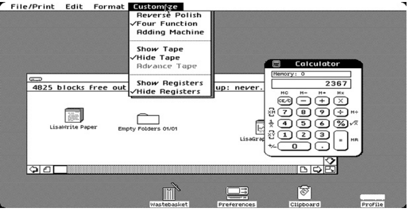
Xerox 8010 Star, Source: toastytech.com

Apple Lisa Office System 1 (released in 1983)

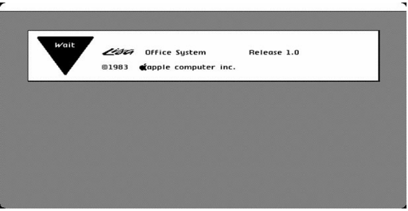
Also referred to as Lisa OS, which in this case is short for Office System. It was developed by Apple with the intention of being a document processing workstation.

Unfortunately this workstation didn't last, it was *killed* by Apple's Macintosh operating system that was more affordable.

There were upgrades to Lisa OS, *Lisa OS 2* in 1983 and *Lisa OS 7/7 3.1* in 1984, that upgraded the system itself, but not the graphical user interface.


File/Print
Edit
Format
Customize
Reverse Polish
✓Four Function
Adding Machine
Show Tape
✓Hide Tape
Advance Tape
Show Registers
✓Hide Registers
4825 blocks free out
up: never.
Calculator
Memory: 0
2367
MC
M−
M+
MX
CE/C
−
+
×
7
8
9
÷
4
5
6
%
1
2
3
0
.
=
LisaWrite Paper
Empty Folders 01/01
LisaGrap
Wastebasket
Preferences
Clipboard
ProFile

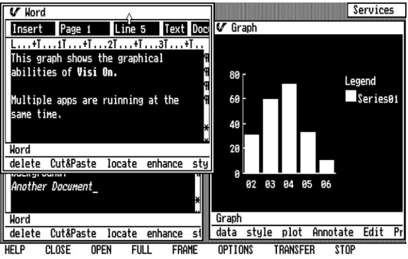
Apple Lisa OS 1, Source: GUIdebook


Wait
Lisa
Office System
Release 1.0
©1983
apple computer inc.

Apple Lisa OS 1, Source: GUIdebook

VisiCorp Visi On (released in 1984)

Visi On was the first desktop GUI developed for the IBM PC. This system was targeted towards big corporations and came with a high price tag. The GUI made use of a mouse, it had a built-in installer and help system and it didn't use icons.

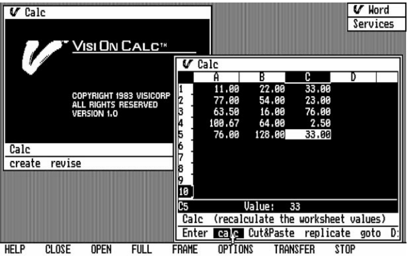

Word
Insert
Page 1
Line 5
Text
Doc
L...+T...1T...+T...2T...+T...3T...+T..
Word
delete Cut&Paste locate enhance sty
Word
delete Cut&Paste locate enhance st
Services
Graph
80
60
40
20
0
02 03 04 05 06
Legend
Series01
Graph
data style plot Annotate Edit Pr
HELP CLOSE OPEN FULL FRAME OPTIONS TRANSFER STOP

This graph shows the graphical abilities of **Visi On.**

Multiple apps are ruining at the same time.

*Another Document_*

VisiCoprt Visi On, Source: toastytech.com


Calc
VISI ON CALC™
Calc
create revise
Word
Services
Calc
HELP CLOSE OPEN FULL FRAME OPTIONS TRANSFER STOP

COPYRIGHT 1983 VISICORP
ALL RIGHTS RESERVED
VERSION 1.0

	A	B	C	D
1	11.00	22.00	33.00	
2	77.00	54.00	23.00	
3	63.50	16.00	76.00	
4	100.67	64.00	2.50	
5	76.00	128.00	33.00	
6				
7				
8				
9				
10				

C5 Value: 33

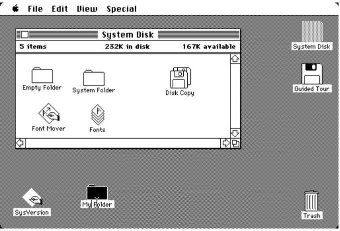
Calc (recalculate the worksheet values)

Enter calc Cut&Paste replicate goto D:

VisiCoprt Visi On, Source: toastytech.com

Mac OS System 1.0 (released in 1984)

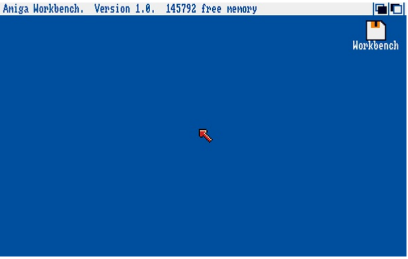
System 1.0 was the first operating system GUI developed for the Macintosh. It had several features of a modern operating system, being windows based with icons. The windows could be moved around with the mouse and files and folders could be copied by dragging and dropping onto the target location.


File
Edit
View
Special
System Disk
5 items
232K in disk
167K available
Empty Folder
System Folder
Disk Copy
Font Mover
Fonts
System Disk
Guided Tour
SysVersion
My Folder
Trash

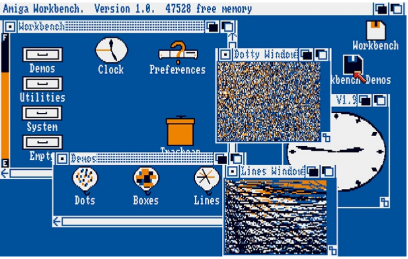
Apple Mac System 1.0, Source: toastytech.com

Amiga Workbench 1.0 (released in 1985)

When first released, Amiga was ahead of its time. The GUI included features such as color graphics (four colors: black, white, blue, orange), preemptive multitasking, stereo sound and multi-state icons (selected and unselected).


Amiga Workbench. Version 1.0. 145792 free memory
Workbench

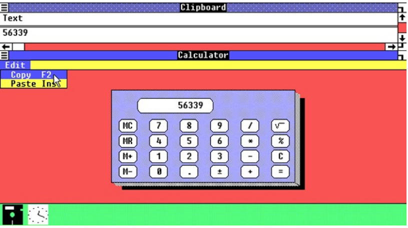
Amiga Workbench 1.0, Source: GUIdebook


Amiga Workbench. Version 1.0. 47528 free memory
Workbench
Demos
Clock
Preferences
Utilities
System
Empty
Trashcan
Dotty Window
Workbench
Demos
V1.0
Demos
Dots
Boxes
Lines
Lines Window

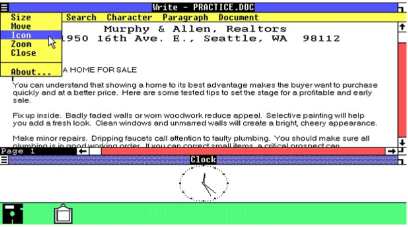
Amiga Workbench 1.0, Source: GUIdebook

Windows 1.0x (released in 1985)

In this year Microsoft finally caught up with the whole graphical user interface craze and released Windows 1.0, its first GUI based operating system (although no one would dare to refer to it as one). The system featured 32×32 pixel icons and color graphics. The most interesting feature (which later was omitted) was the icon of the animated analog clock.


Clipboard
Text
56339
Calculator
Edit
Copy F2
Paste Ins
56339
MC
7
8
9
/
√‾
MR
4
5
6
*
%
M+
1
2
3
-
C
M-
0
.
±
+
=

Microsoft Windows 1.01, Source: makowski-berlin.de


Write - PRACTICE.DOC
Size
Move
Icon
Zoom
Close
About...
Search
Character
Paragraph
Document
Page 1
Clock

Murphy & Allen, Realtors
1950 16th Ave. E., Seattle, WA 98112

A HOME FOR SALE

You can understand that showing a home to its best advantage makes the buyer want to purchase quickly and at a better price. Here are some tested tips to set the stage for a profitable and early sale.

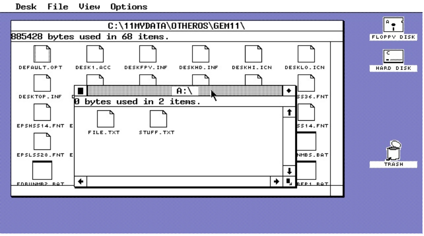
Fix up inside. Badly faded walls or worn woodwork reduce appeal. Selective painting will help you add a fresh look. Clean windows and unmarred walls will create a bright, cheery appearance.

Make minor repairs. Dripping faucets call attention to faulty plumbing. You should make sure all plumbing is in good working order. If you can correct small items, a critical prospect can

Microsoft Windows 1.01, Source: makowski-berlin.de

GEM (released in 1985)

GEM (Graphical Environment Manager) was a windowing style GUI created by Digital Research, Inc. (DRI). It was initially created for use with the CP/M operating system on the Intel 8088 and Motorola 68000 microprocessors and was later developed to run on DOS as well. Most people will remember GEM as the GUI for the Atari ST computers. It was also used on a series Amstrad's IBM compatible computers. It was the core for Ventura Publisher and a few other DOS programs. The GUI was also ported to other computers but did not gain popularity on them.


Desk
File
View
Options
C:\11MYDATA\OTHEROS\GEM11\
DEFAULT.OPT
DESK1.ACC
DESKFPV.INF
DESKHD.INF
DESKHI.ICN
DESKLO.ICN
DESKTOP.INF
SS36.FNT
EPSHSS14.FNT
SS14.FNT
EPSLSS28.FNT
NMBS.BAT
A:\
FILE.TXT
STUFF.TXT
FLOPPY DISK
HARD DISK
TRASH

885428 bytes used in 68 items.

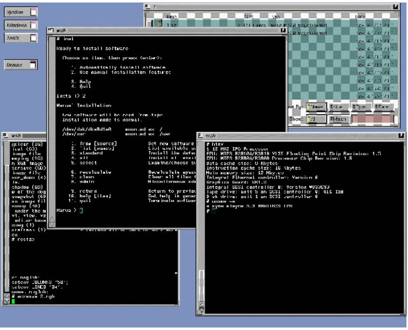
0 bytes used in 2 items.

Source: Wikipedia

1986 – 1990

IRIX 3 (released in 1986, first release 1984)

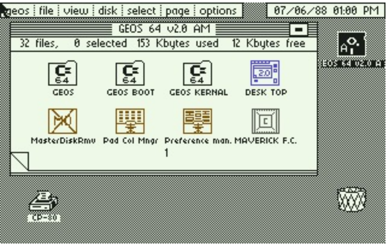
The 64-bit IRIX operating system was created for UNIX. An interesting feature of this GUI is the support for vector icons. This feature was built into the GUI long before Mac OS X even existed.



Silicon Graphics IRIX 3.0, Source: osnews.com

GEOS (released in 1986)

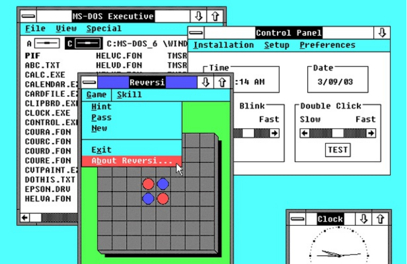
The GEOS (Graphic Environment Operating System) operating system was developed by Berkeley Softworks (later GeoWorks). It was originally designed for the Commodore 64 and included a graphical word processor, called geoWrite and a paint program called geoPaint.


geos
file
view
disk
select
page
options
07/06/88 01:00 PM
GEOS 64 v2.0 AM
32 files, 0 selected 153 Kbytes used 12 Kbytes free
GEOS
GEOS BOOT
GEOS KERNAL
DESK TOP
MasterDiskRmv
Pad Col Mngr
Preference mgr.
MAVERICK F.C.
1

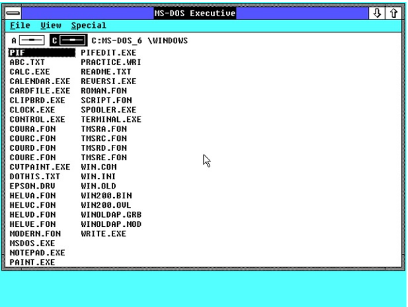
Source: Wikipedia

Windows 2.0x (released in 1987)

In this version, the actual management of the windows had significantly improved. The windows could be overlapped, resized, maximized and minimized.


MS-DOS Executive
File
View
Special
A
C
C:MS-DOS_6 \WIND
PIF
ABC.TXT
CALC.EXE
CALENDAR.E
CARDFILE.E
CLIPBRD.EX
CLOCK.EXE
CONTROL.EX
COURA.FON
COURC.FON
COURD.FON
COURE.FON
CUTPAINT.E
DOTHIS.TXT
EPSON.DRV
HELVA.FON
HELVC.FON
HELVD.FON
TMSR
TMSR
Control Panel
Installation
Setup
Preferences
Time
:14 AM
Date
3/09/03
Blink
Fast
Double Click
Slow
Fast
TEST
Reversi
Game
Skill
Hint
Pass
New
Exit
About Reversi...
Clock

Microsoft Windows 2.03, Source: [guidebookgallery.org]()

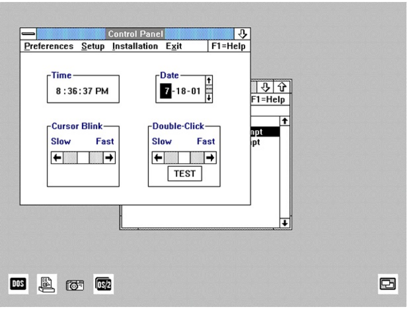

MS-DOS Executive
File View Special
A
C

```
C:MS-DOS_6 \WINDOWS
PIF            PIFEDIT.EXE
ABC.TXT        PRACTICE.WRI
CALC.EXE       README.TXT
CALENDAR.EXE   REVERSI.EXE
CARDFILE.EXE   ROMAN.FON
CLIPBRD.EXE    SCRIPT.FON
CLOCK.EXE      SPOOLER.EXE
CONTROL.EXE    TERMINAL.EXE
COURA.FON      TMSRA.FON
COURC.FON      TMSRC.FON
COURD.FON      TMSRD.FON
COURE.FON      TMSRE.FON
CVTPAINT.EXE   WIN.COM
DOTHIS.TXT     WIN.INI
EPSON.DRV      WIN.OLD
HELVA.FON      WIN200.BIN
HELVC.FON      WIN200.OVL
HELVD.FON      WINOLDAP.GRB
HELVE.FON      WINOLDAP.MOD
MODERN.FON     WRITE.EXE
MSDOS.EXE
NOTEPAD.EXE
PAINT.EXE
```

Microsoft Windows 2.03, Source: [guidebookgallery.org]()

OS/2 1.x (released in 1988)

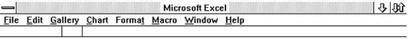
OS/2 was originally co-developed by IBM and Microsoft, but in 1991 the two companies split up, with Microsoft incorporating the technology in its own Windows GUI and IBM developing OS/2 further. The GUI used in OS/2 was called “Presentation Manager”. This version of the GUI only supported monochrome, fixed icons.

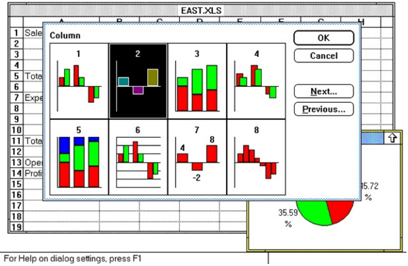

Control Panel
Preferences Setup Installation Exit F1=Help
Cursor Blink
Slow Fast
Double-Click
Slow Fast
TEST
F1=Help
DOS
OS/2

Time: 8:36:37 PM

Date: 7-18-01

Microsoft-IBM OS/2 1.1, Source: [pages.prodigy.net]()


Microsoft Excel
File Edit Gallery Chart Format Macro Window Help


EAST.XLS
Column
OK
Cancel
Next...
Previous...
1
2
3
4
5
6
7
8
4
8
-2
45.72 %
35.59 %
For Help on dialog settings, press F1

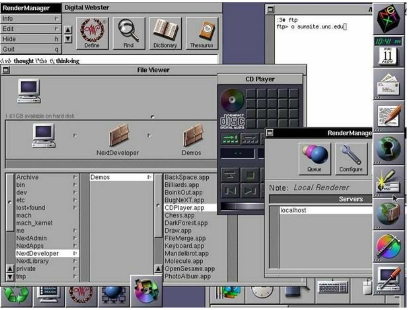
Microsoft-IBM OS/2 1.1, Source: [pages.prodigy.net]

NeXTSTEP / OPENSTEP 1.0 (released in 1989)

Steve Jobs came up with the idea to create the perfect research computer for universities and research labs. This idea later evolved into a startup called NeXT Computer Inc.

The first NeXT computer was released in 1988, however significant advances were made in 1989 with the release of the NeXTSTEP 1.0 GUI, which later evolved into OPENSTEP.

The GUI's icons were bigger (48×48) and it introduced more colors. The GUI was initially monochrome, but version 1.0 started supporting color monitors too. This screenshot gives you have a peek into what would become the modern GUIs.



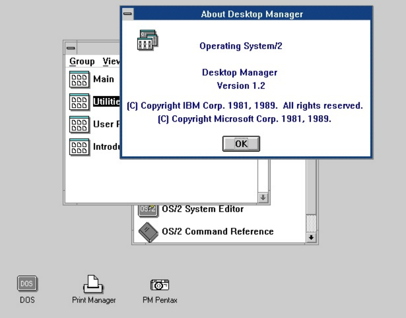
```
:3# ftp
ftp> o sunsite.unc.edu
```

RenderManager
Info
Edit
Hide
Quit
Digital Webster
Define
Find
Dictionary
Thesaurus
File Viewer
1.61 GB available on hard disk
NextDeveloper
Demos
Archive
bin
dev
etc
lost+found
mach
mach_kernel
me
NextAdmin
NextApps
NextDeveloper
NextLibrary
private
tmp
Demos
BackSpace.app
Billiards.app
BoinkOut.app
BugNeXT.app
CDPlayer.app
Chess.app
DarkForest.app
Draw.app
FileMerge.app
Keyboard.app
Mandelbrot.app
Molecule.app
OpenSesame.app
PhotoAlbum.app
CD Player
RenderManager
Queue
Configure
Note: Local Renderer
Servers
localhost
10:41 PM
FRI 11 NOV

NeXTSTEP 1.0, Source: [kernelthread.com]

OS/2 1.20 (released in 1989)

The next minor version upgrade of the GUI showed slight improvements in many areas. The icons looked nicer and the windows were smoother.


About Desktop Manager
Group
View
Main
Utilities
User
Introd
OS/2 System Editor
OS/2 Command Reference
DOS
Print Manager
PM Pentax
OK

Operating System/2

Desktop Manager
Version 1.2

(C) Copyright IBM Corp. 1981, 1989. All rights reserved.
(C) Copyright Microsoft Corp. 1981, 1989.

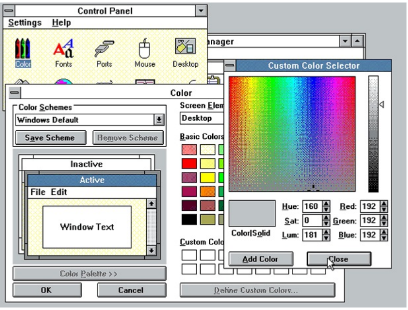
OS/2 1.2, Source pages.prodigy.net

Windows 3.0 (released in 1990)

By this version, Microsoft had realized the real potential in GUI's and started to significantly improve them.

The operating system itself supported standard and 386 enhanced modes, which made use of higher memory capacity than 640 KB and hard disk space, resulting in the ability to use higher screen resolutions and better graphics, such as Super VGA 800×600 and 1024×768.

Also, Microsoft hired Susan Kare to design the Windows 3.0 icons and to add a unified style to the GUI.

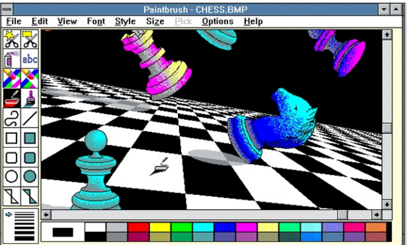

Control Panel
Settings
Help
Color
Fonts
Ports
Mouse
Desktop
nager
Custom Color Selector
Color
Save Scheme
Remove Scheme
Inactive
Active
File
Edit
Window Text
Color Palette >>
OK
Cancel
Basic Colors
Custom Colo
Define Custom Colors...
Color|Solid
Add Color
Close

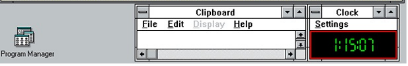
Color Schemes: Windows Default

Screen Elem: Desktop

Hue: 160
Sat: 0
Lum: 181
Red: 192
Green: 192
Blue: 192

Microsoft Windows 3.0, Source: toastytech.com


Paintbrush - CHESS.BMP
File
Edit
View
Font
Style
Size
Pick
Options
Help
abc

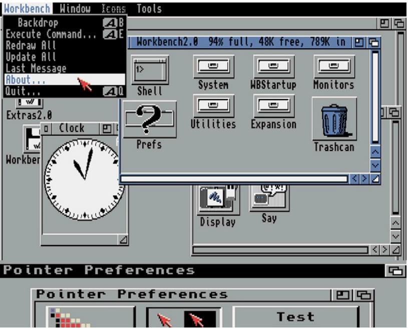

Program Manager
Clipboard
File
Edit
Display
Help
Clock
Settings
1:15:07

Microsoft Windows 3.0, Source: toastytech.com

1991 – 1995

Amiga Workbench 2.04 (released in 1991)

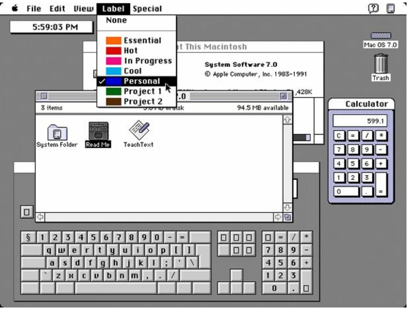
Many improvements were made to this version of the GUI. The color scheme changed and a 3D look was introduced. The desktop could be divided vertically into screens of different resolutions and color depths, which nowadays seems a little odd. The default resolution of Workbench was 640×256, but the hardware supported larger resolutions too.


Workbench
Window
Icons
Tools
Backdrop
Execute Command...
Redraw All
Update All
Last Message
About...
Quit...
Workbench2.0 94% full, 48K free, 789K in
Shell
System
WBStartup
Monitors
Prefs
Utilities
Expansion
Trashcan
Extras2.0
Clock
Display
Say
Pointer Preferences
Pointer Preferences
Test

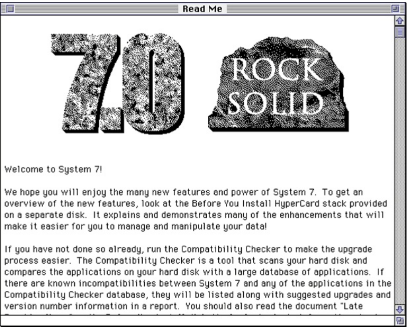
Commodore Amiga Workbench 2.04, Source: guidebookgallery.org

Mac OS System 7 (released in 1991)

Mac OS version 7.0 was the first Mac OS GUI which supported colors. Subtle shades of grey, blue and yellow were added to icons.


File
Edit
View
Label
Special
5:59:03 PM
None
Essential
Hot
In Progress
Cool
Personal
Project 1
Project 2
System Software 7.0
© Apple Computer, Inc. 1983-1991
3 items
94.5 MB available
System Folder
Read Me
TeachText
Mac OS 7.0
Trash
Calculator
599.1

Apple Mac OS System 7.0, Source: guidebookgallery.org


Read Me
7.0
ROCK SOLID

Welcome to System 7!

We hope you will enjoy the many new features and power of System 7. To get an overview of the new features, look at the Before You Install HyperCard stack provided on a separate disk. It explains and demonstrates many of the enhancements that will make it easier for you to manage and manipulate your data!

If you have not done so already, run the Compatibility Checker to make the upgrade process easier. The Compatibility Checker is a tool that scans your hard disk and compares the applications on your hard disk with a large database of applications. If there are known incompatibilities between System 7 and any of the applications in the Compatibility Checker database, they will be listed along with suggested upgrades and version number information in a report. You should also read the document "Late

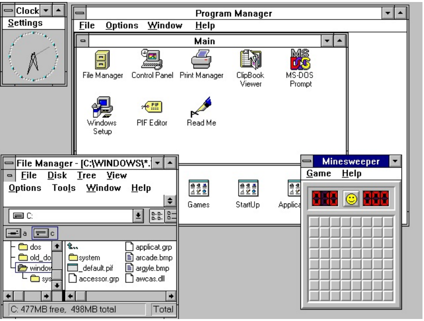
Apple Mac OS System 7.0, Source: guidebookgallery.org

Windows 3.1 (released in 1992)

This version of Windows included TrueType fonts which were pre-installed. This effectively made Windows a functional desktop publishing platform for the first time.

Previously, it was only possible to achieve such functionality in Windows 3.0 using the Adobe Type Manager (ATM) font system from Adobe. This version also contained a color scheme named Hotdog Stand, which contained bright hues of red, yellow and black.

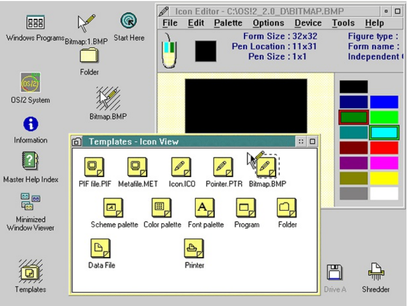
This color scheme was designed to help people with some degree of color blindness see text/graphics on the screen easier.


Clock
Settings
Program Manager
File Options Window Help
Main
File Manager
Control Panel
Print Manager
ClipBook Viewer
MS-DOS Prompt
Windows Setup
PIF Editor
Read Me
Games
StartUp
Applica
File Manager - [C:\WINDOWS\*.
File Disk Tree View
Options Tools Window Help
C:
a
c
dos
old_do
window
sys
system
_default.pif
accessor.grp
applicat.grp
arcade.bmp
argyle.bmp
awcas.dll
C: 477MB free, 498MB total
Total
Minesweeper
Game Help

Source: Wikipedia

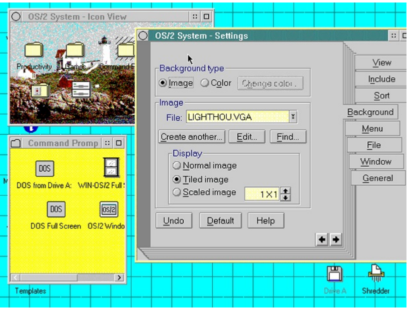
OS/2 2.0 (released in 1992)

This was the first GUI that was subjected to international acceptance, usability and accessibility testing. The entire GUI was developed using object-oriented design. Every file and folder was an object which could be associated with other files, folders and applications. It also supported drag and drop functionality and templates.


Icon Editor - C:\OS!2_2.0_D\BITMAP.BMP
File Edit Palette Options Device Tools Help
Windows Programs
Bitmap:1.BMP
Start Here
Folder
OS/2 System
Bitmap.BMP
Information
Master Help Index
Minimized Window Viewer
Templates - Icon View
PIF file.PIF
Metafile.MET
Icon.ICO
Pointer.PTR
Bitmap.BMP
Scheme palette
Color palette
Font palette
Program
Folder
Data File
Printer
Templates
Drive A
Shredder

Form Size : 32x32
Pen Location : 11x31
Pen Size : 1x1
Figure type :
Form name :
Independent

IBM OS/2 2.0, Source: toastytech.com


OS/2 System - Icon View
Productivity
Games
Command P
OS/2 System - Settings
View
Include
Sort
Background
Menu
File
Window
General
Change color...
Create another...
Edit...
Find...
Undo
Default
Help
Command Promp
DOS from Drive A:
WIN-OS/2 Full S
DOS Full Screen
OS/2 Windo
Templates
Drive A
Shredder

Background type
● Image ○ Color

Image
File: LIGHTHOU.VGA

Display
○ Normal image
● Tiled image
○ Scaled image 1X1

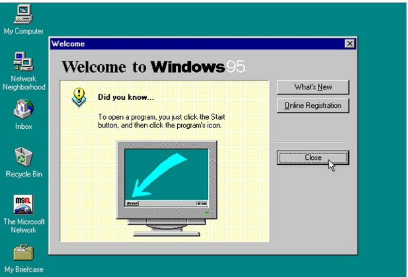
IBM OS/2 2.0, Source: toastytech.com

Windows 95 (released in 1995)

The user interface was completely re-designed since version 3.x. This was the first Windows version where a small close button was added to each window.

The design team gave states (enabled, disabled, selected, checked, etc.) to icons and other graphics. The famous *Start* button appeared for the first time.

This was a huge step forward for Microsoft regarding the operating system itself and the unified GUI.

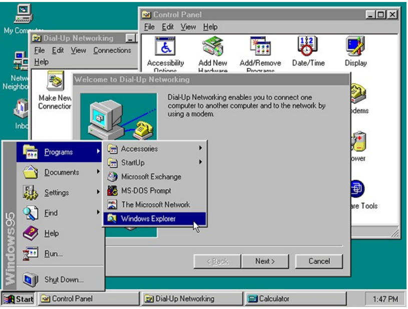

My Computer
Network Neighborhood
Inbox
Recycle Bin
The Microsoft Network
My Briefcase
Welcome
Welcome to Windows 95
What's New
Online Registration
Close

Did you know...

To open a program, you just click the Start button, and then click the program's icon.

Start
Welcome
2:38 PM

Microsoft Windows 95, Source: guidebookgallery.org


My Computer
Control Panel
File Edit View Help
Accessibility Options
Add New Hardware
Add/Remove Programs
Date/Time
Display
Dial-Up Networking
File Edit View Connections Help
Make New Connection
Welcome to Dial-Up Networking
Programs
Documents
Settings
Find
Help
Run...
Shut Down...
Accessories
StartUp
Microsoft Exchange
MS-DOS Prompt
The Microsoft Network
Windows Explorer
Windows95
< Back
Next >
Cancel
Start
Control Panel
Dial-Up Networking
Calculator
1:47 PM

Dial-Up Networking enables you to connect one computer to another computer and to the network by using a modem.

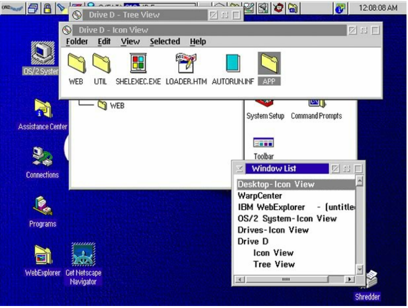
Microsoft Windows 95, Source: guidebookgallery.org

1996 – 2000

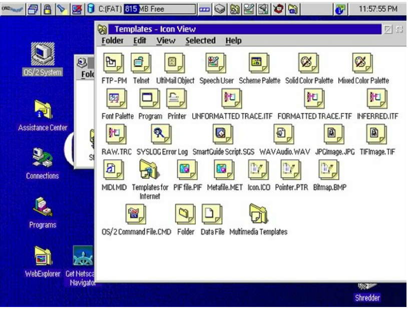
OS/2 Warp 4 (released in 1996)

IBM released OS/2 Warp 4 which brought a significant facelift to the workspace.

Icons were placed on the desktop, where custom files and folders could also be created. The shredder appeared which was similar to Windows' Recycle Bin or Mac OS's Trash, except it deleted the file or folder instantly and didn't store any additional copies for later retrieval.


12:08:08 AM
Drive D - Tree View
Drive D - Icon View
Folder Edit View Selected Help
WEB
UTIL
SHELEXEC.EXE
LOADER.HTM
AUTORUN.INF
APP
OS/2 System
Assistance Center
Connections
Programs
WebExplorer
Get Netscape Navigator
System Setup
Command Prompts
Toolbar
Window List
Desktop - Icon View
WarpCenter
IBM WebExplorer - (untitled
OS/2 System - Icon View
Drives - Icon View
Drive D
Icon View
Tree View
Shredder

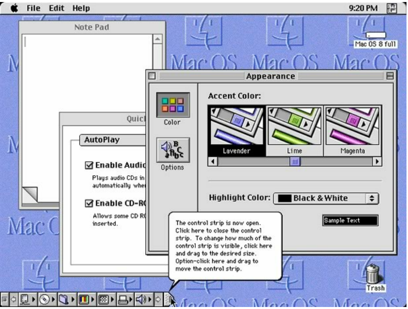
IBM OS/2 Warp 4, Source: toastytech.com


C:(FAT) 815 MB Free
11:57:55 PM
Templates - Icon View
Folder
Edit
View
Selected
Help
OS/2 System
Assistance Center
Connections
Programs
WebExplorer
Get Netsca
Navigato
FTP-PM
Telnet
UltiMail Object
Speech User
Scheme Palette
Solid Color Palette
Mixed Color Palette
Font Palette
Program
Printer
UNFORMATTED TRACE.ITF
FORMATTED TRACE.FTF
INFERRED.ITF
RAW.TRC
SYSLOG Error Log
SmartGuide Script.SGS
WAV Audio.WAV
JPGImage.JPG
TIFImage.TIF
MIDI.MID
Templates for Internet
PIF file.PIF
Metafile.MET
Icon.ICO
Pointer.PTR
Bitmap.BMP
OS/2 Command File.CMD
Folder
Data File
Multimedia Templates
Shredder

IBM OS/2 Warp 4, Source: toastytech.com

Mac OS System 8 (released in 1997)

256 color icons were the default in this version of the GUI. Mac OS 8 was one of the early adopters of isometric style icons, also called pseudo-3D icons. The platinum grey theme used here became a trademark for future versions of the GUI.


File
Edit
Help
9:20 PM
Note Pad
Mac OS 8 full
Appearance
Color
Options
Accent Color:
Lavender
Lime
Magenta
Sample Text
Trash
Quic
AutoPlay

Highlight Color: Black & White

☑ Enable Audi

Plays audio CDs in automatically whe

☑ Enable CD-R

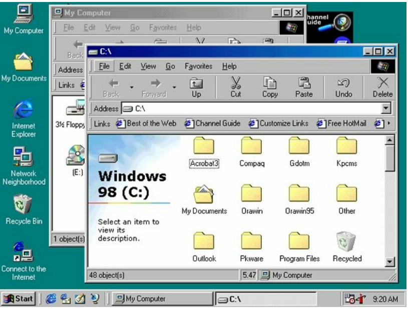
Allows some CD R inserted.

The control strip is now open. Click here to close the control strip. To change how much of the control strip is visible, click here and drag to the desired size. Option-click here and drag to move the control strip.

Apple Mac OS 8, Source: guidebookgallery.org

Windows 98 (released in 1998)

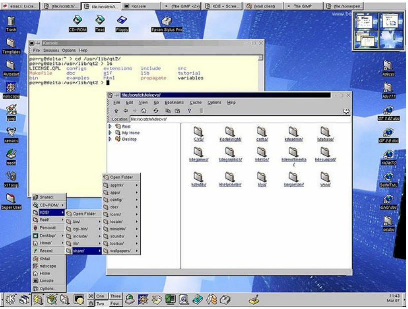
The icon styles were almost the same as in Windows 95, but the whole GUI could use more than 256 colors for rendering. Windows Explorer changed almost completely and the “Active Desktop” appeared for the first time.


My Computer
My Documents
Internet Explorer
Network Neighborhood
Recycle Bin
Connect to the Internet
C:\
File Edit View Go Favorites Help
Back Forward Up Cut Copy Paste Undo Delete
Address C:\
Links Best of the Web Channel Guide Customize Links Free HotMail
Windows 98 (C:)
Select an item to view its description.
Acrobat3
Compaq
Gdotm
Kpcms
My Documents
Orawin
Orawin95
Other
Outlook
Pkware
Program Files
Recycled
48 object(s)
5.47
My Computer
Start
9:20 AM

Microsoft Windows 98, Source: toastytech.com

KDE 1.0 (released in 1998)

This is how the KDE team described the project upon releasing version 1.0: "KDE is a network transparent, contemporary desktop environment for UNIX workstations. KDE seeks to fill the need for an easy to use desktop for Unix workstations, similar to the desktop environments found under the MacOS or Window95/NT. A completely free and open computing platform available to anyone free of charge including its source code for anyone to modify."



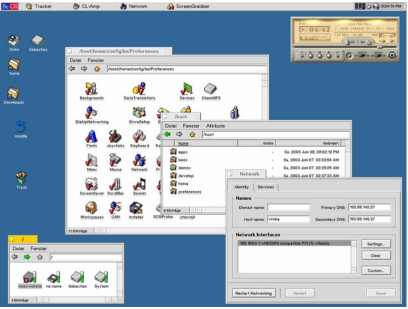
```
perry@delta:~ > cd /usr/lib/qt2/
perry@delta:/usr/lib/qt2 > ls
LICENSE.QPL  configs    extensions  include    src
Makefile     doc        gif         lib        tutorial
bin          examples   html        propagate  variables
perry@delta:/usr/lib/qt2 > 
```

Konsole
File Sessions Options Help
CD-ROM
Teac
Floppy
Epson Stylus Pro
file:/scratch/kdecvs/
File Edit View Go Bookmarks Cache Options Help
Location: file:/scratch/kdecvs/
Root
My Home
Desktop

Source: Wikipedia

BeOs 4.5 (released in 1999)

The BeOS operating system was developed for personal computers. It was originally written by Be In in 1991 to run on BeBox hardware. It was later further developed to take advantage of newer technologies and hardware such as symmetric multiprocessing by utilizing modular I/O bandwidth, pervasive multithreading, preemptive multitasking and a custom 64-bit journaling file system known as BFS. The BeOS GUI was developed on the principles of clarity and a clean, uncluttered design.


Be OS
Tracker
CL-Amp
Network
ScreenGrabber
9:24:14 PM
Disks
Sebastian
home
Downloads
mozilla
Trash
/boot/home/config/be/Preferences
Datei
Fenster
Backgrounds
DataTranslations
Devices
CheckBFS
DialUpNetworking
DriveSetup
Fonts
Joysticks
Keyboard
Menu
Mouse
Network
ScreenSaver
ScrollBar
Sounds
Workspaces
CAPI
Installer
SCSIProbe
Uninstall
31 Einträge
/boot
Attribute
Name
Größe
Geändert
6 Einträge
/
beos-volume
no name
Sebastian
System
4 Einträge
Network
Identity
Services
Names
Network Interfaces
Settings...
Clear
Custom...
Restart Networking
Revert
Save

/boot/home/config/be/Preferences

/boot

apps - So, 2003 Juni 08, 09:02:12 PM
beos - Sa, 2003 Juni 07, 02:33:54 AM
demos - Sa, 2003 Juni 07, 02:35:25 AM
develop - Sa, 2003 Juni 07, 02:37:33 AM
home
preferences

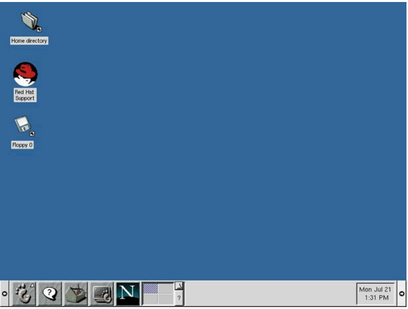
Domain name:
Primary DNS: 193.99.145.37
Host name: vimba
Secondary DNS: 193.99.145.37

192.168.0.1->NE2000 compatible PCI (1)->Ready

Source: Wikipedia

GNOME 1.0 (released in 1999)

GNOME desktop was mainly developed for Red Hat Linux, later it was developed for other Linux distributors as well.


Home directory
Red Hat Support
Floppy 0
Mon Jul 21
1:31 PM

Red Hat Linux GNOME 1.0.39, Source: visionfutur.com

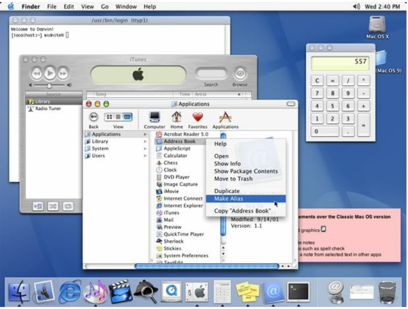
2001 – 2005

Mac OS X (released in 2001)

In early 2000 Apple announced their new Aqua interface and in 2001 the company released it with their brand new operating system called Mac OS X.

The default 32 x 32 and 48 x 48 icons were changed to big 128 x 128 anti-aliased and semi-transparent icons.

Lots of criticism followed after the release of this GUI. Apparently users were not quite ready for such a big change, but soon enough they adopted the new style and today this GUI represents the basis of all Mac OS X operating systems.



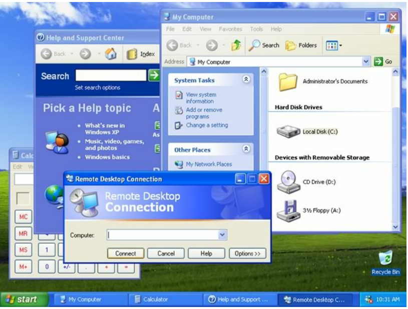
```
Welcome to Darwin!
[localhost:~] midnite% 
```

Finder
File
Edit
View
Go
Window
Help
Wed 2:40 PM
/usr/bin/login (ttyp1)
iTunes
Search
Browse
Mac OS X
Mac OS 9
557
Applications
Back
View
Computer
Home
Favorites
Applications
Library
System
Users
Acrobat Reader 5.0
Address Book
AppleScript
Calculator
Chess
Clock
DVD Player
Image Capture
iMovie
Internet Connect
Internet Explorer
iTunes
Mail
Preview
QuickTime Player
Sherlock
Stickies
System Preferences
Help
Open
Show Info
Show Package Contents
Move to Trash
Duplicate
Make Alias
Copy "Address Book"
Modified: 9/14/01
Version: 1.1
Radio Tuner

Apple Mac OS X 10.1 Source: guidebookgallery.org

Windows XP (released in 2001)

As Microsoft tends to change their GUI completely with every major operating system release, Windows XP was no exception. The GUI itself is *skinnable*, users could change the whole look and feel of the interface. The icons were 48 x 48 in size by default, rendered in millions of colors.

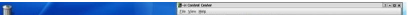


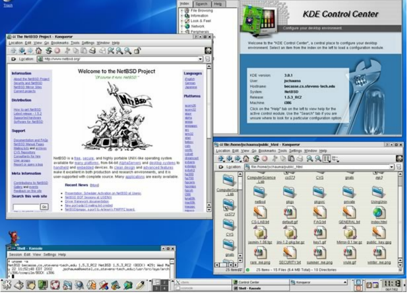
My Computer
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
Address
Go
System Tasks
View system information
Add or remove programs
Change a setting
Other Places
My Network Places
Administrator's Documents
Hard Disk Drives
Local Disk (C:)
Devices with Removable Storage
CD Drive (D:)
3½ Floppy (A:)
Help and Support Center
Index
Search
Set search options
Pick a Help topic
What's new in Windows XP
Music, video, games, and photos
Windows basics
Remote Desktop Connection
Remote Desktop Connection
Computer:
Connect
Cancel
Help
Options >>
Recycle Bin
start
My Computer
Calculator
Help and Support ...
Remote Desktop C...
10:31 AM

Microsoft Windows XP Professional, Source: guidebookgallery.org

KDE 3 (released in 2002)

Since version 1.0, the K Desktop Environment improved significantly. They polished all the graphics and icons and unified the whole user experience.



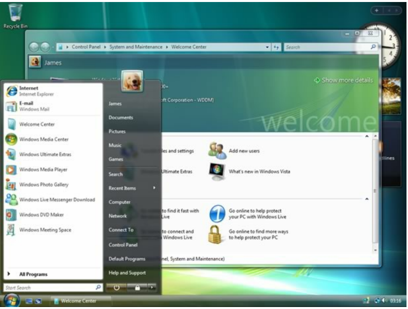

KDE Control Center
Configure your desktop environment.
Welcome to the NetBSD Project
The NetBSD Project - Konqueror
Shell - Konsole
Control Center

KDE 3.0.1, Source: netbsd.org

2007 – 2009 (current)

Windows Vista (released in 2007)

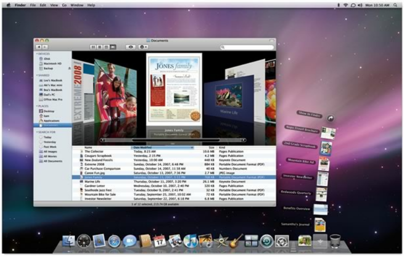
This was Microsoft's response to their competition. They also included quite a lot of 3D and animation. Since Windows 98, Microsoft has always tried to improve the desktop. With Windows Vista they released widgets and a somewhat improved replacement of the Active Desktop.


Recycle Bin
Control Panel
System and Maintenance
Welcome Center
Search
James
Show more details
welcome
Internet
Internet Explorer
E-mail
Windows Mail
Welcome Center
Windows Media Center
Windows Ultimate Extras
Windows Media Player
Windows Photo Gallery
Windows Live Messenger Download
Windows DVD Maker
Windows Meeting Space
All Programs
Start Search
Documents
Pictures
Music
Games
Recent Items
Computer
Network
Connect To
Control Panel
Default Programs
Help and Support
Add new users
What's new in Windows Vista
Go online to help protect your PC with Windows Live
Go online to find more ways to help protect your PC
03:16

Microsoft Windows Vista, Source: technology.berkeley.edu

Mac OS X Leopard (released in 2007)

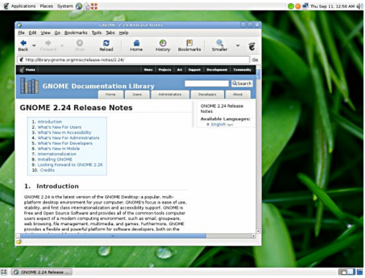
With their 6th generation, Mac OS X system Apple, once again improved the user interface. The basic GUI is still the Aqua with its candy scroll bars and platinum grey, blue colors. The new GUI features a more 3D look, with the 3D dock and lots more animation and interactivity.



Apple Mac OS X 10.5 Leopard, Source: [skattertech.com]

GNOME 2.24 (2008)

GNOME put a lot of effort into creating the themes and artwork into v2.2.4 as their aim is "to make your computer look good". They ran a competition to collect some of the most intruiging desktop backgrounds that their contributors have produced for use in v2.24.



Applications Places System
Thu Sep 11, 12:56 AM
GNOME 2.24 Release Notes
File Edit View Go Bookmarks Tools Tabs Help
Back Forward Stop Reload Home History Bookmarks Smaller
Go
Home News Projects Art Support Development Community
GNOME Documentation Library
Search
Home Users Administrators Developers About
GNOME 2.24 Release ...

http://library.gnome.org/misc/release-notes/2.24/

GNOME 2.24 Release Notes

1. Introduction
2. What's New For Users
3. What's New In Accessibility
4. What's New For Administrators
5. What's New For Developers
6. What's New In Mobile
7. Internationalization
8. Installing GNOME
9. Looking Forward to GNOME 2.26
10. Credits

GNOME 2.24 Release Notes

Available Languages:
- English (en)

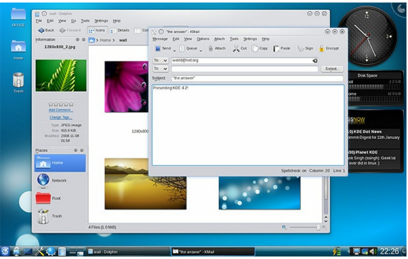
1. Introduction

GNOME 2.24 is the latest version of the GNOME Desktop: a popular, multi-platform desktop environment for your computer. GNOME's focus is ease of use, stability, and first class internationalization and accessibility support. GNOME is Free and Open Source Software and provides all of the common tools computer users expect of a modern computing environment, such as email, groupware, web browsing, file management, multimedia, and games. Furthermore, GNOME provides a flexible and powerful platform for software developers, both on the

Source: [gnome.org]

KDE (v4.0 Jan. 2008, v4.2 Mar. 2009)

Version 4 of K Desktop Environment produced many new improvements to the GUI such as animated, smooth, efficient window management and support for desktop widgets. The icons size are easily adjustable and almost every design element is much easier to configure. Some of the most noticeable changes include new icons, themes and sounds, which are provided by the Oxygen Project. These icons are more photorealistic. It is definitely a big improvement to the earlier versions of KDE. It can now also be run on Windows and Mac OS X platforms.



wall - Dolphin
File Edit View Go Tools Settings Help
Back Forward Icons Details
Home > wall
Places
Home
Network
Root
Trash
Add Comment
Change Tags
4 Files (1.0 MiB)
"the answer" - KMail
Message Edit View Options Attach Tools Settings Help
Send Queue Attach Cut Copy Paste Sign Encrypt
Select...
Disk Space
KDE Dot News
Planet KDE
22:26

To: world@net.org

Subject: "the answer"

Presenting KDE 4.2!

Spellcheck: on Column: 20 Line: 1

Source: [Wikipedia]

Acknowledgments

Huge thanks to Guidebook for the continuous work on GUI design. http://www.guidebookgallery.org/

Also, big thanks to Nathan Toasty’s graphical user interface gallery. http://toastytech.com/guis/index.html

Written and compiled exclusively for WDD by Gyorgy Fekete.

What do you think of the evolution of these designs? What other improvements would you like to see? Please share with us...