Ohio's Computer Science Standards: Glossary

This glossary includes definitions of terms used in the Ohio Learning Standards for Computer Science.[1]

Glossary Term	Definition
Algorithm	A step-by-step process to complete a task (K-12 Computer Science Framework, 2016). Note: This definition differs from the one used in math.
Algorithmic Thinking	A way of getting to a solution through the clear definition of the steps needed ("Algorithmic Thinking," n.d.).
Computing	Any goal-oriented activity requiring, benefiting from or creating algorithmic processes (Massachusetts Digital Literacy and Computer Science Standards [MDESE], 2016).
Computing System	A collection of one or more computers or computing devices, together with their hardware and software, integrated for the purpose of accomplishing shared tasks. Although a computing system can be limited to a single computer or computing device, it more commonly refers to a collection of multiple connected computers, computing devices, and hardware (K-12 Computer Science Framework, 2016).
Control Structure	**Control:** *(in general)* The power to direct the course of actions. *(In programming)* The use of elements of programming code to direct which actions take place and the order in which they take place (K-12 Computer Science Framework, 2016). **Control Structure:** A programming (code) structure that implements control. Conditionals and loops are examples of control structures (K-12 Computer Science Framework, 2016).
Cybersecurity	The protection against access to, or alteration of, computing resources through the use of technology, processes and training (TechTarget Network, n.d.).
Data	Information that is collected and used for reference or analysis. Data can be digital or nondigital and can be in many forms, including numbers, text, show of hands, images, sounds or video (Computing at School [CAS], 2013; Tech Terms Computer Dictionary, n.d.).
Data Representation	The way information is organized for interpretation and communication. It is the format used to receive, process, represent, store, transform and transmit data, such as number, text, graphics and sound.
Device	A unit of physical hardware that provides one or more computing functions within a computing system. It can provide input to the computer, accept output, or both (Techopedia, n.d.).

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[1] The K-12 Computer Science Framework (2016) also provides a glossary of computer science terms at https://k12cs.org/glossary/.

Glossary Term	Definition
Hardware	The physical components that make up a computing system, computer or computing device (MDESE, 2016).
Inference	A conclusion reached on the basis of evidence and reasoning (Oxford Dictionaries, n.d.).
Modeling	**Model:** A representation of some part of a problem or a system (MDESE, 2016). Note: This definition differs from that used in science. **Modeling**: The creation or use of a computer model.
Modularity	The characteristic of a software/web application that has been divided into smaller modules. An application might have several procedures that are called from inside its main procedure. Existing procedures could be reused by recombining them in a new application (Techopedia, n.d.).
Network	A group of computing devices (for example, personal computers, phones, servers, switches and routers) connected by cables or wireless media for the exchange of information and resources (K-12 Computer Science Framework, 2016).
Program	**Program (n):** A set of instructions that the computer executes to achieve a particular objective (MDESE, 2016). **Program (v):** To produce a program by programming (K-12 Computer Science Framework, 2016).
Programming	The craft of analyzing problems and designing, writing, testing and maintaining programs to solve them (MDESE, 2016).
Software	Programs that run on a computing system, computer, or other computing device (K-12 Computer Science Framework, 2016).
Storage	**(Place)** A place, usually a device, into which data can be entered, in which the data can be held, and from which the data can be retrieved at a later time (Free Online Dictionary of Computing [FOLDOC], n.d.). **(Process)** A process through which digital data is saved within a data storage device by means of computing technology. Storage is a mechanism that enables a computer to retain data, either temporarily or permanently (Techopedia, n.d.).
Troubleshooting	A systematic approach to problem solving that is often used to find and resolve a problem, error or fault within software or a computing system (Techopedia, n.d.; TechTarget Network, n.d.).

Glossary Term	Definition
Variable	A symbolic name that is used to keep track of a value that can change while a program is running. Variables are not just used for numbers; they can also hold text, including whole sentences (strings) or logical values, such as true or false. A variable has a data type and is associated with a data storage location; its value is normally changed during the course of program execution (CAS, 2013; Techopedia, n.d.). Note: This definition differs from that used in math.
Visualization	Data can be displayed for communication in many ways. People use computers to transform data into new forms (K-12 Computer Science Framework, 2016). Visualization is the representation of an object, situation or set of information as a chart, image or other sensory medium to enhance understanding.

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