

DICTIONARY
OF
**COMPUTER
SCIENCE,
ENGINEERING,
AND TECHNOLOGY**

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class implementation

activate the effectors. *See also* learning classifier system.

class implementation description of the hidden features which are typically methods (describing the functional aspects) and attributes (data). It is the code of the class.

class instance *See* object, instance.

class library a library of reusable classes. These can be organized in one or more class hierarchies.

class member in a class definition the set of attributes and methods declared in the class are members of it. In an extensive view of the term, it is rarely used for indicating the set of the instances of a class.

class method *See* method.

class specialization specialization occurs in a class hierarchy when the classes are related in the type-subtype configuration. The subtype is a specialized form of the parent type in that (a) the subtype offers all the features of the parent and probably more and (b) polymorphism is present which supports dynamic type substitutability.

class tree *See* class hierarchy.

class variable any variable which pertains to the class itself and, hence, to all instances of that class.

clausal form *See* clause.

clause in logic, a disjunction of literals (negated or not) where all the variables are implicitly universally quantified. A generic clause is:

$$P_1 \vee P_2 \vee \dots \vee P_n \vee \neg N_1 \vee \dots \vee \neg N_m$$

where P_i and N_j are literals. *See* Horn clause.

clean cache block a cache block (or "line") where a copy of the information is stored in memory. A clean block can be overwritten with another block without any need to save its state in memory.

cleanroom development a software development method where defect prevention and removal are performed when a software deliverable is being created, before the document is passed to the next step in the software process.

clear (1) to set the value of a storage location to zero (often used in the context of flip-flops or latches).

(2) clearing a bit (register) means writing a zero in a bit (register) location. Opposite of "set".

client synonymous with customer or a computer system or process that requests a service of another computer system or process (e.g., a server). In the client-server model, the client is a process that remotely accesses resources of a server. In the object oriented model, a class is considered a client of another class when it uses the other class features. According to C++ syntax, the clients can be grouped into is-a, has-a (or is-part-of), and use-a (or is-referred-by) relationships.

client-server a common form of distributed system in which software is split between server tasks and client tasks. A client sends requests to a server, according to some protocol, asking for information or action, and the server responds. There may be either one centralized server or several distributed ones. This model allows clients and servers to be placed independently on nodes in a network, possibly on different hardware and operating systems appropriate to their function, e.g., fast server/cheap client.

client-server application a common form of distributed system in which software is split between server tasks and client tasks. A client sends requests to a server, according to some protocol, asking for information or action, and the server responds. There may be either one centralized server or several distributed ones. This model allows clients and servers to be placed independently on nodes in a network, possibly on different hardware and operating systems appropriate to their function, e.g., fast server/cheap client.