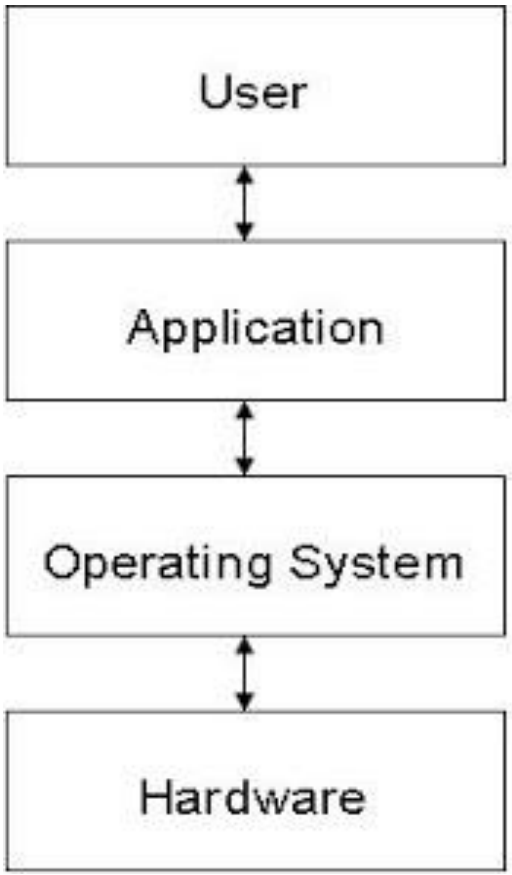
UNIT 3 - OPERATING SYSTEM-MICROSOFT-WINDOWS



An operating system (OS) is a set of computer program that manages the hardware and software resources of a computer.

At the foundation of all system software, the OS performs basic tasks such as

- controlling and allocating memory,
- prioritizing system requests,
- controlling input and output devices,
- facilitating networking, and managing files.
- It also may provide a graphical user interface for higher level functions

Process management: It deals with running multiple processes. Most operating system allow a process to be assigned a priority which affects its allocation of CPU time.

Memory management: The memory manager in an OS coordinates the memories by tracking which one is available, which is to be allocated or deallocated and how to swap between the main memory and secondary memories

Disk and file systems: Operating systems have a variety of native file systems that controls the creation, deletion, and access of files of data and programs.

Networking: Most current operating systems are capable of using the TCP/IP networking protocols. This means that one system can appear on a network of the other and share resources such as files, printers, and scanners.

Security: most operating systems include some level of security

Device drivers: A device driver is a specific type of computer software developed to allow interaction with hardware devices.

Types of operating systems:

There are different types of operating systems. These are as follows:

1. Real-time Operating System: It is a multitasking operating system that aims at executing real-time applications.

2. Multi-user and Single-user Operating Systems: The operating systems of this type allow a multiple users to access a computer system concurrently.

3. Multi-tasking and Single-tasking Operating Systems: When a single program is allowed to run at a time, the system is grouped under a single-tasking system, while in case the operating system allows the execution of multiple tasks at one time, it is classified as a multi-tasking operating system.

4. Distributed Operating System: A distributed operating system manages a group of independent computers and makes them appear to be a single computer. When computers in a group work in cooperation, they make a distributed system.

5. Embedded System: Embedded operating systems are designed to be used in embedded computer systems. They are designed to operate on small machines like PDAs with less autonomy. They are able to operate with a limited number of resources. They are very compact and extremely efficient by design. Windows CE and Minix 3 are some examples of embedded operating systems.

Example

DOS (Disk Operating System)

UNIX ,

LINUX ,

Windows,Mac

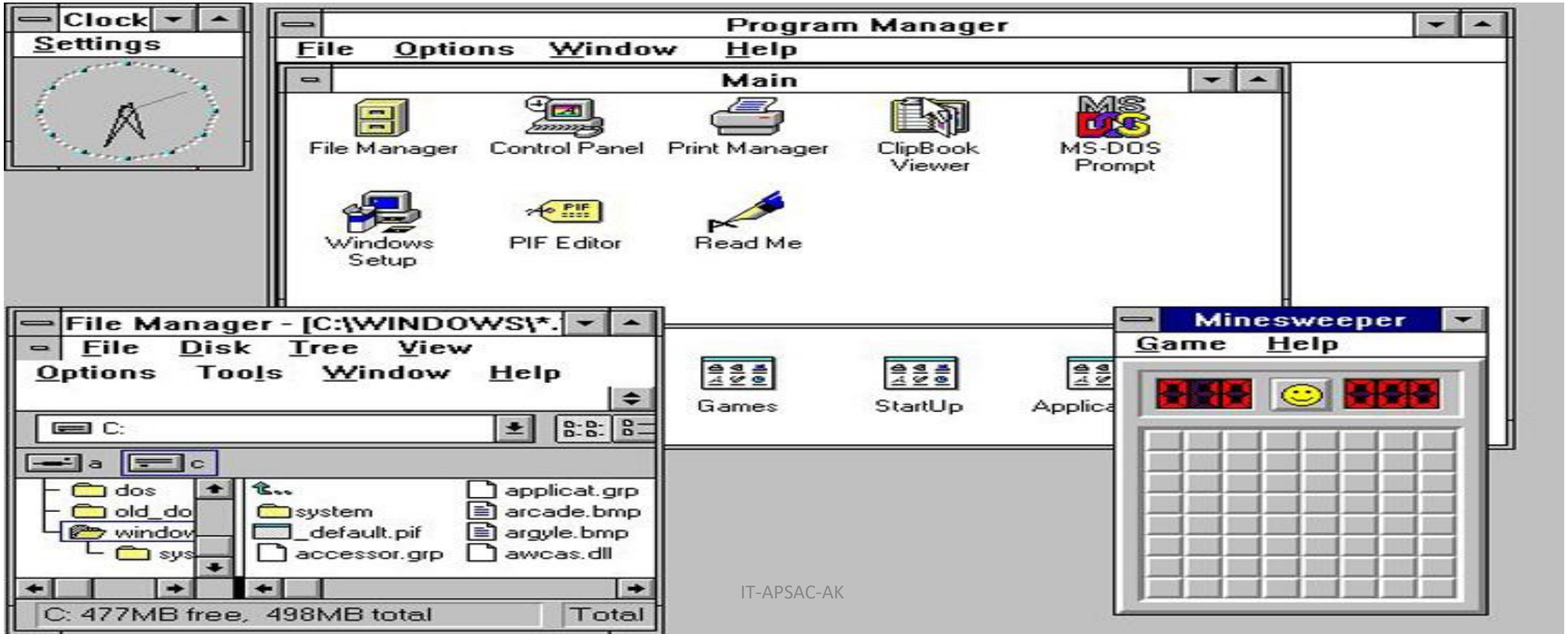
Microsoft Windows history
MS-DOS (Microsoft Disk Operating System)

Originally developed by Microsoft for IBM, MS-DOS was the standard operating system for IBM-compatible personal computers.

The initial versions of DOS were very simple and resembled another operating system called CP/M.

MS-DOS (Microsoft disk operating system)

Windows 1.0 – 2.0 (1985-1992): Introduced in 1985, Microsoft Windows 1.0 was named due to the computing boxes, or "windows" that represented a fundamental aspect of the operating system. In 1987 Microsoft released Windows 2.0, which was designed for the designed for the Intel 286 processor. This version added desktop icons, keyboard shortcuts.

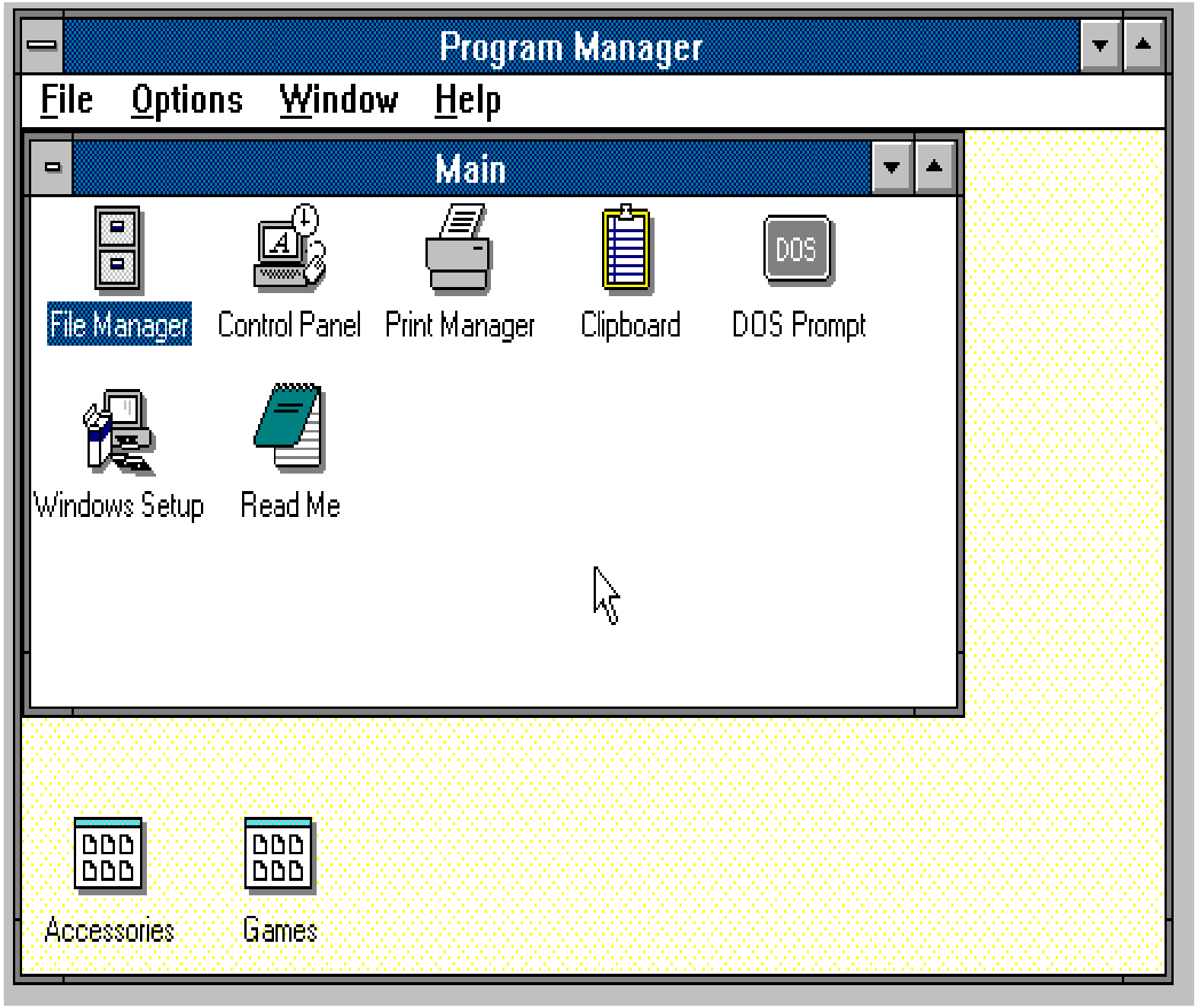


Windows 3.0 – 3.1 (1990–1994)

Windows 3.0 was released in May, 1900 offering better icons, performance and advanced graphics with 16 colors designed for Intel 386 processors.

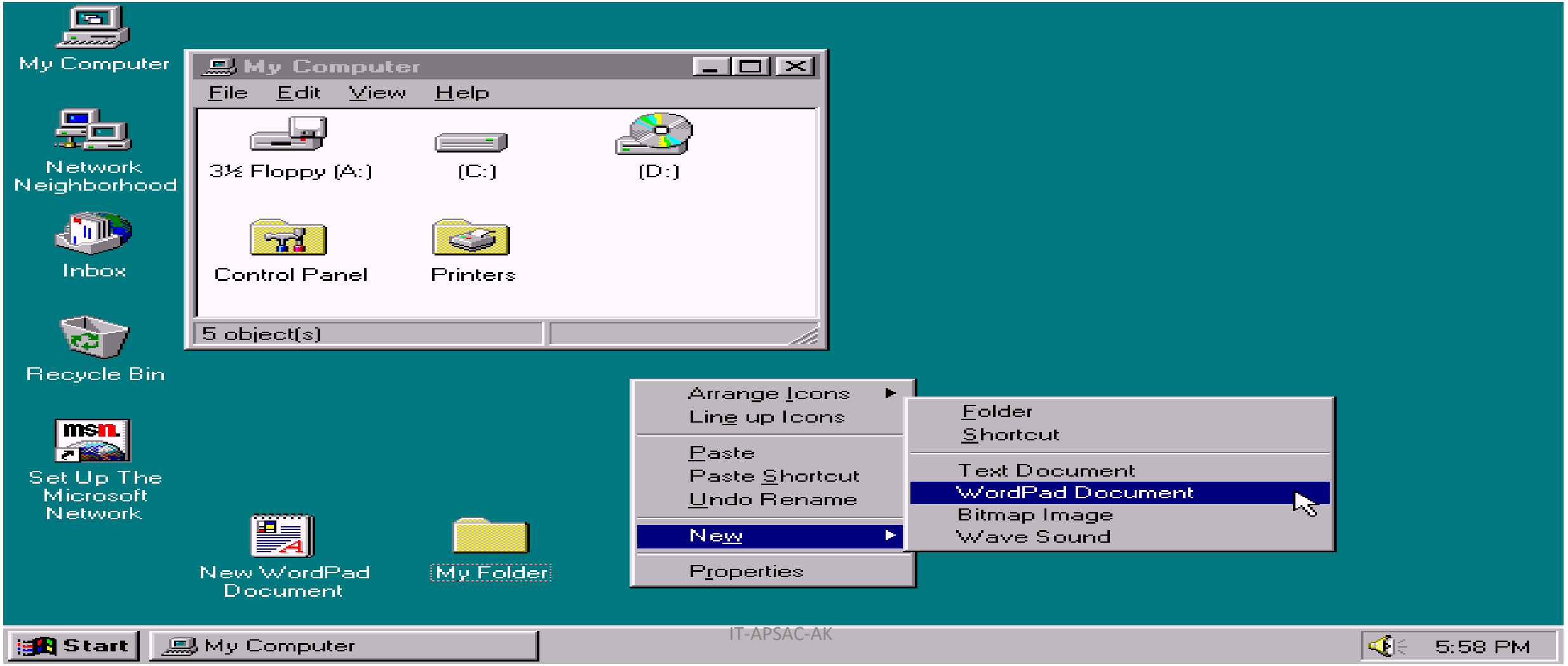
This version is the first release that provides the standard "look and feel" of Microsoft Windows for many years to come.

Windows 3.0 included Program Manager, File Manager and Print Manager and games



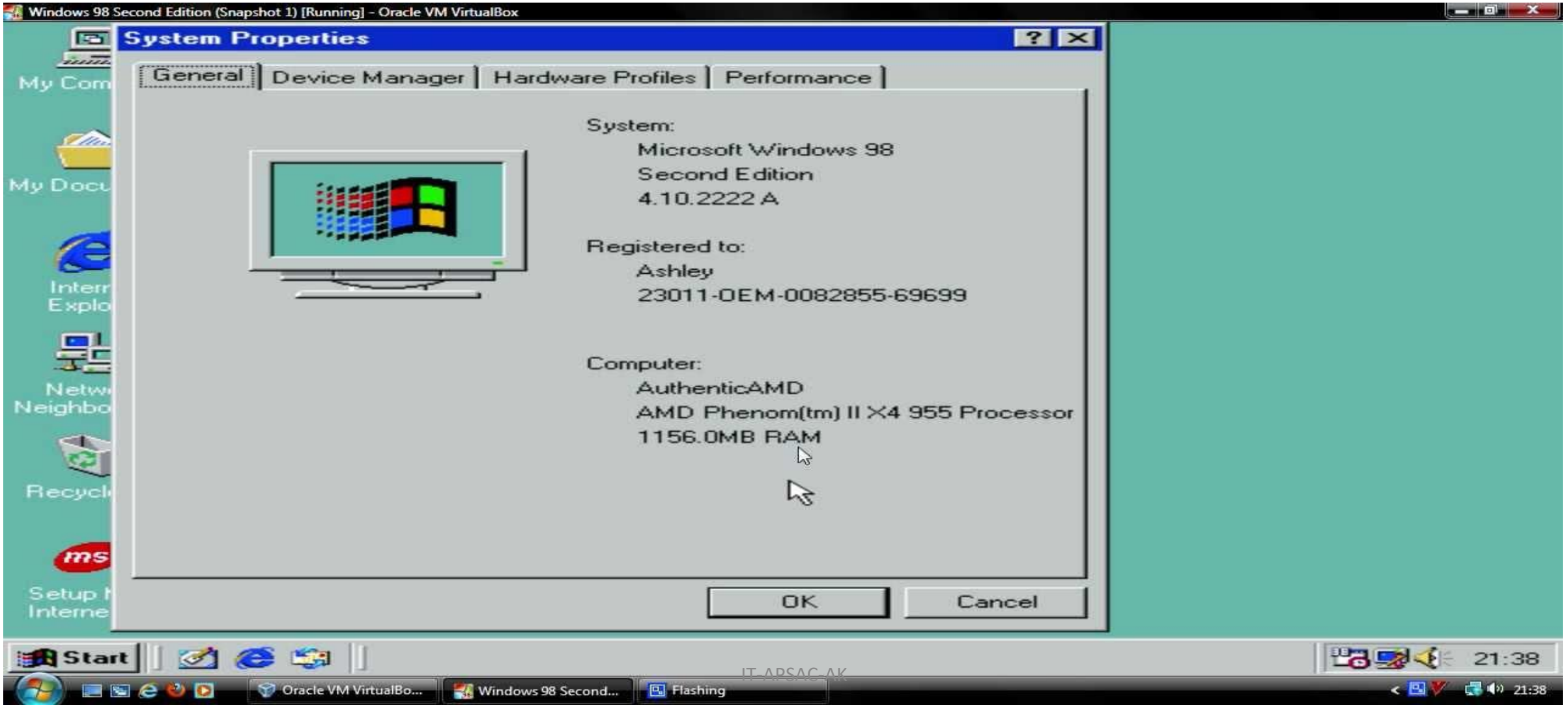
Windows 95 (August 1995)

Windows 95 was released in 1995 and was a major upgrade to the Windows operating system.



Windows 98 (June 1998)

Windows 98 offers support for a number of new technologies, including FAT32, AGP, MMX, USB, DVD, and ACPI



Windows ME - Millennium Edition (September 2000)

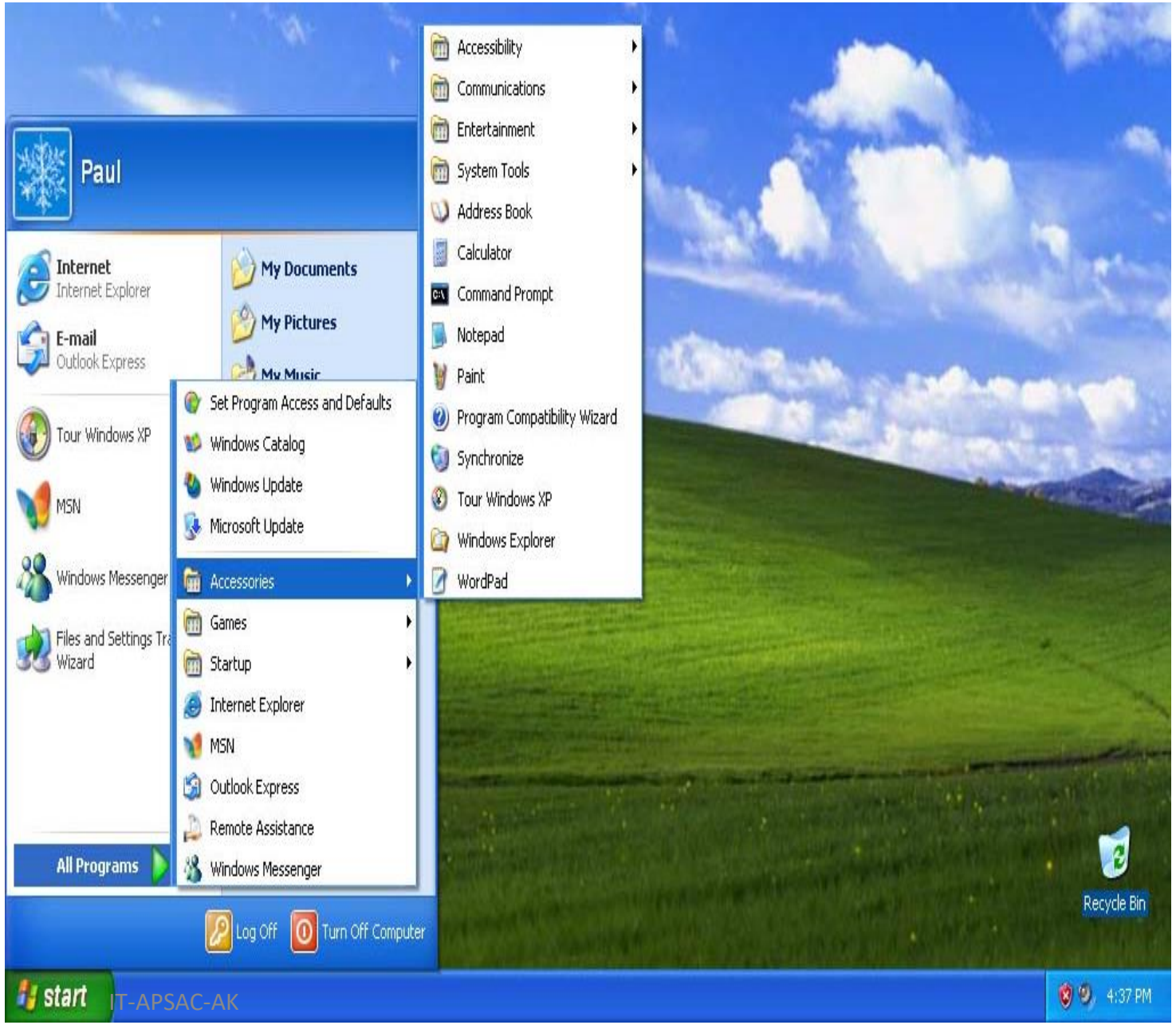
Windows NT 31. - 4.0 (1993-1996)

Windows 2000 (February 2000)

Windows XP (October 2001)

Windows XP was released in 2001. Along with a redesigned look and feel to the user interface, the new operating system is giving the user a more stable and reliable environment than previous versions of Windows.

Windows XP comes in two versions, Home and Professional. Microsoft focused on mobility for both editions, including plug and play features for connecting to wireless networks.



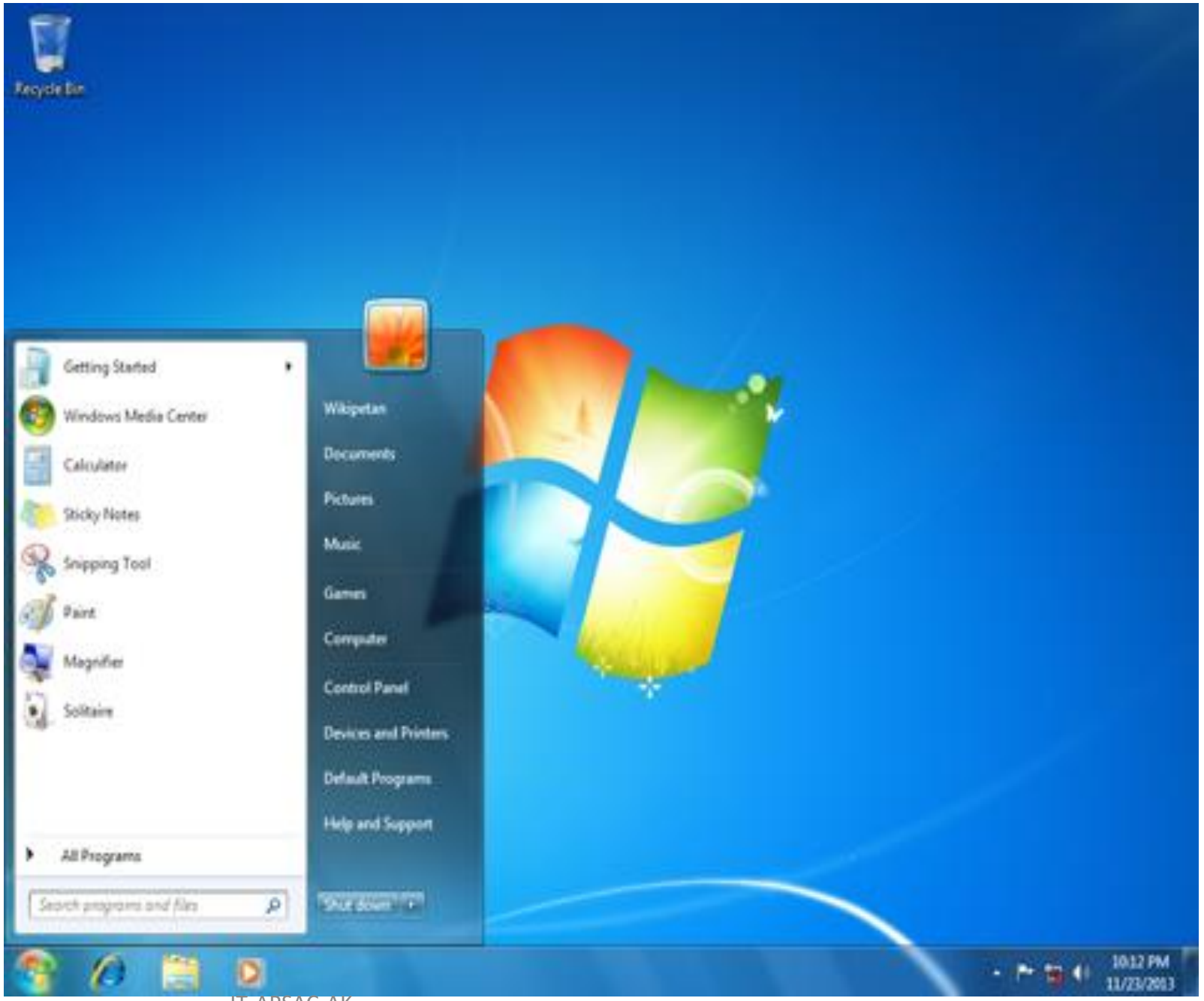
Windows Vista (November 2006)

Windows Vista offered an advancement in reliability, security, ease of deployment, performance and manageability ,faster start-up time and low power consumption of the new sleep state.

Windows 7 (October, 2009)

Windows 7 was released by Microsoft on October 22, 2009 as the latest in the 25-year-old line of Windows operating systems and as the successor to Windows Vista.

Enhancements and new features in Windows 7 include multi-touch support, Internet Explorer , improved performance and start-up time, Aero Snap, Aero Shake, support for virtual hard disks, a new and improved Windows Media Center, and improved security.



Windows 8

Windows 8 was released on August. 1, 2012 and is a completely redesigned operating system that's been developed from the ground up with touchscreen use in mind as well as near-instant-on capabilities that enable a Windows 8 PC to load and start up in a matter of seconds rather than in minutes.

its replace the more traditional Windows OS look and feel with a new "Metro" design system interface.

The Metro user interface primarily consists of a "Start screen" made up of "Live Tiles," which are links to applications and features that are dynamic and update in real time. Windows 8 supports both x86 PCs and ARM processors.

Desktop
Snagit 11 Editor
IconsExtract
Google
53°
Mostly Cloudy
61°/53°
San Francisco
A new kind of fir
China?
Photos
tweeTRO
24
Wednesday
Internet Explorer
Store
Bing
Surface tablet: Undone by absent apps
Trouble viewing this email? Read it on...
2
MetroTwit
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Maps
SkyDrive
13
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FOX Sports - Contract doesn't weigh down Fielder
9:55
Wednesday
October 24
Search
Share
Start
Devices
Settings

Windows 10

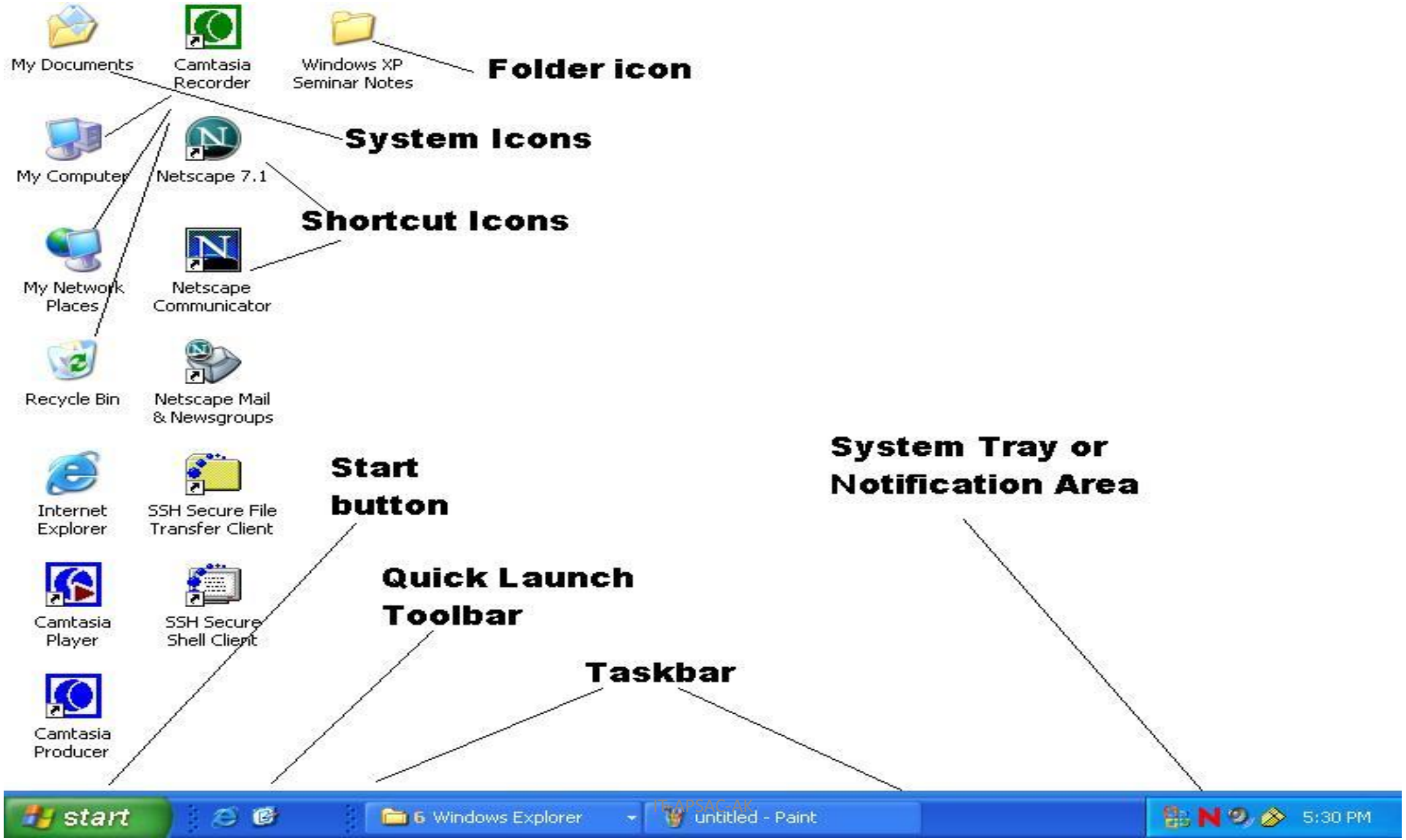
Windows 10 is Microsoft's Windows successor to Windows 8. Windows 10 debuted on July 29, 2015, following a "technical preview" beta release of the new operating system that arrived in Fall 2014 and a "consumer preview" beta in early 2015

Windows CE (November 2006): A version of the Windows operating system designed for small devices such as personal digital assistants (PDAs) The Windows CE graphical user interface (GUI) is very similar to Windows 95 .

Windows Mobile 6.5 :A mobile operating system for smartphones and mobile devices from Microsoft based on the Windows CE kernel and designed to look and operate similar to desktop versions of Microsoft Windows.

Windows Phone (November 2010)

A mobile operating system for smartphones and mobile devices that serves as the successor to Microsoft's initial mobile OS platform system, Windows Mobile.


My Documents
Camtasia Recorder
Windows XP Seminar Notes
Folder icon
System Icons
My Computer
Netscape 7.1
Shortcut Icons
My Network Places
Netscape Communicator
Recycle Bin
Netscape Mail & Newsgroups
Internet Explorer
SSH Secure File Transfer Client
Start button
System Tray or Notification Area
Camtasia Player
SSH Secure Shell Client
Quick Launch Toolbar
Taskbar
Camtasia Producer
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6 Windows Explorer
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