

Object-oriented language—An object-oriented language uses classes and objects. Classes are similar to blue prints. A class describes what an object can contain, including properties/variables and functions/methods. An object is an instance of a class (like a building that has been created from a blueprint). Object-oriented languages provide polymorphism, encapsulation, and inheritance. Objects are naturally encapsulated by containing all related functions/methods and properties/variables within the object itself. Polymorphism allows duplicate method/function names within object-oriented objects. However, the “signature” must be different. The “signature” is the combination of the types of variables (numbers and characters) passed into the method/function and the type of information passed out of a method/function. For example, several add methods could be created—one that only accepts integers (whole numbers), one that only accepts floating point numbers (numbers with decimals), and one that accepts a combination. The program will determine which method/function to call by what has been passed into the method/function. Inheritance in object-oriented programming allows an object to inherit properties/variables and functions/methods from another object. The object can also override those items inherited. This is similar to a child inheriting characteristics from the parents. Object-oriented languages can also be event-driven. An event-driven program will “sleep” until an event occurs. This is similar to an ATM machine program waiting for a user to input an ATM card.

PHP is an **open source** language. As such, each version of the language is created using input from the individuals who use it—the programmers themselves. This allows the language, over time, to evolve and float into the direction that is driven by the users. From its first release in 1995 as a Personal Home Page Tool (PHP) by Rasmus Lerdorf, the versions have been released on the Internet with forums to provide users the ability to make suggestions and even provide code changes and additions. Today www.php.net is the official PHP web site.

Open source language—An open source programming language is developed by a community of interested parties. The community accepts input from fellow programmers for suggested upgrades and corrections. Several members of the community work together to present proposals and to make changes to the language. Open source languages are “free.” A non-open source language (such as Microsoft C#) is created and updated by a company or major organization. Non-open source languages are not usually “free.”