

On the Origin of Lithium

The framework for people who hate frameworks









I booked this
talk with Hans



Lithium

And now
here we are

In the beginning...

```
<!--sql database select * from table where user='username'-->

<!--ifless $numentries 1-->
Sorry, that record does not exist<p>
<!--endif exit-->

Welcome <!--$user-->!<p>
You have <!--$index:0--> credits left in your account.<p>
```



1995

In the beginning...

```
<?
$name = "bob";
$db = "db";
$result = msql($db,"select * from table where firstname='$name'");
$num = msql_numrows($result);
echo "$num records found!<p>";
$i=0;
while($i<$num);
    echo msql_result($result,$i,"fullname");
    echo "<br>";
    echo msql_result($result,$i,"address");
    echo "<br>";
    $i++;
endwhile;
>
```

PHP 3

1998

In the beginning...

```
require_once 'MDB2.php';
require_once 'DB/Table.php';
require_once 'Guestbook_Table.php';

$dsn = "phptype://username:password@localhost/database";
$conn = MDB2::connect($dsn);

$table = 'GuestBook';
$create = 'safe';
$GuestBook =& new Guestbook_Table($conn, $table, $create);

if ($GuestBook->error) {
    echo "Failure! Try again.";
    print_r($GuestBook->error);
}
```

PEAR

2000

In the beginning...

```
class A {
    function foo() {
        if (isset($this)) {
            echo '$this is defined (' . get_class($this) . ")\n";
        } else {
            echo "\$this is not defined.\n";
        }
    }
}

class B {
    function bar() {
        A::foo();
    }
}
```

PHP 4

2000

In the beginning...

```
class A {  
  
    protected $_foo = 0;  
  
    public static function foo() {  
        self::$_foo++;  
    }  
}
```

PHP 5

2004

In the beginning...

```
class PostsController extends AppController {  
  
    public function index() {  
        $posts = $this->Post->find("all");  
        $this->set(compact('posts'));  
    }  
}
```

CakePHP

2005

In the beginning...

```
class mymoduleActions extends sfActions
{
    public function executeIndex()
    {
        // Retrieving request parameters
        $password      = $this->getRequestParameter('password');

        // Retrieving controller information
        $moduleName     = $this->getModuleName();
        $actionName     = $this->getActionName();

        // Retrieving framework core objects
        $request       = $this->getRequest();
        $userSession   = $this->getUser();
        $response      = $this->getResponse();
```



Symfony

2005

In the beginning...

```
class Blogmodel extends Model {  
  
    var $title  = '';  
    var $content = '';  
    var $date    = '';  
  
    function Blogmodel()  
    {  
        // Call the Model constructor  
        parent::Model();  
    }  
  
    function get_last_ten_entries()  
}
```

Codelgniter

2006

In the beginning...

```
< ?php

class Bootstrap extends Zend_Application_Bootstrap_Bootstrap
{
    protected function _initDoctype()
    {
        $this->bootstrap( 'view' );
        $view = $this->getResource( 'view' );
        $view->doctype( 'XHTML1_STRICT' );
    }

    protected function _initAutoload()
    {
        $autoloader = new Zend_Application_Module_Autoloader
(array(
```



Zend

2007

What have we learned?

- Uniformity: +
- Tight coupling: -
- Lack of extensibility: -

What have we learned?

- People dislike complexity for its own sake
- Things are reactionary (high level)
- A lot of things are superficial (high level)

Ch-Ch-Ch-Changes

- Late Static Binding
- Namespaces
- Closures

Late Static Binding

- ➊ Proper subclassing of static classes... finally
- ➋ Warm, fuzzy feelings of architectural purity
- ➌ Handling state (vs. statelessness)

Namespaces

- Formal, non-hacky way to organize classes
- No_More_Class_Names_That_Go On_For_Days
- New PEAR-inspired naming standard



Standards Adopters

- Agavi
- Symfony
- Doctrine
- PEAR
- Solar
- Zend Framework
- ...

```
vendor\package\Foo = "vendor/package/Foo.php"
```

Closures

```
function Y($F) {  
    return current(array(function($f) { return $f($f); }))->__invoke(function($f) use ($F) {  
        return $F(function($x) use ($f) {  
            return $f($f)->__invoke($x);  
        });  
    });  
}
```