

## **Definitions:**

**Biometrics:** The study of measurable biological characteristics. In computer security, biometrics refers to authentication techniques that rely on measurable physical characteristics that can be automatically checked.

**Monitoring:** Monitoring is the regular observation and recording of activities taking place in a project or program. It is a process of routinely gathering information on all aspects of the project.

**Obsolescence in hardware/software/services:** This is when a hardware/software/service is going out of date or being no longer in use. For example, the Floppy Disk is an obsolescent hardware.

**Data:** individual facts, statistics, or items of information: These data represent the results of our analyses.

**Information:** knowledge gained through study, communication, research, instruction

**Input Devices:** A device, such as a keyboard, used to enter information into a computer.

**Output Devices:** An **output device** is any piece of computer hardware equipment used to communicate the results of data processing carried out by an information processing system (such as a computer) to the outside world.

**Processing:** Performing some predefined sequence of operations on an input to produce an output or change of internal state; activity specifically involving the computers.

**Storage:** capacity or space for storing.

**Memory:** something that is remembered; "search as he would, the memory was lost"

**RAM:** computer memory available to the user for creating, loading, or running programs and for the temporary storage and manipulation of data, in which time of access to each item is independent of the storage sequence.

**ROM:** computer memory in which program instructions, operating procedures, or other data are permanently stored, generally on electronic chips during manufacture and that ordinarily cannot be changed by the user.

**MHz:** a unit of frequency, equal to one million cycles per second.  
Abbreviation: MHz

**Dpi:** Dots per inch. This is a measure of resolution for printers, scanners and displays.  
Laser printers typically reach 300 DPI, though 600 DPI is becoming more common. Commercial typesetters are usually around 1200 DPI.

**Bit:** A fundamental unit of information having just two possible values, as either of the binary digits 0 or 1.

**KB:** A unit of computer memory or data storage capacity equal to 1,024 ( $2^{10}$ ) bytes.

**MB:** A unit of computer memory or data storage capacity equal to 1,048,576 ( $2^{20}$ ) bytes.

**GB:** A measure of storage capacity equal to 1 billion ( $10^9$ ) bytes.

**TB:** A unit of information equal to 1000 gigabits or  $10^{12}$  (1,000,000,000,000) bits

**ASCII:** a standard code, consisting of 128 7-bit combinations, for characters stored in a computer or to be transmitted between computers.

**Compatibility:**

- (Of software) capable of being run on another computer without change.
- (Of hardware) capable of being connected to another device without the use of special equipment or software.
- Electronics. (of a device, signal, etc.) Capable of being used with equipment in a system without the need for special modification or conversion.

**OCR:** The electronic identification and digital encoding of printed or handwritten characters by means of an optical scanner and specialized software.

**OMR:** (OMR) A special scanning device that can read carefully placed pencil marks on specially designed documents. OMR is frequently used in forms, questionnaires, and answer-sheets.

**Bar code:** a series of lines of varying width, printed, as on a container or product, that can be read by an optical scanner to determine charges for purchases, destinations for letters, etc.

**Baud:** a unit used to measure the speed of signaling or data transfer, equal to the number of pulses or bits per second: baud rate.

**Verification:** A Computer check or Data check done manually. For example: Double Entry or Proof Reading.

**Validation:** A computer check or Data check done automatically by the computer for example: a Spell check, Digit check.

**Encryption:**

- The activity of converting data or information into code.
- The process of encoding a message so that it can be read only by the sender and the intended recipient. Encryption systems often use two keys, a public key, available to anyone, and a private key that allows only the recipient to decode the message.

**Decryption:** the activity of making clear or converting from code into plain text; "a secret key or password is required for decryption"

**Firewall:** an integrated collection of security measures designed to prevent unauthorized electronic access to a networked computer system.

**Virus:**

- a segment of self-replicating code planted illegally in a computer program, often to damage or shut down a system or network.
- a software program capable of reproducing itself and usually capable of causing great harm to files or other programs on the same computer; "a true virus cannot spread to another computer without human assistance"

**Trojan horse:**

- a non-replicating computer program planted illegally in another program to do damage locally when the software is activated.
- a program that appears desirable but actually contains

something harmful; "the contents of a Trojan can be a virus or a worm"; "when he downloaded the free game it turned out to be a Trojan horse"

**Worm:** *Computer Science* A malicious program that replicates itself until it fills all of the storage space on a drive or network.

**Logic Bomb:** A computer virus that remains hidden until it is triggered when certain specific conditions are met

**Platform:** The basic technology of a computer system's hardware and software that defines how a computer is operated and determines what other kinds of software can be used.

**Peripheral:** A device or unit that operates separately from the CPU but is connected to it, as a magnetic disk or tape unit or a printer.

**Analogue Data:** This is data in the form of continuous electrical waves which represent an infinite amount of values

**Digital Data:** This is considered any data that is transferred or stored in the binary form of 0 or 1

**Operating Systems:** Operating systems perform basic tasks, such as recognizing input from the keyboard, sending output to the display screen, keeping track of files and directories on the disk, and controlling peripheral devices such as disk drives and printers.

**Multitasking:** This refers to being able to perform many tasks at the same time. For example, listening to music on iTunes while working on a document or watching a movie while creating a PowerPoint slideshow. Both Windows and Mac can perform this.

**Boot:** This refers to the starting up of a computer. To boot a computer is to load an operating system into the computer's main memory or random access memory (RAM).

**Defragment:** To reorganize the disk by putting files into contiguous or adjacent order.

**Disk Format:** Disk formatting is the process of preparing a hard disk or other storage medium for use, including setting up an empty file system.

**Virus Scan Programs:** Programs to detect and remove computer viruses.

**Back-ups:** This means to make a copy of the data held on the system in case the original data is lost or damaged. Backups can be made onto removable media such as CDs, magnetic tape, removable hard disks and then stored away from the PC. This is useful if there were to be a fire/flood, if the PC were to be stolen or in the event of a hard disk failure. The original data files could then be restored. Backups can also be made to a different drive or file on the hard disk.

**Virus Checking:** This is a generic method of virus detection.

**Security:** In the computer industry, refers to techniques for ensuring that data stored in a computer cannot be read or compromised by any individuals without authorization. Most security measures involve data encryption and passwords.

**Storage:** In the computer industry, refers to techniques for ensuring that data stored in a computer cannot be read or compromised by any individuals without authorization. Most security measures involve data encryption and passwords.

**Housekeeping:** A set of instructions that are executed at the beginning of a program. It sets all counters and flags to their starting values and generally readies the program for execution.

**Analysis:** A separating or breaking up of any whole into its parts, esp. with an examination of these parts to find out their nature, proportion, function, interrelationship, etc.

**Design:** Plan something for a specific role or purpose or effect.

**Implementation:** The installation of a computer system or an information system - The use of software on a particular computer system.

**Testing:** Running new or revised programs to determine if they process all data properly.

**Evaluation:** A periodic evaluation of the system to assess its status in terms of original or current expectations and to chart its future direction.

**Training:** With regard to software, training provides instruction for each command and function in an application.

**Policies and standards:** A security policy is a document that outlines the rules, laws and practices for computer network access. This document regulates how an organization will manage, protect and distribute its sensitive information and lays the framework for the computer-network-oriented security of the organization.

**Vulnerability of network to intrusion:** This is when the network is susceptible as there are low security measurements taken.

**Level of access:**

**Network failure:** A complete or partial failure of a component or components of a network because of malfunction or natural or human-caused disasters.

**Groupware:** Groupware refers to programs that help people work together collectively while located remotely from each other.

**Data sharing:** The ability to share the same data resource with multiple applications or users. It implies that the data are stored in one or more servers in the network.

**Data integrity:** This is the assurance that information can only be accessed or modified by those authorized to do so.

**Database:** A database is an application that manages data and allows fast storage and retrieval of that data.

**Stand-alone computers:** A desktop or laptop computer that is used on its own without requiring a connection to a local area network (LAN) or wide area network (WAN).

**Filter:** To use a filter to block access to a website or Web content.

**EFT:** (Electronic Funds Transfer) this is the transfer of money from one account to another by computer.

**EDI:** Electronic Data Interchange- This is the electronic communication of business transactions, such as orders, confirmations and invoices, between organizations.

**E-Commerce:** The "E" in E-commerce refers to electronic and therefore the term "E-commerce" means the buying and selling of objects electronically.

**Interface:** The point of interaction or communication between a computer and any other entity, such as a printer or human operator.

**LAN:** A LAN is a network of computers which are connected together in a limited area - usually the same building or a couple of nearby buildings.

LANs are usually high speed and they make use of connected peripherals such as printers.

**WAN:** A wide area network or WAN is a computer network that joins computers together over long distances.

Computers on a WAN can be joined using the public telephone system, fibre optic cables, satellites or other means.

**Server:** A server is a computer system that provides services to other computing systems—called clients—over a network. The term server can refer to hardware or software.

**Ethernet:** A standard method of connecting computers to a Local Area Network (LAN) using coaxial cable.

**Access & Access Permissions:** Access is being able to get to computers, networks and networks resources. Access permission is provided by the organization in the form of a password and username.

**Login & Password:** A login is the process of receiving access to a computer system by identification of the user in order to obtain credentials to permit access. It is an integral part of computer security procedure. A username is used in preference to the full name of the

user this is a shorter sequence of characters which still uniquely identifies the person.

**Firewall:** A firewall is a set of related programs, located at a network gateway server which protects the resources of a private network from users from other networks.

**Sysadmin:** A person in charge of managing and maintaining a computer system of telecommunication system (as for a business or institution)

**UPS:** Uninterruptible Power Supply- A device that provides battery backup when the electrical power fails or drops to an unacceptable voltage level.

**Virus:** A computer virus is a self-replicating computer program written to alter the way a computer operates, without the permission or knowledge of the user.

**Hacking:** A hacker is someone who creates and modifies computer software and computer hardware, including computer programming, administration, and security-related items.

**Phreaking:** To manipulate a telephone system illicitly to allow one to make calls without paying for them.

**Intranet:** An intranet is the internal network of an organization, such as company or school. An intranet uses the same network protocols and technology of the internet, but the access is restricted to employees, teachers, etc.

**Internet:** The internet is a worldwide network that is constantly growing. It uses a common protocol known as Transmission Control Protocol/Internet Protocol. The internet is an endless resource for information.

**VPN:** A virtual private network is two or more computers connected to each other via the internet. What separates the VPN from the other networks is its encryption. VPN generally involve high encryption in their data transfer as their medium for transmission is via the internet.

**Encryption:** Encryption is the process of obscuring or hiding information so it is not read without any special knowledge. An example can be emails, and how passwords can be considered as special knowledge.

**SSL:** (Secure Sockets Layer) is a cryptographic protocol and applies cryptographic methods to provide authentication and privacy over the Internet. SSL runs under protocols like HTTP, FTP, SMTP, etc.

**Software:** Software is short for computer software. Software includes all computer applications and operating systems used with computers. Software tells the hardware when to do a specific task.

**Shareware:** Shareware is computer software that is distributed for free on a trial basis on the understanding that if you want to continue to use the software after the trial is over e.g. 30 days, then you will voluntarily send the author of the software a small payment.

**Public domain:** Creative work or intellectual property that is freely usable by anyone, either because the copyright has expired or because the creator obtained a Creative Commons license for the work.

**Freeware:** Freeware is software that is distributed free by the author. It can be downloaded and used free of charge.

**Commercial software:** Commercial software is computer software that is produced for sale or that serves commercial purposes.

**Integrated software:** Software packages that include several applications designed to work well together.

**User manual:** A user guide or user's guide, also commonly known as a manual, is a technical communication document intended to give assistance to people using a particular system.

**Registration card:** Registration card means a state voter registration card approved by the Secretary of State

**Serial number:** A number that is one of a series and is used for identification, as of a machine, weapon, or motor vehicle.

**Warranty:** A guarantee of the quality of a product or service made by the seller to the buyer.

**Copyright:** This is the legal recognition that a creative work belongs to you if you are the 'copyright' owner. This means that anyone wishing to make use of the work for non-personal use will need to get your agreement.

'Creative works' includes almost anything a person can produce for other people e.g.

- > Literature
- > music
- > film
- > software code

You have automatic copyright for any works that you create, unlike a trademark which you have to apply for.

**License:** Official or legal permission to do or own a specified thing

**Compression:** Compression means to reduce the size of a data file for example a document, spreadsheet, image, sound file etc. It is a good idea to compress large files because they can take up a lot of storage

space on your hard disk. They will also take a long time to send as an attachment by email.

**Decompression:** The restoration of data that has undergone compression to its original state.

**Back door/ trapdoor:** A programming term. A 'back-door' is a secret way of getting into the system and by-passing the security checks.

**Upload:** Mainly an internet term. Uploading means to transfer a data file from your computer to a server. For example, if you use Flickr you would 'upload' a photo file to the Flickr server.

**Download:** Download is getting information from another computer. The opposite is upload, sending data to another computer. When we say we are downloaded something, it is normally a bigger piece of information or file.

**Wizard:** The wizard facility assists the user in the production of a document. It is an automatic creation of preset templates using guidance from the user

**Template:** A template is a standard document with pre-set layouts and formats. A template determines the basic structure and settings of a document and includes; formatting, page formatting, inserting text and graphics.

**GUI:** (Graphical user interface) A software interface designed to standardize and simplify the use of computer programs, as by using a mouse to manipulate text and images on a display screen featuring icons, windows, and menus.

**Command-line interface:** A Command Line Interface (CLI) lets you control your PC by typing commands. There's no mouse or graphical controls like you get in a GUI such as Windows.

**Voice Recognition:** A technology designed to recognize and respond to spoken commands through digitization and algorithm-based programming; also called speech recognition.

**CD ROM:** A compact disk that functions as read-only memory.

**Internet:** an internet is a global network of interconnected computers, enabling users to share info along multiple channels.

**Virtual actors:** is the creation or re-creation of a human being in image and voice using computer-generated imagery and sound.

**Animation:** Moving diagrams or cartoons that are made up of a sequence of images displayed one after the other. Animations are created for entertainment, ad banners as well as instructional sequences. E.g. flash

**Bit map:** A set of bits that represents a graphic image, with each bit or group of bits corresponding to a pixel in the image.

**Vector graphics:** refers to software and hardware that use geometrical formulas to represent images.

**Object orientated:** A computer image that is stored and displayed in terms of vectors rather than points, allowing for easier scaling and storage.

**Clip art:** Ready-made pieces of printed or computerized graphic art, such as illustrations, borders, and backgrounds that can be electronically copied and used to decorate a document.

**CAD:** stands for computer aided design. The use of computer programs and systems to design detailed two- or three-dimensional models of physical objects, such as mechanical parts, buildings, and molecules.

**Hypermedia:** A computer-based information retrieval system that enables a user to gain or provide access to texts, audio and video

recordings, photographs, and computer graphics related to a particular subject.

**Hyper text:** A computer-based text retrieval system that enables a user to access particular locations in webpages or other electronic documents by clicking on links within specific webpages or documents.

**Pixel:** The basic unit of the composition of an image on a television screen, computer monitor, or similar display.

**Resolution:** Refers to the sharpness and clarity of an image. This is the total number of pixels displayed on the screen.

**MP3:** MPEG, file containing a song or other audio data.

**MIDI:** an acronym for musical instrument digital interface, a standard adopted by the electronic music industry for controlling devices, such as synthesizers and sound cards, that emit music.

**Morph:** Short for metamorphosing, morphing refers to an animation technique in which one image is gradually turned into another. Many advanced animation programs support some type of morphing feature.

**File format:** A format for encoding information in a file. Each different type of file has a different file format. The file format specifies first whether the file is a binary or ASCII file, and second, how the information is organized.

**Storage:** The capacity of a device to hold and retain data.

**Computer models:** A mathematical representation of the functioning of a system, presented in the form of a computer program.

**Military simulations:** also known informally as war games, are simulations in which theories of warfare can be tested and refined without the need for actual hostilities.

**Simulation:** The mathematical representation of the interaction of real-world objects.

**Feedback loop:** The section of a control system that allows for feedback and self-correction and that adjusts its operation according to differences between the actual output and the desired output.

**Tutorial software:** A program that provides instruction for the use of a system or of software.

### **Implementing:**

**Training software:** Computer programs that training; usually job related, e.g., how to perform tasks, about company procedures or policies. Training programs may also be used to teach basic knowledge and skills.

**Wizards:** A utility within an application that helps you use the application to perform a particular task. For example, a "letter wizard" within a word processing application would lead you through the steps of producing different types of correspondence.

**Help menu:** Online documentation. Many programs come with the instruction manual, or a portion of the manual, integrated into the program. If you encounter a problem or forget a command while running the program, you can summon the documentation by pressing a designated Help key or entering a HELP command.

**"Read me" files:** To copy data to a place where it can be used by a program. The term is commonly used to describe copying data from a storage medium, such as a disk, to main memory.

**Desktop published documents:** Desktop publishing documents may be for desktop or commercial printing or electronic distribution including PDF, slide shows, email newsletters, and the Web.

**Slideshows:** A collection of pages arranged in sequence that contain text and images for presenting to an audience. It often refers to a Microsoft PowerPoint presentation.

**Websites:** A site (location) on the World Wide Web. Each Web site contains a home page, which is the first document users see when they enter the site. The site might also contain additional documents and files. Each site is owned and managed by an individual, company or organization.

**Authenticity:** In social media, authenticity is the word used to describe "real" people behind blog posts and other social profiles that can develop an authentic voice with readers and followers.

**Internet:** A global network connecting millions of computers. More than 100 countries are linked into exchanges of data, news and opinions

**Virus:** A computer program that is designed to replicate itself by copying itself into the other programs stored in a computer.

**Web:** A system of Internet servers that support specially formatted documents.

**Open access:** To make an object accessible. Whenever you access a file (that is, you edit a text file or run a program file), the operating system opens the file.

**Spam:** Electronic junk mail or junk newsgroup postings. Some people define spam even more generally as any unsolicited e-mail.

**IT- Rich nations:** nations that can afford to have many technical devices

**IT-Poor:** nations that cannot afford to have technical devices.

**Telemedicine:** The use of telecommunications technology to provide, enhance, or expedite health care services, as by accessing off-site databases, linking clinics or physicians' offices to central hospitals, or transmitting x-rays or other diagnostic images for examination at another site.

**Electronic health records:** (also electronic patient record or computerized patient record) is an evolving concept defined as a longitudinal collection of electronic health information about individual patients or populations

**Data analysis:** is a process of inspecting, cleaning, transforming, and modeling data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making.

**Diagnostic and therapeutic tools:**

**Robotic surgery:** Using robots in the operating room to assist the surgeon in performing surgery. The surgeon views the patient via a terminal and manipulates robotic surgical instruments via a control panel.

**Prosthetic devices:** An artificial device used to replace a missing body part, such as a limb or heart valve.

**Diagnostic software:** Software routines that test hardware components (memory, keyboard, disks, etc.). Diagnostics are often stored in ROM chips and activated on startup.

**Electronic music:** music in which the sounds are originated, organized, or altered by electronic devices.

**Interactive visual arts:**

**Digital actor simulations:**

**DVD:** a digital recording (as of a movie) on an optical disk that can be played on a computer or a television set

**CD:** An optical digital audio disc that contains up to 74 minutes of hi-fi stereo sound.

**VR:** A computer simulation of a real or imaginary system that enables a user to perform operations on the simulated system and shows the effects in real time.

**Stereo lithography:** A three-dimensional printing process that makes a solid object from a computer image by using a computer-controlled laser to draw the shape of the object onto the surface of liquid plastic.

**Digital radio:** The microwave transmission of digital signals through space or the atmosphere.

**Digital television:** Television in which picture information is encoded into digital signals on the transmitter, and decoded at the receiver.

**Electronic news:** is an online publication that currently covers just the semiconductor production equipment industry. It was originally a weekly trade newspaper, which covered all aspects of the electronics industry including semiconductors, computers, software, communications, space and even television electronics.

**Online games:** Internet games are those that require a connection to the Internet to play, and is a type of PC game. Computer games with multiplayer capabilities can be referred to as Internet games, as are online only games which you play in your browser.

**Online gambling:** Online gambling is a general term for gambling using the Internet.

**Mapping:** The process of storing and displaying map data in digital form (to store and retrieve on a computer).

**Collection, processing and analysis:**

**Forecasting:** To estimate or calculate in advance, especially to predict (weather conditions) by analysis of meteorological data. See synonyms at predict.

**Data logging:** Conversion of electrical impulses from process instruments into digital data to be recorded, stored, and periodically tabulated.

**Lobbying:** Lobbying is the practice of influencing decisions made by the government (in groups or individually). It includes all attempts to influence legislators and officials, whether by other legislators, constituents, or organized groups.

**Record keeping:** Systematic procedure by which the records of an organization are created, captured, maintained, and disposed of.

**Tax collection:** the collection of taxes assembling, collecting, aggregation, collection - the act of gathering something together.

**Policy implementation:**

**Policy development:**

**Enactment:** the passing of a law by a legislative body.

**Enforcement and analysis:**

**Cyberwarfare:** the use of computers and the Internet in conducting warfare in cyberspace.

**Espionage:** the systematic use of spies to get military or political secrets

**Internet protocols:** the standards that keep the Internet running. The foundation protocol is TCP/IP, which provides the basic communications mechanism as well as ways to copy files (FTP) and send e-mail (SMTP). The Web added the HTTP protocol for downloading Web pages and HTML, XML and XHTML for formatting them

**http:** (Hypertext Transfer Protocol) The communications protocol used to connect to Web servers on the Internet or on a local network (intranet).

**ftp:** A communications protocol governing the transfer of files from one computer to another over a network.

**TCP:** a protocol developed for the internet to get data from one network device to another.

**Cookies:** A data file written to a hard drive by some Web sites, contains information the site can use to track such things as passwords, login, registration or identification, user preferences, online shopping cart information, and lists of pages visited.

**Listserv:** The software (server) used to maintain an electronic mailing list. It is also known as list server.

**Webcam:** A digital camera capable of downloading images to a computer for transmission over the Internet or other network.

### **Internet language:**

**Netiquette:** Etiquette practiced or advocated in electronic communication over a computer network.

**Intranet:** A privately maintained computer network that can be accessed only by authorized persons, especially members or employees of the organization that owns it.

**URL:** Universal resource locator, Address of a resource on the Internet. The resource can be any type of file stored on a server, such as a Web page, a text file, a graphics file, or an application program.

**Hyperlink:** link in hypertext: a word, symbol, image, or other element in a hypertext document that links to another element in the same document or in another hypertext document

**Bandwidth:** a rate of data transfer, throughput or bit rate, measured in bits per second (bps)

**WWW:** An Internet-based system that enables an individual or a company to publish itself to the entire world, except to countries or locations that prohibit the free interchange of information.

**Browser:** A Web browser is a software application for retrieving, presenting, and traversing information resources on the World Wide Web

**Search engine:** A software program that searches a database and gathers and reports information that contains or is related to specified terms.

Or

This is a website whose primary function is providing a search engine for gathering and reporting information available on the Internet or a portion of the Internet.

**E-mail:** sending and receiving messages electronically over a computer network, as between personal computers.

**Comparison of internet and intranet:** Intranet is an in-house Web site that serves the employees of the enterprise. Although intranet pages may link to the Internet, an intranet is not a site accessed by the general public and internet is a worldwide system of interconnected computer networks.

**Online services:** An organization that provides an information service over the Internet. Examples are search engines, online backup services and application service providers.

**E-commerce:** e-commerce: (Electronic-COMMERCE) Doing business online, typically via the Web. It is also called "e-business," "e-tailing" and "I-commerce."

**e-banking or online banking:** Online banking (or Internet banking) allows customers to conduct financial transactions on a secure website operated by their retail or virtual bank, credit union or building society.

## **E-health:**

**Robots:** A stand-alone hybrid computer system that performs physical and computational activities. Capable of performing many different tasks, it is a multiple-motion device with one or more arms and joints. Robots can be similar in form to a human, but industrial robots do not resemble people at all.

**Android:** An android is a robot or synthetic organism designed to look and act like a human.

**Cyborg:** A human who has certain physiological processes aided or controlled by mechanical or electronic devices.

**Sensors:** A device that measures or detects a real-world condition, such as motion, heat or light and converts the condition into an analog or digital representation.

**Expert systems:** An expert system is software that attempts to provide an answer to a problem, or clarify uncertainties where normally one or more human experts would need to be consulted. Expert systems are most common in a specific problem domain, and it is a traditional application and/or subfield of artificial intelligence.

Or

This is a computer application that performs a task that would otherwise be performed by a human expert. For example, there are expert systems that can diagnose human illnesses, make financial forecasts, and schedule routes for delivery vehicles. Some expert systems are designed to take the place of human experts, while others are designed to aid them.

**Knowledge engineer:** A computer programmer who constructs expert systems.

**Informant:** a person who supplies information

**Programmer:** A programmer is someone who writes computer software. The term computer programmer can refer to a specialist in one area of computer programming or to a generalist who writes code for many kinds of software.

**Smart weapons:** Smart weapons are military hardware that incorporates computer technologies in order to carry out their missions.

**Reconnaissance:** reconnaissance is the the exploration or examination of an area to gather information, especially about the strength and positioning of enemy forces with technology

**Artificial intelligence:** the ability of computers to perform functions that normally require human intelligence.

**Turing tests:** a procedure to test whether a computer is capable of humanlike thought.

**Parallel processing:** The simultaneous processing of different tasks by two or more microprocessors, as by a single computer with more than one central processing unit or by multiple computers connected together in a network.

**Machine learning:** The process or technique by which a device modifies its own behavior as the result of its past experience and performance.

**Natural language:** A human written or spoken language as opposed to a computer language.

**Common-sense knowledge:** commonsense knowledge is the collection of facts and information that an ordinary person is expected to know.

**Agent:** A software routine that waits in the background and performs an action when a specified event occurs.

Or

A person hired or recruited by an intelligence agency to do its bidding.

**Pattern recognition:** The automatic identification of figures, characters, shapes, forms, and patterns without active human participation in the decision process. For example, the ability of a computer to read barcodes and finger prints.

**Knowledge base:** The part of an expert system that contains the facts and rules needed to solve problems.

Or

It is a database of rules about a subject used in AI applications.

**Inference engine:** The processing program in an expert system. It derives a conclusion from the facts and rules contained in the knowledge base using various artificial intelligence techniques.

**Heuristics:** experience-based techniques that help in problem solving, learning and discovery

**Fuzzy logic:** A mathematical technique for dealing with imprecise data and problems that have many solutions rather than one. Although it is implemented in digital computers which ultimately make only yes-no decisions, fuzzy logic works with ranges of values, solving problems in a way that more resembles human logic.

**Knowledge engineer:** A knowledge engineer is a computer systems expert who is trained in the field of expert systems.

**Domain:** A group of networked computers that share a common communications address.

**Telecommuting:** "Telecommute" simply means to work from a remote location, usually a home office, by electronically linking to a company. For many, the word telecommute implies employment (though working off-site) because often companies don't allow non-employees access to their computer systems in order to telecommute.

**Video Conferencing:** Computer software, hardware, or other device capable of transmitting a video signal to another computer software program or hardware device allowing other individuals to see a picture of the participants in a conference.

**Public information systems:** These are systems designed for use by the general public, rather than specialists in a particular field or organization. There are three generations of public information systems:

1. Information packaging systems, which provide minimal sharing,

2. Information retrieval systems, with provision for the sharing of data but not of processes, and

3. Information processing systems, which provide maximal sharing of data and processes. Public information packaging systems include automated bank tellers, library checkout systems, and airline reservation systems.

**Teleconferencing:** To hold a conference via a telephone or network connection. Computers have given new meaning to the term because they allow groups to do much more than just talk. Once a teleconference is established, the group can share applications and mark up a common whiteboard. There are many teleconferencing applications that work over private networks. One of the first to operate over the Internet is Microsoft's NetMeeting.

**Digital TV:** is the sending and receiving of moving images and sound by discrete (digital) signals, in contrast to the analog signals used by analog TV.

**Push–pull technologies:** Currently, one of the most fashionable technologies within the Internet is “Push” technology. Contrary to the “Pull” world of web pages where users request data from another program or computer, via a web browser, “Push” enables services to be targeted at the user, without them having to initiate the information collection activity. Instead, information finds the user. In other words, an automated retrieval of data from the Internet, corporate data sources and e-commerce web sites, is delivered directly to specific user populations in a personalised manner.

**Phone tapping:** Phone taps, or phone tapping, is a form of wiretapping. Wiretapping is the use of devices to intercept a telephone transmission for the purpose of electronic eavesdropping. These devices, commonly called “bugs” may be planted legally or illegally. They are often used to listen to sensitive conversations and can record them.

**“What if” question:** A feature of spreadsheet software that allows speculations, by providing instant answers to hypothetical questions.

**Boolean operator:** Boolean operators are used to construct searches of a database. There are 3 Boolean operators: AND, OR, NOT.

**Absolute reference:** When writing a formula, the reference to a cell can be made absolute (the formula will always refer to the same cell) by prefixing the row and column with a \$ character

**ASCII/Unicode:** (Acronym for American Standard Code for Information Interchange): ASCII text does not include special formatting features and therefore can be exchanged and read by most computer systems. Files that have a ".txt" extension are typical of ASCII files.

**CD-ROM:** Short for Compact Disc-Read-Only Memory, a type of optical disk capable of storing large amounts of data -- up to 1GB

**Column:** a vertical line of units following one after another

**Copyright:** The right by law to be the entity which determines who may publish, copy and distribute a piece of writing, music, picture or other work

**Data integrity:** A condition in which data has not been altered or destroyed in an unauthorized manner

**Data redundancy:** is information that is duplicated within a system

**Data:** information that can be read, used and manipulated by the computer

**Data mining:** Data mining refers to the process of analyzing data in order to determine patterns and their relationships.

**Data transfer:** The amount of data that can be transmitted in a fixed amount of time. Also known as bandwidth

**Database:** Database is a structured collection of records or data that is stored in a computer system by organizing information in a regular structure

**Desktop Publishing-DTP:** Formatting a document on a computer screen with an accurate representation of the printed version

**Electronic mail:** Electronic Mail, commonly referred to as e-mail, is an electronic means for communicating information under specified conditions, generally in the form of text messages, through systems

that will send, store, process, and receive information and in which messages are held in storage until the addressee accesses them.

**Ergonomics:** The study of how workers interact with their work environment. Proper ergonomics means designing objects in the workplace, such as keyboards and chairs, to provide safety and comfort for the worker.

**Field:** Fields describe a single aspect of each member of a table. A student record, for instance, might contain a last name field, a first name field, a date of birth field and so on.

**File Format:** The way data is organized for a particular kind of file. Some formats are proprietary and can be read only by the program used to create the file. Other formats such as ASCII and rich text format (RTF) are more generic and can be read by many programs.

**Flat-file database:** database structure in which all data is entered and stored in a single table, usually in a single large file

**Formatting:** Usually encoded as a set of instructions to an application on how to present the data through various output devices

**Input device:** Device for sending information to the computer

**Key field:** Key fields are also used in relational databases to maintain the structural integrity of your tables, helping you to avoid problems such as duplicate records and conflicting values in fields

**Label:** In a spreadsheet, a text entry that provides information on what a column or row represents.

**Macro:** Custom-design embedded procedure program that automates tasks in application programs

**Mail merge:** A word processing feature which creates standard documents by combining a template document and a database.

**Output device:** device for sending information from the computer

**PDF:** Portable Document Format): A technology developed by the Adobe Corporation for formatting documents so that they can be

viewed and printed exactly the same on any PC using the Adobe Acrobat reader.

**Query:** A view of your data showing information from one or more tables. For example, you could query a Students database asking "Show me the first and last names of the students who take both history and geography and have Alice Hernandez as their advisor".

**Record:** A record contains all the information about a single 'member' of a table.

**Relational data:** A database consisting of more than one table. In a multi-table database, you not only need to define the structure of each table, you also need to define the relationships between each table in order to link those tables correctly.

**Relative reference:** When writing a formula, a reference to a cell is normally a relative reference. When the formula is copied to another location, the formula within that cell is the same, relative to its position on the spreadsheet

**Replicate:** A feature of spreadsheet software

**Row:** Row is a horizontal portion of the spreadsheet. It extends from left to right across the spreadsheet. Rows are labeled with numbers

**RTF:** The Rich Text Format (RTF) Specification is a method of encoding formatted text and graphics for easy transfer between applications

**Search engine:** A search engine is an information retrieval system designed to help find information stored on a computer system

**Spell check:** To verify the spelling used in a document for correctness. In computing, a spell checker is an application program that flags words in a document that may not be spelled correctly

**Spreadsheet:** A spreadsheet is a computer application that simulates a paper, accounting worksheet. It displays multiple cells that together make up a grid consisting of rows and columns

**Surveillance:** The monitoring of the behavior, activities, or other changing information, usually of people and often in a surreptitious manner. It most usually refers to observation of individuals or groups by government organizations

**Template:** In spreadsheet software worksheets that contain labels and formulas but no data values

**Virtual reality:** Form of computer-based technology that creates a sensory experience that allows a participant to believe and barely distinguish a virtual experience from a real one. VR uses graphics with animation systems, sounds, and images to reproduce electronic versions of real life experience.

**Worksheet:** piece of paper recording work planned or done on a project