

What's New in PHP 5

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This Talk

- 8:30 AM - 9:30 AM
- Can't cover everything in one hour
- Q&A is important

This Talk

- Object-Oriented Programming (OOP)
- XML (SimpleXML)
- SQLite

Object-Oriented Programming

OOP

- PHP 4
- Visibility
- Magic Methods
- Static Properties
- Backwards Compatibility

OOP: PHP 4

- Basic Syntax Only
 - `$obj->myProperty`
 - `$obj->myMethod()`
- What's Missing?
 - Everything

OOP: PHP 4

- PHP 4 uses a few OOP vocab words:
 - class, object, method, property, instantiation, inheritance
- Not a bad introduction
- But doesn't answer "Why OOP?"

OOP: Visibility

- One of the most important new features
- Lets you control your API

```
<?php  
  
class Item  
{  
    var $price;  
  
    function Item($item)  
    {  
        $this->price = $this->getPrice($item);  
    }  
  
    function buy() { /* ... */ }  
  
    function getPrice($item) { /* ... */ }  
}  
  
?>
```

OOP: Visibility

- \$price cannot be made off-limits:
 - \$obj = new Item('shoes');
 - \$obj->price = 0;
 - \$obj->buy();
- In PHP 5, you can hide properties and methods

```
<?php  
  
class Item  
{  
    private $price;  
  
    public function __construct($item)  
    {  
        $this->price = $this->getPrice($item);  
    }  
  
    public function buy() { /* ... */ }  
  
    private function getPrice($item) { /* ... */ }  
}  
  
?>
```

OOP: Visibility

- public
- private
- protected
 - same as private, but child classes have access

OOP: Magic Methods

- `__toString()`
- `__call()`
- `__get()`
- `__set()`

OOP: `__toString()`

- Lets you use an object as a string
- `echo $myObject;`
- What should this output?

```
<?php

class Person
{
    public $name;

    function __toString()
    {
        return $this->name;
    }
}

$myPerson = new Person;
$myPerson->name = 'Chris Shiflett';

echo $myPerson;
/* Chris Shiflett */

?>
```

OOOP: `__call()`

- Lets you create virtual methods
- Handles calls to non-existent methods
- `$myObject->asdf();`

```
<?php

class MyClass
{
    public function __call($method, $arguments)
    {
        echo "$method() does not exist.";
    }
}

$myObject = new myClass;

$myObject->asdf();

?>
```

OOP: `__get()`

- Lets you create virtual properties
- Handles reading non-existent properties
- `echo $myObject->asdf;`

```
<?php  
  
class MyClass  
{  
    public function __get($property)  
    {  
        return 'PHP';  
    }  
}  
  
$myObject = new myClass;  
  
echo $myObject->asdf;  
  
?>
```

OOP: `__set()`

- Lets you create virtual properties
- Handles writing non-existent properties
- `$myObject->asdf = 'PHP';`

```
<?php

class MyClass
{
    public function __set($property, $value)
    {
        echo "$property = $value";
        /* Store in DB? */
    }
}

$myObject = new myClass;

$myObject->asdf = 'PHP';

?>
```

OOP: Static Properties

- Closest PHP has to namespaces
- `ClassName::$propertyName`

```
<?php  
  
class Person  
{  
    static $firstName;  
}  
  
Person::$firstName = 'Chris';  
  
echo Person::$firstName;  
  
?>
```

OOP

- <http://php.net/oop5>

SimpleXML

SimpleXML

- Uses PHP 5 OOP features
- Simplifies XML Reading
- But, you have to know the format

```
<?php

$parsed =
    simplexml_load_file('http://shiflett.org/rss');

echo $parsed->channel->title;
/* Chris Shiflett */

echo $parsed->channel->item[0]->title;
/* PHP News Catchup */

?>
```

SimpleXML

- `$parsed->element`
- `$parsed->element[2]`
- `$parsed->element['attribute']`

SimpleXML

- <http://php.net/simplexml>

SQLite

SQLite

- Buy one (PHP) get one (SQLite) free
 - They're both free
- Uses file for DB
 - No separate process (DB server)
- Supports SQL

```
<?php

$db = sqlite_open('/path/to/db.sqlite');

$sql = "SELECT name, location
        FROM users";

$result = sqlite_query($db, $sql);

while ($row = sqlite_fetch_array($result)) {
    /* $row['name'] and $row['location'] */
}

?>
```

SQLite

- Also supports OOP syntax
- `$db->query($sql);`

```
<?php

$db = sqlite_open('/path/to/db.sqlite');

$sql = "SELECT name, location
        FROM users";

$result = $db->query($sql);

while ($row = $result->fetch()) {
    /* $row['name'] and $row['location'] */
}

?>
```

SQLite

- <http://php.net/sqlite>

More Information

More Information

- Upgrading to PHP 5
by Adam Trachtenberg (O'Reilly)
- My Blog
<http://shiflett.org/>
- My Business
<http://brainbulb.com/>

Thanks for Listening!

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