

Diploma in Web Development - Part II



PHP Development - Week 1
Object-Oriented PHP

Presented by:
Julian Quirke
Web Development Educator



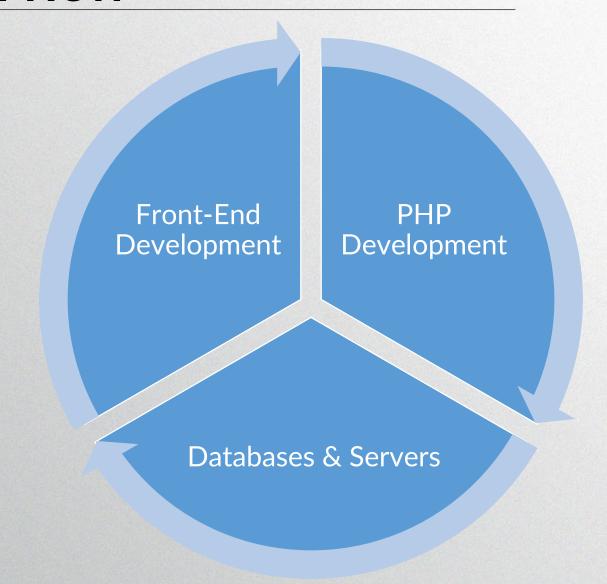
Course Overview



Welcome New Students!

Course Overview





Course Overview

PHP Development

Object-Oriented PHP

- Introduction to PHP
 - > PHP Class Overview
 - ➤ Magic Methods

Practical:

> Shawpify: PHP Structures for

Website Template



Cookies & PHP Sessions

- 2 ➤ What is a Cookie?
 - ➤ Creating User Sessions
 - > PHP Sessions Demo

Practical:

➤ Shawpify: Creating a User Session



s shawa

Error Handling & Advanced Development

- 3 ➤ Member Visibility
 - ➤ Abstract Classes & Interfaces
 - > Error Handling in PHP

Practical:

> Shawpify: Login Functionality



PHP & Security

- 4 ➤ Encrypted Data & HTTPS
 - ➤ Data Validation with Hashing
 - ➤ Storing Passwords Securely

Practical:

➤ Shawpify: User Login (I)



Let's Begin!



Object-Oriented PHP



PHP HyperText Preprocessor

Object-Oriented PHP



PHP HyperText Preprocessor

is an open-source general-purpose scripting language that is especially suited for web development

PHP can be embedded directly into HTML

shawacademy

Object-Oriented PHP

Generates HTML code

Embedded into HTML

Executes on the Web Server



Object-Oriented PHP



PHP Demo



PHP Class Overview



Class



Class

is a template from which an object instance can be created

Creating a Class

- ➤ Use the "class" keyword
- ➤ Naming classes in PHP:➤ MyFirstClass
- ➤ Note: Classes must be declared before an object can be instantiated

```
class MyFirstClass {
}
```

Creating Methods & Properties

```
class MyFirstClass {
    $myProperty = "a property";
    function myFunction() {
        echo "this is a class method";
```

(Also known as members)



Instantiating & Using an Object

- ➤ Use the "new" keyword
- ➤ Call Properties & Methods of instances with the "->"
- ➤ Skip the properties' "\$" symbol!
- Calling class methods ("::") is Bruce Lee stuff (we'll see later!)

```
$myInstance = new MyFirstClass();
echo $myInstance->myProperty; //a property
$myInstance->myFunction(); //call to instance method
```

operator

Creating a Child Class

➤ Use the "extends" keyword

➤ All public & protected methods & properties from the parents can be accessed from the child

```
class MySecondClass extends MyFirstClass {
}

$myInstance = new MySecondClass();
echo $myInstance->myProperty; //a property
$myInstance->myFunction(); //call to instance method
```





PHP
Demo(II)



Magic Methods



Magic Methods

in PHP are methods which have additional functionality automatically built into the PHP programming language

shawacademy

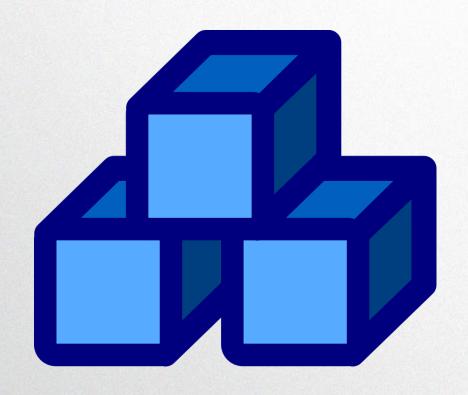
Magic Methods

- Special method names that have "magical" functionality
- There are exactly 15 magic methods in PHP
- ➤ Denoted by preceeding "__" i.e. two underscores
 - ➤ Only use this naming convention if using a predefined magic method



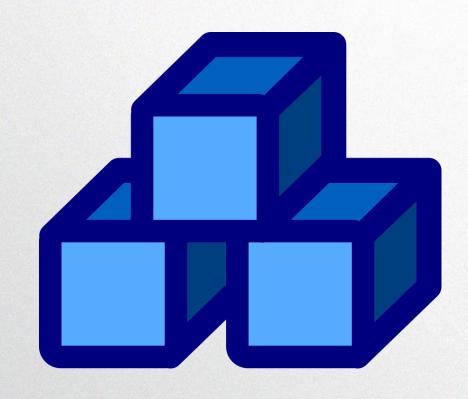
"__construct()"

- ➤Invoked when an object instance is created
- > Allows us to initialize in a special way
- We can add our own construct method to our classes
- Child classes should run their parent construct methods



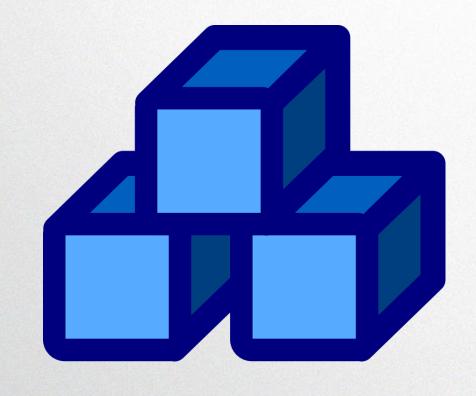
"__get()"

- Invoked when the value of an inaccessible property is accessed
- ➤ Allows us to control how our object's assets are seen
- ➤ Allows us to show otherwise protected information via property access
- Can be used to generate php errors of improper use of the object (if we wish)



"__set()"

- ➤ Invoked when an inaccessible property is assigned to a new value
- ➤ Allows us to control how properties are changed outside the class
- ➤ Can be used to generate php errors of improper use of the object (if we wish)



Demo

Next Week



PHP Development Semester

- > The next session is "Cookies & PHP Sessions"
 - What is a Cookie?
 - Creating User Sessions
 - PHP Sessions Demo



- Recordings are available within 24 hours after the live webinar
 - **➢** Go to <u>www.shawacademy.com</u> and then the Top Right Corner − Members Area

Next Lesson is

Cookies & PHP Sessions

- ➤ Understand the purpose and makeup of browser cookies.
- ➤ You will learn how to create a memorable interaction between a user and a web application using sessions.

- www.shawacademy.com
- www.facebook.com/shawacademy
- www.twitter.com/shawacademy
- support@shawacademy.com