

# **CLASSES AND OBJECTS**

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We are just about to start creating/writing our first objects! But first, we need to cover just a few bits of theory, so that we can be sure your feet will hit the ground running ... when we actually write some code.

## PHP objects - some nerd details:

Objects (in object-oriented PHP) are just like the bricks used to build a building:

Objects are the building blocks of object-oriented PHP projects.

### So what are objects?

In a nutshell: an object is just PHP code wrapped up in package. Objects sort of look like functions (in code,) but are a lot more powerful. More on that later.

... PHP scripts built with object oriented PHP, are just a bunch of objects that work together to make the whole system. An analogy could be a restaurant (the main script,) that has a bunch of employees (objects,) working together at the restaurant, where each employee (object) takes care his or her job.

Contrast this to classic PHP, where you would have a bunch of functions, variables and other code floating around willy-nilly. OO PHP is about creating modular code that is contained in virtual containers called: objects.

... I'm repeating myself a little, but I want to drive the point home.

### **Objects: Functions on steroids:**

One way I describe objects (to help people understanding what they are) is to call them 'functions on steroids'.

In the strict nerd sense, this is not exactly true. But when you look at actual PHP code, PHP objects kind of look like functions because PHP objects will have many of the same sort of things in them ... things like:

- 1. variables.
- 2. conditionals
- 3. functions

That said, PHP objects have all kinds of extra capability that functions do not have. More on that later.

## WHAT IS A 'CLASS'?

Before you can build an object in PHP, you need to create a blueprint for the object ... an outline, a template.

A template (for an object) is called a 'class'.

### More on classes:

Classes are the blueprints for objects in PHP. Actually, classes are used in every OO programming language ever invented! They are one of the fundamental constructs in object-oriented programming.

## How objects are created:

- 1. You create a class that 'describes' an object. Much in the same way a blueprint 'describes' a building. Instead of room dimensions etc ... PHP classes / blueprints details a bunch of things about an object:
  - a. Variables it contains.
  - b. Functions it contains yep, classes typically have functions in them.
  - c. Objects are much more powerful and complex when compared to functions. As such, there are many other special things that can be found in classes, which are unique to classes. Again, more on that later.
- 2. Once you've defined your class, you are ready to tell the PHP engine to actually create a class from your blueprint. There are special commands (PHP code,) that tell the PHP engine to create an object from the 'blueprint' you described/outlined in a class.
- 3. When the PHP script is run (with the code that instructs PHP to create an object ... based on the class,) PHP actually creates a living, breathing object based on your class.

What I mean by 'creates a living, breathing object, is to mean that the object is actually created in (server) memory.

## What is the best way to learn OOP in PHP?

The solution to understanding OOP is found in actually creating classes and objects, in actual PHP code.

... In the video on building PHP objects (that will be out soon,) we will actually write classes and generate a few PHP objects!

Once we've done that, you will be wondering why you thought this stuff was so hard in the first place!

### **Conclusion:**

This stuff may be confusing you now but that's normal for anyone new to object oriented programming. So worry not young PHP nerd, this will all clear up quickly!

In the meantime if you have any comments or questions, please post them on my blog at <u>www.killerphp.com</u> or email me at stefan@killersites.com.

Thanks for reading,

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