# **PHP 5.4**

Die wichtigsten Neuerungen im Überblick



#### **SHORT ARRAY SYNTAX**

```
a = array('a', 'b', 'c');
a = ['a', 'b', 'c'];
$a = ['one' => 1, 'two' => 2];
```

#### **FUNCTION ARRAY DEREFERENCING**

```
function foo() {
    return array(1, 2, 3);
}
echo foo()[2]; // prints 3
```

# CLASS MEMBER ACCESS ON INSTANTIATION

```
class Foo {
  public function bar() {
    echo 'foobar';
  }
}
(new Foo)->bar(); // foobar
```

//

The best way to understand what traits are and how to use them is to look at them for what they essentially are: language assisted copy and paste.

If you can copy and paste the code from one class to another then you have a candidate for a trait."

Unterschiedlich Klassen implementieren unterschiedliches Verhalten – aber es gibt einige Aspekte, die in praktisch allen Klassen eines Systems implementiert werden sollen.

User

Verhalten: login()

buy()

pay()

Aspekt: logging

Item

order()

ship()

changeColor()

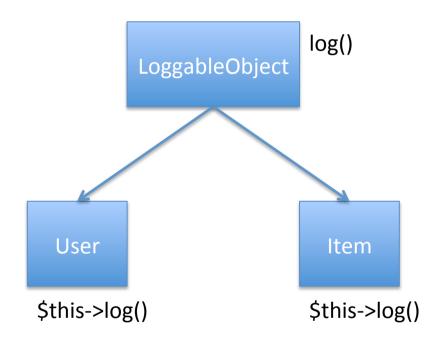
logging

```
class User {
   public function login() {
      //...
      $this->logger->log('login', $user->name, time());
class Item {
   public function ship() {
       //...
       $this->logger->log('shipped', $item->id, time());
```

Was, wenn das *logger* Objekt ab sofort den Zeitstempel als ersten Parameter erwartet?

Wie verhindern wir, dass wir in allen Klassen, die den Logger verwenden, den Code anpassen müssen?

# Variante 1: Gemeinsame Vererbung



```
class LoggableObject {
 public function log(event, identifier, timestamp) {
    $this->logger->log(event, identifier, timestamp);
class User extends LoggableObject {
 public function login() {
    //...
    $this->log('login', $user->name, time());
Class Item extends LoggableObject {
 public function ship() {
    //...
    $this->log('login', $item->id, time());
```

Was, wenn wir einen zweiten Aspekt haben?

User

Verhalten: login()

buy()

pay()

Aspekt: logging

profiling

Item

order()

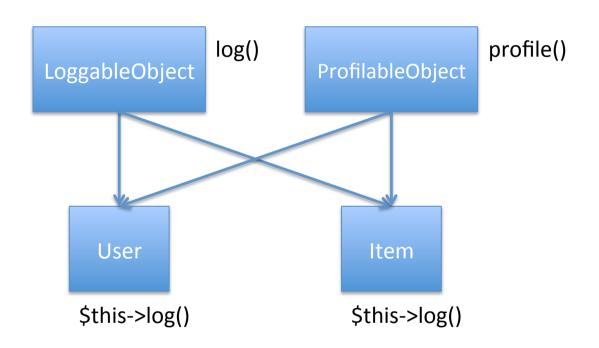
ship()

changeColor()

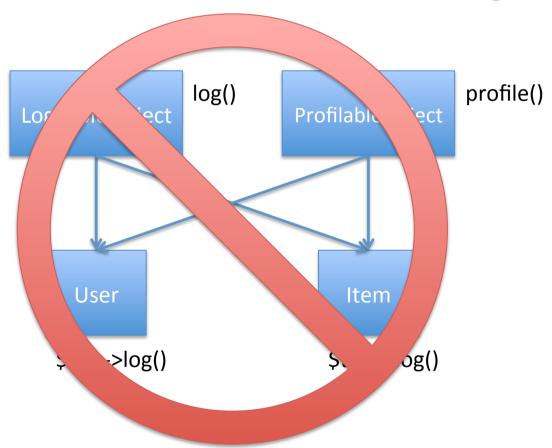
logging

profiling

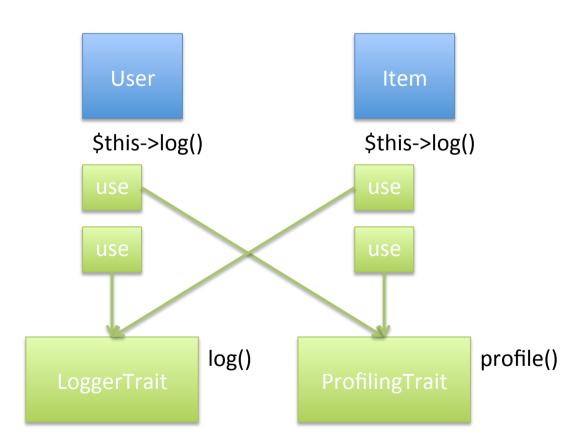
# Variante 1: Mehrfachvererbung



# Variante 1: Mehrfachvererbung



Variante 2: Traits



```
trait Logger {
  public function log(event, identifier, timestamp) {...}
trait Profiler {
  public function profile() {...}
class User {
  use Logger, Profiler;
  public function login() {
   $this->log('login', $user->name, time());
   $this->profile(...);
Class Item {
  use Logger, Profiler;
  public function ship() {
   $this->log('login', $item->id, time());
   $this->profile(...);
```

# Danke. Fragen?

