General Software Features and Trend

Contents

Introduction

- Is a set of programs, procedures, algorithms
- means computer instructions or data. anything that can be stored electronically is software
- Is the program that stored as binary data this is copied to computer's hard drive , when it is installed
- Is virtual and does not take up any physical space
- Is much easier (and often cheaper) to upgrade than hardware

Introduction..

- Is software that are developed for general user not for specific organization/company
- General-software is “off the shelf” or ready made software. This software is not written for any specific business or organization but can be used to suit their specific needs.

Examples

- Word processing
- Spreadsheet
- Database Management
- Presentation
- Communication
- Desktop publishing
- Graphics
- Computer Aided Design

Advantages

- Installation can be easily done
- Intensive training is not required to use it
- These software are readily available

Disadvantages

- The general-purpose software package may not specifically fit the user's needs
- The user purchases software for which some features are never used and may never be used

Features

- * Ease of use
- *Graphical User Interface(GUI)
- *Requirement of more powerful hardware
- *Multi-platform capability
- *Network capability
- *Compatibility with other software
- *Object linking and embedding
- *Group work capabilities
- *Mail enabling
- *Web enabling

Ease of use

- A number of factors make software user-friendly, including
- The readability and clarity of the documentation, or manual, for the software package
- The clarity of the menus and prompts displayed on the screen
- On-line help that explains the prompts and commands
- Tutorials that teach us how to use a software

Graphical User Interface(GUI)

- Graphical user interface is a type of user interface that allows users to interact with electronic devices using images rather than text commands.
- GUIs can be used in computers, hand-held devices such as MP3 players, portable media players or gaming devices, household appliances, office, and industry equipment.
- A GUI represents the information and actions available to a user through graphical icons and visual indicators such as secondary notation as opposed to text-based interfaces, typed command labels or text navigation. The actions are usually performed through direct manipulation of the graphical elements.

- The graphical user interface has become more popular in all types of software, not just operating system software. Every type of software now has commercial applications that use a GUI, including word processing, spreadsheets, project management and even utility software packages.

Requirement of more powerful hardware

- Software also requires increasingly more powerful hardware, especially greater amounts of main memory, secondary storage, and fast screens.

Multi-platform capability

- Software vendors are increasingly providing products that are capable of running on more than one hardware platform.
- For example: Microsoft Corporation provides versions of Excel, a spreadsheet program, that run on computers constructed around Intel's 80*86 chip family and Motorola's 64000 chip family. The operating systems Windows NT and UNIX have versions that run on Intel chip computers and RISC computers.

Network capability

- Connecting computers to each other has become very important in developing information systems to serve organizations. It is very likely that some of our applications will require a computer network. Thus the ability of software to run on a network of connected computers, and in fact, to take advantage of the network, is usually an important consideration.

Compatibility with other software

- The compatibility of software is important when we are updating the software we currently use with a new version. That is, the new version of the software should be able to read and use the data files we created with our old version of the software. This feature of software is called backward compatibility. At the very last, the new version should be able to convert the old files to the format of new version easily.
- File conversion features have become increasingly common on word processors, spreadsheets, databases and other popular software packages. These conversion features enable users to read, copy, and use files prepared by other programs.

Object linking and embedding

- Compound documents are documents that contain several objects. An object can be any piece of data or file created by a program. A letter created by word processing document, a chart created by a spreadsheet program, a drawing created by drawing program can all be objects.
- Linking data between these objects has become an important feature of many desktop suites. For example, we may link a chart produce the chart in a spreadsheet program to a word processing document. Rather than actually containing the spreadsheet chart, the word processing document contains a pointer to the chart. Any changes made to the chart while it is in spreadsheet program are automatically reflected in the word processing document.

- Embedding places the object directly into the document. For example, if we embed the spreadsheet budget into the project report, we will have only one file: a compound document made up of a word processing document and a spreadsheet document.
- Both object linking and embedding provide in-place editing.

Group work capabilities

- In the last few years, integrated software products aimed specifically at improving the productivity of people who are collaborating to achieve common goals have evolved. These packages called groupware, offer integrated support for many of the typical activities needed by work groups.
- However, many newer software packages have features that facilitate group work. For example, some word processors have multiuser document prepared by other users. The feature usually allows users to track and catalog revisions made by others. Direct faxing of documents or direct distribution of documents via electronic mail to others also facilitates group work, as does automatic conversation of documents to formats used by other programs.

Web enabling

- Web enabling is the art of constructing, adapting, or interfacing software applications so that the user of the software only needs a browser on the desktop.
- Web enabling saves companies very large amounts of money in software maintenance and hardware costs, and makes useful software available to many more coworkers than ever before, thus improving the efficiency of their work.

Advantages

- The software can in principle be started from any computer on the company's intranet using a web-browser only
- The cost for extra licenses of expensive software is avoided as the software runs on one computer only (the server).
- If there are many users, one multi-processor computer can replace many local workstations, leading to cost reduction.
- The use of the software can be extended to much more people than ever before. See also our achievements.
- Validation of software (required by regulatory authorities) is considerably more easy for web-enabled software.

General Software Trends

- Many trends are occurring in software. Like at first the computers were very hard to maintain. But now-a-days software have made it very easy to maintain computers. The major trends or changes occurring in software are:
- have too much of flexibility
- now used for daily communication
- are used for security systems
- are also used for robbing(hacking)

- Windows programs are so easy to maintain that even a 12 year kid can run them.
- People use software such as Microsoft Outlook Express, Yahoo Messenger, MSN Messenger, etc., for daily communication.

- Security systems in banks, offices, courts, etc. are being computerized.
  - People who know a lot about software rob banks, by breaking their security systems. This kind of robbing is known as Cracking.
  - Some software producing computers expect that by some years people will no more use the mouse or keyboard, they will use devices which will directly read the brains of people and will make the computer perform those jobs. The computer that lets Stephen Hawkins speak and do other jobs is an example of this kind of computers.

- Software has too much flexibility:
- Flexibility has become one of the major attributes of modern softwares in the sense that, now developed software are becoming more easier to use .It does not really acquire tutorials or have to be thought before one can use a software on the market these days. This is due to cues and depicting of naturalness in software making it meaningful for users to see and use without haven to be explained before use. For example early versions of Microsoft Office were that uneasy to use but with current versions of this Application software (That is in 2007-2010), the organization is more simple therefore becoming more flexible because you can easily manipulate around with it.

Enables Multitasking:

One major trend occurring in softwares these days include its Multitasking supportiveness. Multitasking refers to the ability of a system specifically CPU/COMPUTER SYSTEM to run more than one task simultaneously. Softwares these days has the ability to support Multitasking. Typical example is, The Microsoft XP PACK versions were able to support multitasking but not more effective as in Windows 7 which can carry more than 4 tasks at a time. It could copy, delete, install at the same time which shows how software evolving these days are Multitasking supported.

ANY QUERIES???