

# Glossary

**Acceptable Use Policy (AUP):** An Acceptable Use Policy comprises a set of rules applied by the owner/manager of a network, website or large computer system that defines the ways in which the network, site or system may be used.

**Algorithm:** An unambiguous set of rules or a precise step-by-step guide to solve a problem or achieve a particular objective.

**Command:** An instruction for the computer to execute, written in a particular programming language.

**Computational thinking:** Thinking about systems or problems in a way that allows computer systems to be used to model or solve these.

**Computer networks:** The computers and the connecting hardware (wifi access points, cables, fibres, switches and routers) that make it possible to transfer data using an agreed method ('protocol').

**Creative Commons:** A licensing scheme where the creator of an original work allows others to use it without seeking further permission, subject to a number of agreed conditions: [www.creativecommons.org](http://www.creativecommons.org).

**Data:** A structured set of numbers, possibly representing digitised text, images, sound or video, which can be processed or transmitted by a computer, also used for numerical (quantitative) information.

**Debug:** To fix the errors in a program.

**Decomposing:** The process through which problems or systems are broken down into their component parts, each of which may then be considered separately.

**Domain Name Service (DNS):** The distributed automatic system that converts domain names into the IP addresses which are used for routing packets via the internet.

**Encrypt:** To securely encode information so that it can only be read by those knowing both the system used and a secret, private key.

**E-safety:** Used to describe behaviours and policies intended to minimise the risks to a user of using digital technology, particularly the internet.

**Generalisation:** A computational thinking process in which general solutions or models are preferred to or derived from particular cases.

**Hardware:** The physical systems and components of digital devices; see also software.

**Hypertext mark-up language (HTML):** HTML is the language in which web pages are composed.

**Hypertext transfer protocol (HTTP):** HTTP is the standard protocol for the request and transmission of HTML web pages between browser and web server.

**Input:** Data provided to a computer system, such as via a keyboard, mouse, microphone, camera or physical sensors.

**Interface:** The boundary between one system and another – often used to describe how a person interacts with a computer.

**Internet Protocol (IP) addresses:** Numeric addresses uniquely specifying computers directly connected to the internet, also used on private networks to uniquely identify computers on that network.

**Loop:** A block of code repeated automatically under the program's control.

**Network server:** A computer connected to a local area network providing services – such as file storage, printing, authentication, web access or email – automatically to other computers on the network.

**Open source software:** Software in which the source code is made available for others to study, and typically adapt, usually with few if any restrictions.

**Operating system:** The programs on a computer which deal with internal management of memory, input/output, security and so on, such as Windows 8 or iOS.

**Output:** The information produced by a computer system for its user, typically on a screen, through speakers or on a printer, but possibly through the control of motors in physical systems.

**Packets of data:** A small set of numbers that get transmitted together via the internet, typically enough for 1000 or 1500 characters.

**Programmable toys:** Robots designed for children to use, accepting input, storing short sequences of simple instructions and moving according to this stored program.

**Program:** A stored set of instructions encoded in a language understood by the computer that does some form of computation, processing input and/or stored data to generate output.

**Repetition:** Executing a section of computer code a number of times as part of the program.

**Router:** Network hardware which forwards packets of data onwards to the most appropriate hardware to which it is connected.

**Screencast:** A recording of on-screen action that is often accompanied by an audio narration.

**Script:** A computer program typically executed one line at a time through an interpreter, such as the instructions for a Scratch character.

**Selection:** A programming construct in which one section of code or another is executed depending on whether a particular condition is met.

**Sequence:** To place program instructions in order, with each executed one after the other.

**Simulation:** Using a computer to model the state and behaviour of real-world (or imaginary) systems, including physical or social systems; an integral part of most computer games.

**Sprite:** A computer graphics object that can be controlled (programmed) independently of other objects or the background.

**Uniform Resource Locator (URL):** A standard for specifying the location on the internet of certain files.

**Variables:** A way in which computer programs can store, retrieve or change data, such as a score, the time left, or the user's name.

**Web server:** A service running on a computer (or sometimes for the computer itself) that returns HTML data for a web page when it receives an HTTP request via the local network or the internet.

**World Wide Web:** A service provided by computers connected to the internet (web servers), in which pages of hypertext (web pages) are transmitted to users.