

Q. What is Text/Word Processing ? Explain with Example.

Ans:- The production of typewritten documents (such as business letters) with automated and usually computerized typing and text-editing equipment is called word processing or text processing.

Word-processing software includes basic applications designed for casual business or home users and powerful, advanced applications capable of meeting the most-demanding needs of businesses. Many word-processing applications are designed for use as part of a suite or integrated group of word-processing, spreadsheet, and presentation programs. For example, Microsoft Word, probably the most widely used word-processing software, is part of the Microsoft Office suite, which includes Microsoft's PowerPoint presentation program and Excel spreadsheet program. Libre Office Write is another open source word processor application going popular currently.

Standard Features of Word Processors:-

Word processors vary considerably, but all word processors, whether cloud-based or installed on a system, support the following basic features:

insert text: Allows you to insert text anywhere in the document.

delete text: Allows you to erase characters, words, lines, or pages.

cut and paste: Allows you to remove (cut) a section of text from one place in a document and insert (paste) it somewhere else.

copy: Allows you to duplicate a section of text.

page size and margins: Allows you to define various page sizes and margins, and the word processor will automatically readjust the text so that it fits.

search and replace: Allows you to direct the word processor to search for a particular word or phrase. You can also direct the word processor to replace one group of characters with another everywhere that the first group appears.

word wrap: Automatically moves to the next line when you have filled one line with text, and it will readjust text if you change the margins.

print: Allows you to send a document to a printer to get hard copy.

file management: Provides file management capabilities that allow you to create, delete, move, and search for files.

font specifications: Allows you to change fonts within a document. For example, you can specify bold, italics, and underlining. Most word processors also let you change the font size and even the typeface.

windows: Allows you to edit two or more documents at the same time. Each document appears in a separate window. This is particularly valuable when working on a large project that consists of several different files.

spell checking: Identifies words that don't appear in a standard dictionary.

Full-Featured Word Processors:-

Most installable modern word processor software supports additional features that enable you to manipulate and format documents in more sophisticated ways. Full-featured word processors usually support the following advanced features, and cloud-based word processors may have some of these features as well:

Spelling & grammar checking: Identifies sentences, paragraphs, and punctuation that doesn't appear to meet commonly recognized rules of grammar.

footnotes and cross-references: Automates the numbering and placement of footnotes and enables you to easily cross-reference other sections of the document.

automated lists: Automatically creates bulleted or numbered lists, including multi-level outlines.

graphics: Allows you to embed illustrations, graphs, and possibly even videos into a document. Some word processors let you create the illustrations within the word processor; others let you insert an illustration produced by a different program.

headers, footers, and page numbering: Allows you to specify customized headers and footers that the word processor will put at the top and bottom of every page. The word processor automatically keeps track of page numbers so that the correct number appears on each page.

layout: Allows you to specify different margins within a single document and to specify various methods for indenting paragraphs.

macros: Enables users to define and run macros, a character or word that represents a series of keystrokes. The keystrokes can represent text or commands. The ability to define macros allows you to save yourself a lot of time by replacing common combinations of keystrokes.

merge: Allows you to merge text from one file into another file. This is particularly useful for generating many files that have the same format but different data. Generating mailing labels is the classic example of using merges.

tables of contents and indexes: Allows you to automatically create a table of contents and index based on special codes that you insert in the document.

thesaurus: Allows you to search for synonyms without leaving the word processor.

collaboration: Allows users to track changes to the document when more than one person is editing. Some cloud-based word processors also allow multiple users to edit the same document at the same time.

Internet features: Allows users to embed Web links into their documents and format their documents for the Web. Some also link to Web services that can help users create their documents.

translation and speech: As artificial intelligence capabilities become more commonplace, some word processors have gained the ability to read text aloud, to accept voice commands, and to translate text from one language to another.

Q. Describe the uses of MS WORD and MS WINDOWS.

Ans:- Microsoft Word or MS-WORD (often called Word) is a Graphical word processing program that users can type with. It is made by the computer company Microsoft. Its purpose is to allow users to type and save documents.

Similar to other word processors, it has following helpful tools to make documents:-

- Spelling & grammar checker, word count (this also counts letters and lines)
- Speech recognition
- Inserts pictures in documents
- Choice of typefaces
- Special codes
- Web pages, graphs, etc.
- Tables
- Displays synonyms of words and can read out the text
- Prints in different ways
- MS Word is a part of Microsoft Office, but can also be bought separately.

MS Windows:- Microsoft Windows, commonly referred to as Windows, is a group of several proprietary graphical operating system families, all of which are developed and marketed by Microsoft. Each family caters to a certain sector of the computing industry. Active Microsoft Windows families include Windows NT and Windows IoT; these may encompass subfamilies, e.g. Windows Server or Windows Embedded Compact (Windows CE). Defunct Microsoft Windows families include Windows 9x, Windows Mobile and Windows Phone.

Microsoft introduced an operating environment named Windows on November 20, 1985, as a graphical operating system shell for MS-DOS in response to the growing interest in graphical user interfaces (GUIs). Microsoft Windows came to dominate the world's personal computer (PC) market with over 90% market share, overtaking Mac OS, which had been introduced in 1984. Apple came to see Windows as an unfair encroachment on their innovation in GUI development as implemented on products such as the Lisa and Macintosh (eventually settled in court in Microsoft's favor in 1993).

On September 30, 2014, Microsoft announced Windows 10 as the successor to Windows 8.1. It was released on July 29, 2015, and addresses shortcomings in the user interface first introduced with Windows 8. Changes on PC include the return of the Start Menu, a virtual desktop system, and the ability to run Windows Store apps within windows on the desktop rather than in full-screen mode. Windows 10 is said to be available to update from qualified Windows 7 with SP1, Windows 8.1 and Windows Phone 8.1 devices from the Get Windows 10 Application (for Windows 7, Windows 8.1) or Windows Update (Windows 7).

By:- Raju Ranjan Sinha, BCA Department of Shershah College, Sasaram.

In February 2017, Microsoft announced the migration of its Windows source code repository from Perforce to Git. This migration involved 3.5 million separate files in a 300 gigabyte repository. By May 2017, 90 percent of its engineering team was using Git, in about 8500 commits and 1760 Windows builds per day.

Q. Describe the features of WINDOWS Operating System.

Ans:- Best Features of Windows Operating System

1. Speed

Even aside from incompatibilities and other issues that many people had with Vista, one of the most straightforward was speed – it just felt too sluggish compared to XP, even on pumped up hardware. Windows 7 brings a more responsive and sprightly feel and Microsoft has spent a lot of time and effort getting the Start Menu response just right.

Microsoft has also recognized the need for improved desktop responsiveness, which gives the impression that the computer is responding to the user and that they are in control – something that was often lacking with Vista.

You can also expect faster boot times. And the boot sequence is now not only prettier than it was with Vista, but it's speedier too.

2. Compatibility

In simple terms, compatibility on Windows 7 will be far better than it was with Vista. Many programs that individuals and companies used on Windows XP did not work immediately and required updates, but with Windows 7 almost all applications that work on Vista should still run.

3. Lower Hardware Requirements

Vista gained a reputation for making even the beefiest hardware look rather ordinary. Windows 7, however, will run well on lower end hardware, making the transition from Window XP less painful.

Microsoft is even pushing Windows 7 for netbooks. This could provide a modern replacement for Windows XP, which has found a new lease of life as the OS of choice on netbooks, supplanting Linux. The downside is that Windows 7 Starter Edition, as it will be called, will be limited to only three applications running at the same time.

4. Search and Organization

One of the best things about Windows 7 is the improved search tool, which now rivals Mac OS X's Spotlight to be able to find what you need quickly and easily. For example, typing 'mouse' will bring up the mouse option within the control panel or typing a word will display it and split it up neatly into files, folders and applications.

Also introduced is the concept of Libraries, which takes the 'My Documents' concept a stage further. The various Libraries, such as Documents and Pictures, will watch multiple locations which you can add yourself, so you don't have to keep everything in one place.

5. Safety and Security

By:- Raju Ranjan Sinha, BCA Department of Shershah College, Sasaram.

New security features in Windows include two new authentication methods tailored towards touchscreens (PINs and picture passwords), the addition of antivirus capabilities to Windows Defender (bringing it in parity with Microsoft Security Essentials) Smart Screen filtering integrated into Windows, and support for the "Secure Boot" functionality on UEFI systems to protect against malware infecting the boot process. Family Safety offers Parental controls, which allows parents to monitor and manage their children's activities on a device with activity reports and safety controls. Windows 8 also provides integrated system recovery through the new "Refresh" and "Reset" functions, including system recovery from USB drive. Windows 8's first security patches would be released on November 13, 2012; it would contain three fixes deemed "critical" by the company.

6. Interface and Desktop

Windows introduces significant changes to the operating system's user interface, many of which are aimed at improving its experience on tablet computers and other touchscreen devices. The new user interface is based on Microsoft's Metro design language, and uses a Start screen similar to that of Windows Phone as the primary means of launching applications. The Start screen displays a customizable array of tiles linking to various apps and desktop programs, some of which can display constantly updated information and content through "live tiles". As a form of multitasking, apps can be snapped to the side of a screen. Alongside the traditional Control Panel, a new simplified and touch-optimized settings app known as "PC Settings" is used for basic configuration and user settings. It does not include many of the advanced options still accessible from the normal Control Panel.

7. Taskbar/Start menu

At first glance, the task bar looks like nothing has much has changed since Vista. In fact, that's not the case and it's a lot more powerful. Microsoft is now making best use of its aero technology. By default, taskbar icons are now larger and items are grouped together and are not labelled with clumsy text.

If you have multiple Word documents or Windows Explorer windows open then you'll see a stack appear on the task bar. Hover the mouse over the app and each Window will be visible in a thumbnail. Hover over each thumbnail and it will become visible, while all other open windows temporarily disappear, save for their outlines. You can close each document or Window down from the thumbnail directly or click on it to bring it to the front.

In the Start menu, a small arrow to the right of applications such as Word now expands to give a list of recent documents and any can be pinned so you can keep one permanently on the list.

Advantages and Disadvantages of Microsoft Windows

The biggest advantage of Windows is that it provides ready-made solutions that can be implemented by just about anyone who's ever used a computer.

Microsoft Office is also 100% compatible with any file or document produced in the office space in America. In fact, MS Office isn't compatible with other software and systems, so much as other software and systems strive to be compatible with Office!

Finally, software services are in large supply when it comes to Windows. From Microsoft's official services, to Maryland software support, to Microsoft certification training for individuals, there is no lack of software support for Windows.

Of course, Windows detractors will tell you that there is more need for software services when it comes to Windows. And while this worldwide operating system is far from trash, it is often not as stable as its Mac or Linux counterparts.

The only other major disadvantage of using Windows in the workplace is that over 95% of all viruses and malicious software are written for the Windows OS. This means you have to double-down all security measures if you're using Microsoft software across the board.

Conclusion

A word of caution: The security vulnerabilities of Windows operating systems make them popular targets for programmers of malicious code. Whether these vulnerabilities are due to their enormous share of the market (making them enormously attractive) or coding errors on the part of Microsoft, the result is the same: There is a constant need for every system administrator and computer owner to proactively keep all Windows systems as secure as possible through vigilant access control and patch management.