

Adv. Higher Grade

Glossary



Designing a Software Solution	Orange
Software Development	White
Computer Networking	Green

802.11	The 802.11 is a family of wireless communications standards which define a number of different transmission methods for wireless Ethernet networks.
Acceptance testing	The testing of software outside the development organisation and usually at the client site. Also referred to as beta testing.
ACK	An ACK packet is part of the TCP protocol and is the acknowledgement sent to a server by a client when it receives a SYN/ACK response.
Active Network Infrastructure	The active network infrastructure components are those which act as nodes on the network, and operate at the lower three levels of the OSI model. they are able to alter packets in some way such as re-transmitting or routing and filtering.
Advanced Encryption Standard (AES)	The Advanced Encryption Standard (AES) is a proposed encryption algorithm which can be used to encode data to an encryption level suitable for transmitting government data.
Alpha testing	Testing phase of software within the development organisation.
Amplification	Amplification is the effect on a network of a single ICMP ECHO_REQUEST packet resulting in a large number of replies.
Analogue Bandwidth	Analogue Bandwidth refers to the difference between the highest and lowest frequencies used in a wireless band and is measured in MHz.
Anchor	An anchor in an HTML document is a tag signifying a hyperlink which allows the reader to move to a different document by clicking on a link.
Anonymous variable	An underscore character (_) used in a Prolog query to indicate a variable whose value is not required.
Assertion	Adding data to a Prolog database.
Asymmetric Encryption	Asymmetric Encryption uses a public key and a private key to encrypt and decrypt data. Messages encrypted with the private key can be authenticated using the corresponding public key. Messages encrypted with the private key can be authenticated using the corresponding public key.
Asynchronous programming	Another term for event-driven programming.
Asynchronous Transfer Mode ATM	Asynchronous Transfer Mode (ATM) is based on transferring data in packets of a fixed size. The packet size used with ATM is relatively small compared to units used with older technologies. The small, constant cell size allows ATM equipment to transmit video, audio, and computer data over the same network, and means that no single type of data.
Base class	Another name for a super-class.
Berkeley Internet Name Domain (BIND)	The Berkeley Internet Name Domain (BIND) is the software which is running on most nameservers on the Internet. Because the same software is used on almost all machines, any vulnerabilities which are discovered can have disastrous effects.
Binary chop	Repeated division of a data list by halving to produce sub-

	lists for searching or sorting.
BIND (Berkley Internet Name Domain)	The BIND (Berkley Internet Name Domain) program is the most common program running on nameservers providing the Domain Name Service (DNS).
Binhex	Binhex is short for Binary-Hexadecimal. Binhex is one of several methods for converting files from Binary to ASCII so that they can be sent across the Internet via e-mail.
Black box testing	A phase in testing where focus is on the inputs and outputs of a software system, rather than the code.
BNC T-Piece	A BNC T-Piece is the connector used in Thin Ethernet coaxial Ethernet cable networks.
Body	The Body of an HTML page is the main section containing the content of the page.
Break-even point	The situation where, in running a new software system the benefits just begin to outweigh costs.
Broadcast IP address	A broadcast IP address is a special IP address which requires every machine on a network to respond with an ICMP ECHO-REPLY packet.
Browser	A browser is an application which retrieves HTML code from a web server and interprets it in order to display the file contents on a user's display.
Brute Force Attack	A brute force attack is where large amounts of processing resources are used to try every possible combination in turn in order to discover the key which has been used to encrypt a message. The length of the key used determines the time and resources required to do this.
Buffer	A buffer is a block of memory allocated to temporarily store information which needs to be accessed quickly rather than having to access the hard disk.
Cache	A cache is a block of memory allocated to enable fast access to information which has previously been read from disk.
Carrier Sense Multiple Access/ Collision Detection (CSMA/CD)	Carrier Sense Multiple Access / Collision Detection (CSMA/CD) is the protocol used by the Ethernet standard to ensure that machines on a network can transmit data between them without data loss due to two machines transmitting simultaneously.
Cascading Stylesheet (CSS)	A Cascading Style Sheet enables the details of how data is to be presented in an HTML page to be stored separately from the data itself. Cascading stylesheets mean that a single document may use two or more style sheets that are then applied according to specific circumstances.
CASE Repository	A CASE database of software project information that can be shared by software developers.
Certificate Authority	A certificate authority is an organisation which issues digital certificates and keeps registries of users public keys.
Ciphertext	Ciphertext is the term used to refer to data once it has been encrypted with an encryption key.
Circular queue	A list structure where the front pointer and rear pointer coincide.
Class	A group of objects that share common characteristics.
Class libraries	Collections of classes that can be used in software

	development, as building blocks for further class definitions.
Classless Inter-Domain Routing (CIDR)	Classless Inter-Domain Routing (CIDR) is a more efficient method of dividing blocks of IP addresses up which makes it possible to allocate part of a block instead of the whole block.
Client	The person or company that initiates the development process by specifying a problem.
Client Side Scripting	Client side scripting is where code on a web page written in a scripting language such as Javascript or Vbscript is executed locally on the client machine.
Co-axial cable	Co-axial cable consists of a central core surrounded by a screening of fine copper wire. Co-axial cable is used for thin or thick Ethernet network cabling.
Code generator	Automatic generation of source code from analysis and design specifications.
Codec	Codec is an abbreviation for Compression Decompression. A Codec is a system for compressing and decompressing video information so that it can be transmitted over a network or saved on a backing storage device. Codecs can be hardware or software. Hardware codecs are more efficient but also more expensive so tend to be used for dedicated video conferencing systems.
Collision	A collision occurs when two devices transmit simultaneously on an Ethernet network.
Combined conversion	A mixture of parallel, phased, pilot and direct conversion methods.
Component testing	Part of the testing phase that involves the building blocks of programs such as procedures.
Connectionless	A connectionless protocol does not need to have a connection set up prior to the transmission of a packet. IP is an example of a connectionless protocol.
Connection-oriented	A connection oriented protocol retains information about the state of the connection while data is being transmitted. TCP is an example of a connection oriented protocol.
Consultants	Experts recruited by the client company to engage in a feasibility study.
Cost-benefit-analysis	Part of the feasibility study comparing project development costs with future benefits.
DAT	Digital Audio Tape (DAT) is a high quality magnetic tape used for backup on computer systems.
Data dictionary	A repository of data definitions, system components etc., used by upper CASE tools in software development.
Data flow diagrams	A type of diagram used in the design of software systems, A program or module is represented by an oval shape. Arrows are used to represent any data flowing in or out of the module.
Datagram	A Datagram is an INTERNET protocol (IP) packet. It contains a source address, a destination address, routing information plus the data to be transmitted.
Decryption	Decryption is the reverse of encryption, where encrypted text is converted back into something which can be

	understood. Usually a key is needed in order to do this.
Demilitarised Zone (DMZ)	A Demilitarised Zone (DMZ) is an area of a network which is outside the proxy server NAT network so that its IP-addresses are visible to the outside world, but is still protected by a firewall.
Derived class	A new class that is created from an existing class, inheriting all the characteristics of the existing class.
Differential Backup	A differential backup is one where only the data which has changed since the last full backup is saved to the backup device.
Digital Bandwidth	Digital bandwidth refers to the data transfer rate of a digital network.
Digital Certificate	A digital certificate is a package of information that identifies a user or a server, and contains information such as the organization name, the organization that issued the certificate (the Certificate Authority), the user's e-mail address and country, and the user's public key.
Digital Signature	A digital signature guarantees that a message is from the person it claims to be from and guarantees that the original content of the message has not been altered.
Direct conversion	This is the complete changeover from the old software system to the new. This 'big bang' approach attracts the greatest risks.
Dispatcher	Part of the operating system that is responsible for executing event handlers.
Distributed DoS (DDoS) attack	A Distributed DoS (DDoS) attack is one which is launched from a number of client machines simultaneously. It is more effective than a single machine DoS attack as the attacker themselves can be off-line while the attack is in progress, relying on the client machines to perform the attack.
Divide and conquer	Philosophy behind binary halving of data lists to speed the operations of searching and sorting.
Document generator	A CASE tool that generates documents directly from comments in programs.
Domain Name Service (DNS)	The Domain Name Service (DNS) is the Internet's on-line mapping system which resolves domain names into IP addresses. DNS matches domain names to IP addresses and is maintained by a hierarchy of nameservers.
Driver	A small program written specifically to supply an un-tested module with test data and an interface.
Element	An element in HTML is a piece of text or HTML which can have its attributes modified by enclosing it with tags.
Encapsulation	The binding of data and methods within an object. Data cannot be changed within objects by other objects.
Encapsulation	Encapsulation is the process of transferring packets of data which use different communications protocols inside packets which use another protocol.
Encryption	Encryption is the process of converting data into a form which cannot be used or understood by a third party.
Encryption Algorithm	The encryption algorithm is the method used to combine the data to be encrypted (plaintext) with a secret key in order to create ciphertext.

Event handlers	Small procedures that respond to events in event-driven programming.
Event queue	Multiple triggered events are put into a queue system to wait processing.
Event-driven	A system that responds to an external event such as a mouse click or a key press.
Executable prototype	An executable source code program obtained directly from the analysis diagrams and specifications in UML.
External Router	An external router is the router which connects your network to the Internet. An external router is often supplied by your service provider and they may retain password protected access to it, particularly if it is configured to provide bandwidth at a rate which corresponds to a set tariff.
Feasibility study	Research by the project leader into whether a project is viable enough to go ahead.
Feasibility study	At a very early stage in any project development, a feasibility study is carried out to judge whether or not the project can be achieved, within any known constraints. These constraints include time, finance and availability of appropriate hardware, software and expertise.
Fibre Distributed Data Interface (FDDI)	A Fibre Distributed Data Interface (FDDI) is a high speed token-ring networking technology designed to run over optical fibre.
FIFO	First in first out stack structure.
Firewall	A firewall is a dedicated machine or an application which controls the movement of packets, both incoming and outgoing, between the Internet and a network or a stand alone machine.
Forwarding Table	A forwarding table is a database maintained by a router which stores details of which host to forward IP packets to depending on their destination address. This table is built up by the router as a result of examining the source address of incoming packets.
Frame	A frame is another term for a packet on a network, although frame is normally the term used at the lower levels of the ISO/OSI model. Frames are often used to describe packets on Ethernet networks.
Full Backup	A full backup is one where all the data is saved to the backup device.
Functional requirements	A list of all the functions which the finished program or system must be able to do. This forms a main part of the specification.
Functional specification	This details how the developed program will behave under specified conditions.
Gateway	A Gateway is a server which acts as an intermediary for some other server.
General Packet Radio Service (GPRS)	A system used by mobile phones to connect to the Internet where users are only charged for the data transferred instead of the time they remain connected.
GIF (Graphics Interchange Format)	GIF is a lossless compressed bitmap graphics format used when images are included on web pages. Because it is a compressed format it reduces download time.

Head	The Head element of an HTML page which contains the title of the page and optional metadata (information about a document rather than document content).
Hypertext	Hyper-text is the name for text with links in it which can take the reader to other parts of that document or to other different documents.
Hypertext Mark-up Language (HTML)	Hypertext Mark-up Language (HTML) is the language used to encode web pages for the World Wide Web (WWW).
ICMP ECHO_REPLY	An ICMP ECHO_REPLY packet is the response to a PING (ICMP ECHO_REQUEST) command.
ICMP ECHO_REQUEST	An ICMP ECHO_REQUEST packet is a "PING" request set from one host to another on a network as a diagnostic tool. A PING request will elicit an ICMP ECHO_REPLY packet from the recipient.
Incremental Backup	An incremental backup is one where only the data which has changed since the last incremental backup is saved to the backup device.
Information hiding	Another term for encapsulation.
Inheritance	The sharing of characteristics between a class of object and newly created sub classes. This allows code re-use by extending an existing class.
Inheritance diagram	A diagrammatic representation of an inheritance class hierarchy.
Instance	An object is an instance of a class if it belongs to that class.
Instant Messaging	Instant Messaging is a communications system which allows users to communicate in real time using a private online chat area The service will alert users when friends or colleagues are on line.
Instantiation	This is the process, in Prolog where a variable is temporarily assigned a value.
International Standards organisation (ISO)	The International Standards organisation (ISO) is responsible for setting technical standards which need to be agreed internationally.
Internet Architecture Board (IAB)	The Internet Architecture Board (IAB) oversees the Internet Engineering Task Force (IETF) and is responsible for publishing standards and making them available through a system of Requests For Comments (RFC).
Internet Control Message Protocol (ICMP)	The Internet Control Message Protocol (ICMP) is used by the Internet Protocol (IP) for routing, fault isolation and congestion control. When the PING command is used, an ICMP ECHO_REQUEST is sent to the target host. The host should respond with an ICMP ECHO_REPLY.
Internet Corporation for Assigned Names and Numbers (ICANN)	The Internet Corporation for Assigned Names and Numbers (ICANN) supervises IP addresses and the Domain Name Service (DNS).
Internet Engineering Task Force (IETF)	The Internet Engineering Task Force (IETF) is responsible for specifying the development of protocols and architecture on the Internet and providing a forum for the exchange of information within the Internet community.
Internet Message Access Protocol (IMAP)	The Internet Message Access Protocol (IMAP) allows users to access and store their email on a remote server

	so that it can be accessed from anywhere.
Internet Protocol (IP)	The Internet Protocol (IP) is part of the TCP/IP suite of protocols and is responsible for the routing of packets between hosts, and fragmentation and reassembly of packets if required.
Internet Protocol Version 6 (IPV6)	Internet Protocol Version 6 (IPV6) is a new Internet addressing protocol based on 128 bits instead of 32.
Inverse Square Law	Any point source which spreads its influence equally in all directions will obey the inverse square law. This is because the influence of the radiation is equivalent to the surface of a sphere whose area increases in proportion to the square of its radius.
IP Security (IPSec)	IP Security (IPSec), is a set of protocols developed by the Internet Engineering Task Force (IETF) to support secure exchange of packets at the IP layer for Virtual Private Networks.
Ipconfig	Ipconfig is a utility which return the IP configuration settings of a machine.
IPNG	IP Next Generation - see IPV6.
IPX	IPX is a LAN network protocol developed by Novell.
ISO/OSI network architecture model	The ISO/OSI network architecture model was originally to define a system of layers describing how data is transmitted over a computer network.
JPG (Joint Photographic Experts Group)	JPG is a lossy compressed bitmap graphics format used when photographs are included on web pages. Because it is a compressed format it reduces download time.
Layer 2 Tunnelling Protocol (L2TP)	Layer 2 Forwarding (L2F) is a tunnelling protocol which authenticates the user and checks that they are connecting to the correct server.
LIFO	Last in first out queue structure.
Link loader	Part of a compiler that links the object code with source code during compilation.
Linux	Linux is an Open Source operating system originally written by Linus Torvalds as a replacement for Unix. Linux is the operating system of choice for many servers on the Internet.
Listserver	A Listserver is an application which is often supplied with a Mail server which enables users to form a virtual community where any message sent to the listserver is emailed to every other member of that list.
Loopback	A loopback address is an IP address which is equivalent to the host machine itself. The loopback address is normally 127.0.0.0.
Lower CASE tools	Collections of programming tools that deal with the implementation, testing and maintenance phases of software development.
Macro generators	Assembly language that translated a single line of code into multiple lines of machine code.
Malware	Software which damages a computer in some way. Malware may be a virus, worm or trojan, but can also be software which performs data-mining on behalf of a advertising organisation.
Metadata	Metadata is data which describes the content of a web

	page rather than the data itself. Metadata tags appear in the Header section of a web page to describe its content.
Microsoft Point to Point Encryption (MPPE)	Microsoft Point to Point Encryption (MPPE) is an encryption system used by the PPP protocol to ensure that passwords are secure when using remote access.
Module testing	Testing of collections of procedures, functions etc., that can individually compiled and executed.
Multipurpose Internet Mail Extensions (MIME)	Multipurpose Internet Mail Extensions (MIME) is an encoding system which extends the email format allowing HTML email and attachments.
Nameserver	A nameserver is a host which performs the process of mapping domain names onto their corresponding IP address. This service is called the Domain Name Service (DNS).
NetBEUI	NetBEUI is a LAN networking protocol developed by Microsoft.
Network Address Translation (NAT)	A LAN can be set up using a set of private IP addresses and a proxy server which translates requests from these addresses into a request of its own. This means that only one public IP address is presented to the outside world.
Network Interface Card (NIC)	A Network Interface Card (NIC) is an interface fitted inside a personal computer or network terminal which allows it to communicate with other machines over a network. The card technology will vary according to the network used, but every card on a network must have some way of uniquely identifying itself and some means of converting the signals from the computer to a form which can be transmitted over the connection.
Octet	An octet is an 8 bit binary code. An IP address is made up of four octets separated by periods. E.g. 192.1.68.0.1 equivalent to 11000000.10101000.00000000.00000001.
Operational requirements document	A document describing what a system must be able to do in order for it to meet user requirements.
Packet Internet Groper (PING)	If followed by an IP address or domain name of a host, the PING command will send an ICMP ECHO_REQUEST packet to that host and return details of the time it took to receive an ICMP Echo_REPLY packet. PING will also inform the user if no reply has been received. PING is a useful network diagnostic tool.
Parallel conversion	An implementation phase where the old software system is run in parallel with the new software system.
Persistent TCP Connection	A Persistent TCP Connection enables an HTTP transfer to last longer than a single file transfer, making retrieval of web pages more efficient.
Phased conversion	Similar to parallel conversion but the conversion is done over a larger time scale using smaller parts of the program at a time.
Piconet	A piconet is a Wireless Personal Area Network (WPAN) network made up of up to 10 Bluetooth devices.
Pilot conversion	This is where portions of the old software system that are known to work are tested in the new environment. This is the safest conversion route.
PING of Death	The PING of Death is an ICMP packet larger than the

	permitted 64Kb which can cause an un-patched recipient to crash.
Plaintext	Plaintext is the name for data which is yet to be encrypted, or has already been decrypted.
Plug-in	A plug-in is a small application which enables a web browser to display non standard content such as audio, video or animation.
Point to Point Protocol (PPP)	The Point to Point Protocol (PPP) is the successor to the Single Line Internet Protocol (SLIP) and is used as the dial-up protocol when accessing the Internet over a telephone line.
Point to Point Tunnelling Protocol (PPTP)	The Point to Point Tunnelling Protocol (PPTP) is a Virtual Private Networking protocol which enables PPP packets to be encapsulated in a TCP/IP data stream.
Polymorphic	Two objects derived from a base class are said to be polymorphic in that they can respond to the same message in different ways.
Port	A port is a communications channel. A range of port number exist which allow different applications on the same computer to utilize network resources without interfering with each other. Port numbers range from 0 to 65535.
Port Scanner	A Port scanner is an application which sequentially probes a host for vulnerable connection ports. Although there are 65535 possible ports, port scanners can probe for known vulnerabilities, particularly if these have been opened by a worm or trojan.
Post Office Protocol (POP3)	The Post Office Protocol (POP3) is used by an email client to retrieve stored email messages from a server.
Postfix notation	Another name for Reverse Polish notation.
Private IP address	A Private IP address is one of a designated block of addresses which are used internally on Local Area Networks. These addresses are not valid addresses on the Internet.
Private Key	A private key is used in asymmetric encryption where there are two keys, one public and one private. Messages encrypted with the private key can be authenticated using the corresponding public key.
Project leader	The person responsible for overseeing a project from start to finish.
Project proposal	A report usually compiled by management of the client organisation outlining the nature of the project in terms of scope and objectives.
Project specification	A document agreed between the systems analyst and the client during the analysis phase, which defines clearly all the functional requirements of the systems to be developed. It forms a binding legal agreement between the developer and the client.
Propagation Delay	The propagation delay of a network is the time it takes for a signal to travel from one end of a link to another.
Protocol	A protocol is a set of rules to enable two parties to communicate.
Proxy	An Proxy server is intermediary program which acts as

	both a server and a client for the purpose of making TCP requests on behalf of other clients.
Proxy Server	A proxy Server is a machine which receives requests for internet pages and forwards them. A proxy server can provide a LAN with a single point of access to the Internet, hiding the IP addresses of the LAN from the outside world.
Pseudocode	A design notation used in the design of computer programs. It consists of a combination of ordinary English and programming language specific words. Statements may be numbered to assist coding.
Public IP Address	A public IP address is one which is available on the Internet and which is mapped to a domain name by the DNS.
Public Key	A public key is used in asymmetric encryption where there are two keys, one public and one private. Messages encrypted with the public key can only be decrypted with the corresponding private key.
Public Switched Telephone Network (PSTN)	The Public Switched Telephone Network (PSTN) is the telephone network used by dial-up modems to access the Internet.
Queue	A dynamic data structure like a double-ended stack.
Rational Unified Process	A development process, initiated by IBM to deliver best proven practices during each stage of a project.
Record	Smallest data type that can be part of a random access file.
Remote Backup	Remote Backup is where data is backed up over an Internet connection.
Request For Comments (RFC)	Request For Comments (RFC)s are descriptions of standards published by the Internet Architecture Board (IAB) Each RFC is allocated a number and deals with a specific topic.
Reverse engineering	Production of analysis and design diagrams directly from program source code.
Reverse Polish	Notation where operand comes after the operators. For example $X + Y$ becomes $X Y +$.
RJ45	An RJ45 connector is the telephone style connector which is used in networks which use UTP cabling.
Route	The route command will return the possible routes for an IP packet available from the host machine.
Router	A router is a device with two network cards which is responsible for routing data from one network to another. A router keeps track of the IP addresses of the computers on the networks connected to its network interface cards in its forwarding table and directs IP packets appropriately. A router functions at the Network layer of the OSI model.
Sandbox	A sandbox is a term for the restricted environment which programs such as Java applets which are downloaded as part of a web page can run in. Typically they will be unable to read from or write to the hard disk.
Scatter net	A Scatter net is a WPAN network made up from several piconets.

Secret Key	A secret key is a special piece of code which is used by an encryption algorithm which combines it with the data to be encrypted (plaintext) to produce cipher text.
Segment	A network cabling segment is the length of cable over which only one Ethernet frame can exist at any one time.
Server side scripts	Server side scripts are programs which run on the server providing the web page and are often used to dynamically display the contents of databases or other structured information.
Simple Mail Transfer Protocol (SMTP)	The Simple Mail Transfer Protocol (SMTP) is the standard protocol for transferring electronic mail messages from one server to another. A email client will normally use SMTP to send outgoing mail.
Single Line Internet Protocol (SLIP)	The Single Line Internet Protocol (SLIP) is the original protocol used by dial-up modems. It has been superseded by the Point to Point Protocol (PPP).
Source Address Verification	Source Address Verification is where a router will consult its forwarding table to make sure that the source address of a packet is genuine one, by checking to see if the network which claims to have originated that package is listed as reachable over that interface.
Spam	Spam is unsolicited junk email.
Spoofed IP address	A spoofed IP address or email address is one which fraudulently claims to be from one computer or individual when it actually comes from somewhere quite different. Spoofed addresses are often used in spam email to hide the sender. Spoofed IP addresses are often used in Denial of Service attacks in order to direct ICMP ECHO _REPLY packets to a target machine instead of the one from where the request originated.
Spyware	Spyware is a term for software which attempts to monitor a user's web activity in order to transmit this information or advertisers or other third parties.
Stack	A dynamic data structure much used by software applications and the computer for storing temporary data. Only access is via the top of the stack.
Stack overflow	Situation where a stack becomes full.
Stack pointer	Register that hold the address of the top of a stack.
Stack underflow	Situation where a stack becomes empty.
Standard	In the context of computing, a standard is system of agreements governing how computers and their components interface with each other.
Static Network Infrastructure	Static Network Infrastructure components are those which operate at the physical level of the ISO model such as copper or fibre optic cable and take no active part in the transmission process.
Structure charts	A type of diagram used as a design tool. Modules, sub-programs or individual steps are represented by boxes, linked by lines. Data flow between boxes is shown by labelled arrows.
Stub	A temporary addition to a program used to assist with the testing process.
Stylesheet	A Stylesheet enables the details of how data is to be

	presented in an HTML page to be stored separately from the data itself. This allows global changes to web site styles without changing individual pages.
Sub-class	A class member of an existing class system.
Subnet	A subnet is created when a network is divided up into a number of different logical sub networks, A subdivided network appears as a single entity to the outside world, but internal routers are able to direct packets more efficiently to their appropriate subnets using subnet masks.
Subnet mask	A subnet mask is a four octet binary mask which is used to identify which subnet a packet should be routed to in a network.
Super-class	A super class contains instances of sub-classes. Also called a base class.
Symmetric Encryption	Symmetric Encryption uses a shared secret key to encrypt and decrypt data.
SYN	A SYN packet is a synchronous idle packet sent when a client requests a TCP connection from a host.
SYN/ACK	A SYN/ACK packet is part of the TCP protocol and is the response sent by a server to a SYN packet.
System investigation	This is the post feasibility study phase where a more detailed exploration is undertaken.
Systems analyst	One of the consultants responsible for analysing and determining whether a task is worth pursuing, using a computer. He/she is also responsible for the design of the computer system.
Systems analyst	Usually an experienced programmer, who is responsible for the analysis and design phases of software development. The Systems Analyst, working with the client, develops the project or system specification, on which the design and implementation are based.
Tag	Tags in HTML are used to modify elements on a web page. Tags have a beginning and an end format of the style <> and </>.
Test plan	A plan devised before implementation of software, listing all the tests to be carried out, the test data to be used, and the expected outcomes.
Test-harness	Another name for a driver in the context of software testing.
The Institute of Electronic Electrical Engineers (IEEE)	The IEEE develops standards for computers, data formats and devices. In the context of networking.
Thick Ethernet	Thick Ethernet was an early cabling standard for Ethernet networks running at 10Mbps.
Time To Live (TTL)	The Time To Live(TTL) setting is a parameter which can be used with a PING request to determine how long it takes for a host to respond.
Tracert	The traceroute command enables users to find out what route packets take from one host to another. Traceroute sends PING requests with very small Time To Live (TTL) settings.
Transmission Control Protocol (TCP)	The Transmission Control Protocol (TCP) is part of the TCP/IP suite of protocols and is responsible for the

	reliable end to end transmission of data between two hosts. TCP is also responsible for initiating the connection and for flow control.
Trojan	A trojan is a program which can be run remotely on your computer by a (usually malevolent) third party.
Tunnel	A tunnel is an intermediary program which is acting as a blind relay between two hosts connected using TCP.
Unified Modelling Language	A standard object-oriented diagramming system suitable for CASE tools.
Unshielded Twisted Pair (UTP)	Unshielded Twisted Pair (UTP) cabling is used in 10baseT and 100baseT Ethernet installations. It consists of thin cables twisted together to avoid interference created by electrical induction. UTP cabling is classified according to the data transfer rate it can support and its immunity to interference.
Upper CASE tools	Collections of programming tools that deal with the analysis and design phases of software development.
Usenet	Usenet is the name for the Internet news service where messages can be posted on a news server which then propagates new messages to other news servers around the world. News servers use the Network News Transfer Protocol (NNTP) to transfer messages between one news server and another.
User Datagram Protocol (UDP)	The User Datagram Protocol (UDP) is a protocol similar to TCP but is connectionless and unreliable. No checks are made by the sending station or acknowledgments by the receiving station to confirm that a Datagram has arrived. UDP is used in applications where it is not essential for 100% of all the packets to arrive. This means that it can be used for broadcast or streamed data where some losses are acceptable.
Uuencode	Uuencode is short for Unix to Unix Encoding. This is one of several methods for converting files from Binary to ASCII so that they can be sent across the Internet via e-mail.
V.34	V.34 is an analogue modem standard capable of transmitting data at 33.6Kbps.
V90	V90 is a digital modem standard capable of transmitting data at 56Kbps.
Validation	Validation takes place when data is checked to see if it makes sense. For example are the inputs to a program within the specified range, is the date format correct?
Verification	This is a process that determines if data is correct. For example a name may be input wrongly.
Virtual Private Network (VPN)	Some companies require their employees to travel around the country, but still need to give them secure access to the company network. A Virtual Private Network (VPN) provides this facility enabling users to connect to the company network through the Internet, thus avoiding expensive dedicated telephone lines or call charges. VPN software is also used to secure Wireless Local Area Networks.
Virtual Private Networking (VPN)	A Virtual Private Network (VPN) uses encryption to

	provide the facility to allow users to connect to a private network through the Internet, avoiding expensive dedicated telephone lines or call charges. VPN software is also used to secure Wireless Local Area Networks.
Virus	A virus is a malicious program which can damage the computer it is running on. Viruses will often attempt to propagate themselves by email.
Voice over IP (VoIP)	Voice over IP (VoIP) is a technology which uses the Internet Protocol to route telephone conversations in the same way as conventional network traffic. This means that network cabling is used for both data and voice, and the cost of telephone calls is considerably reduced.
Webcam	A webcam is a simple video camera which can be used to set up a video telephone call over an Internet connection.
What You See Is What You Get (WYSIWYG)	What You See Is What You Get (WYSIWYG) refers to the fact that what you see on the screen when using a word processor or other application is what appears on the page when it is printed. Whereas we take this for granted with modern applications, it was not always the case, particularly where special codes or tags had to be used to create particular effects.
White box testing	A phase in testing where focus is on the structure of the code, rather than its function.
Window	In the context of the TCP protocol a window is a time slice within which packets are transmitted. If a packet does not arrive within its transmission window then TCP will request it again.
Wired Equivalent Privacy (WEP)	This is an encryption system supplied as part of the IEEE802.11b wireless networking standard, which although providing encryption, has been criticised because of the ease with which it can be cracked.
Worm	A worm is a piece of code which is capable of independent execution and propagation. Worms can infect a host without any activity on the part of the user other than connecting to the Internet.