```
<?php
namespace {
    use SilverStripe\CMS\Model\SiteTree;
    use SilverStripe\ORM\HasManyList;
    class Page extends SiteTree
        private static array $has_many = [
            'Likes' => PageLike::class,
```

```
. . .
                                         SILVERSTRIPE
<?php
  use App\Models\PageLike;
                                          O
  use SilverStripe\CMS\Controllers\ContentControll
                                          and the awesome parts
```





Is it good or even awesome? It shows a strength of Silverstripe - getting custom functionality at a low cost (in terms of lines of code). But as always there are some tradeoffs.

```
. . .
<?php
namespace {
    use App\Models\PageLike;
    use SilverStripe\Control\HTTPResponse:
    use SilverStripe\Control\HTTPRequest;
    use SilverStripe\CMS\Controllers\ContentController;
    class PageController extends ContentController
        private static array $allowed_actions = [
            'likethispage',
        1;
        public function likethispage(HTTPRequest $request): HTTPResponse
            $ip = $request->getIP();
            if (!$this->Likes()->filter('IP', $ip)->exists()) {
                $pageLike = PageLike::create();
                $pageLike->IP = $ip;
                $this->Likes()->add($pageLike);
            $this->redirectBack();
```

```
. .
<?php
namespace App\Models;
use Page:
use SilverStripe\ORM\DataObject:
class PageLike extends DataObject
    private static array $db = [
        'IP' => 'Varchar(45)',
    1;
    private static array $belongs_to = [
        'Page' => Page::class,
    1;
```



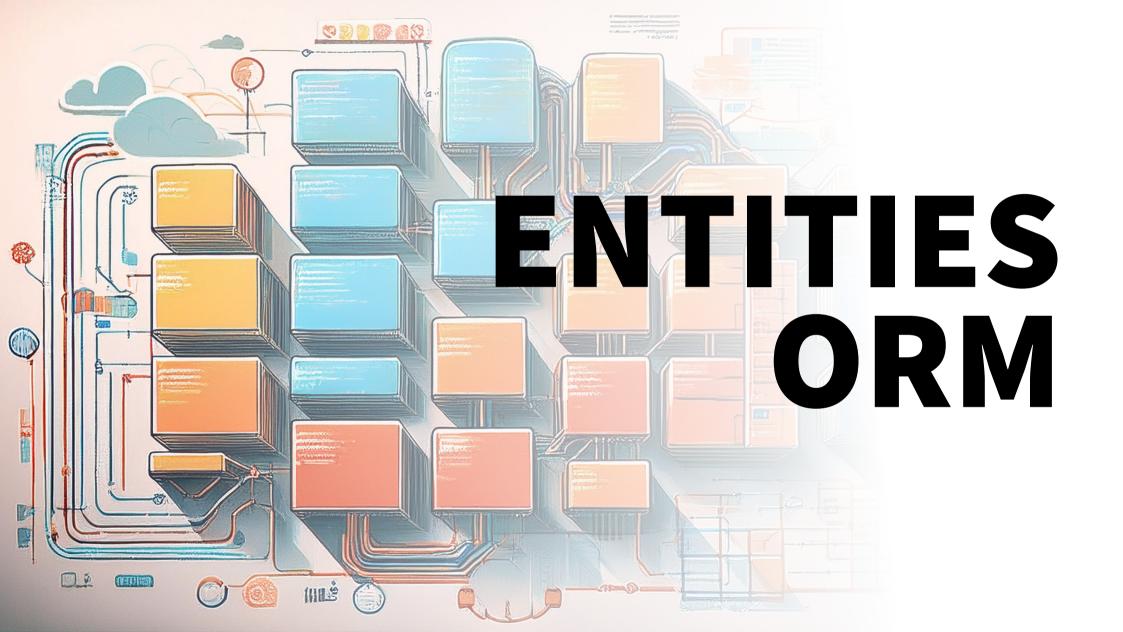


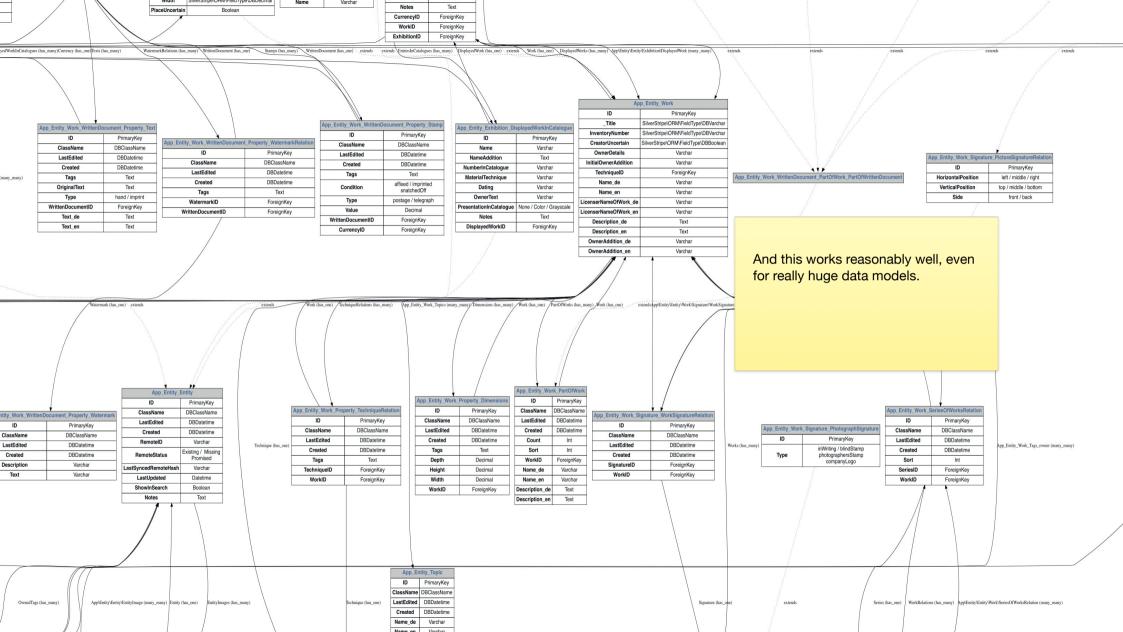
Stephan Bauer

That's me. I'm part of relaxt (https://www.relaxt.at).









\$project->???

There is a certain price to pay, as Silverstripe has a very dynamic approach there is no static type safety, and no auto-completion out of the box.





I sometimes miss the comfort of a Symfony/Doctrine project. But nevertheless this comes a certain cost (in terms of code required for Entities and so on).

\$project-> getDescription():string

getLogo():Image

getName():string

getProperties():array





```
class Project extends \SilverStripe\ORM\DataObject {
        public const DB__NAME = 'Name';
        1 usage
        public const DB__DESCRIPTION = 'Description';
10
        2 usages
11
        public const HAS_MANY__PROPERTIES = 'Properties';
12
        2 usages
13
        public const HAS_ONE__LOGO = 'Logo';
14
        no usages
        private static $has_many = [
15
            self::HAS_MANY__PROPERTIES => Property::class,
16
        ];
18
```

An approach that we are using as a compromise: Define some public constants and use them to access everything. Might be ugly, but it helps with refactoring.



```
];
17
18
        no usages
         private static $db = [
19
20
             self::DB__NAME => 'Varchar',
             self::DB__DESCRIPTION => 'HTMLText',
21
                                                                                 Use them in the static config...
         ];
22
23
        no usages
         private static $hαs_one = [
24
25
             self::HAS_ONE__LOGO => Image::class,
         ];
26
27
        no usages
         private static $owns = [
28
             self::HAS_ONE__LOGO,
29
         ];
30
31
```

no usages

private static \$has_many = [

self::HAS_MANY__PROPERTIES => Property::class,

15

16

```
];
22
23
         no usages
         private static $has_one = [
24
25
             self::HAS_ONE__LOGO => Image::class,
                                                                                     ... and in methods (in the same or
         ];
26
                                                                                     other classes as well).
27
         no usages
         private static $owns = [
28
             self::HAS_ONE__LOGO,
29
         ];
30
31
         no usages
         public function getCountOfProperties(): int{
32
             return $this->{self::HAS_MANY__PROPERTIES}()->count();
33
         }
34
35
36
```

private static \$db = [

self::DB__NAME => 'Varchar',

self::DB__DESCRIPTION => 'HTMLText',

19

20

21

What else are we missing?

Identity Map

Foreign Key Constraints

Unit of Work

Proper use of Transactions

Transactions are used but sparingly throughout the core...





Versioning

Don't get me wrong, Versioning is awesome and it is integrated into the core, but there are some problems:

- * Cleanup of old versions
- * Versioning of relations (there ist the experimental https://github.com/silverstripe/silverstripe-versioned-snapshots)

But those are inherently complex problems, in any framework...





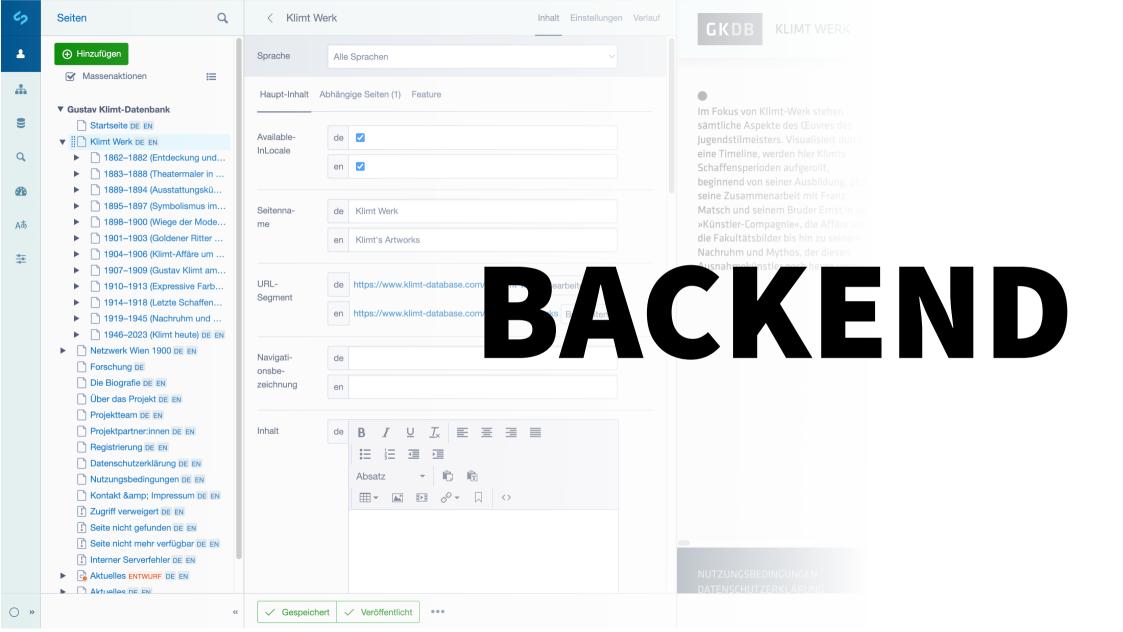
Is it a Page?

Something that bothered me a lot when starting with Silverstripe. Is an Event a subclass of Page, a RealestateObject a subclass of Page, ...?

My lesson learned: Use Composition, create an EventPage that references an Event, create/delete the EventPage on the fly when creating an Event. That seems to be the best of both worlds.







Use (*) in your query as a placeholder for parts of a word.

Sulu CMS

This is a Symfony based CMS, they have a really nice backend: https://sulu.io



+ 1 - - =

Say Hello to Gutenberg, the WordPress WordPress Editor **Gutenberg Editor**

Love it or hate it, from my point of view, inline editing fails for more complex scenarios.

Webpack

Redux

Entwine

Customizing

Babel

GraphQL

React

I am not really into React, so this is very opinionated, but a lot of developers agreed - it is hard work to extend the frontend of the Silverstripe backend (much more difficult than extending the serverside parts:-P)

Schema



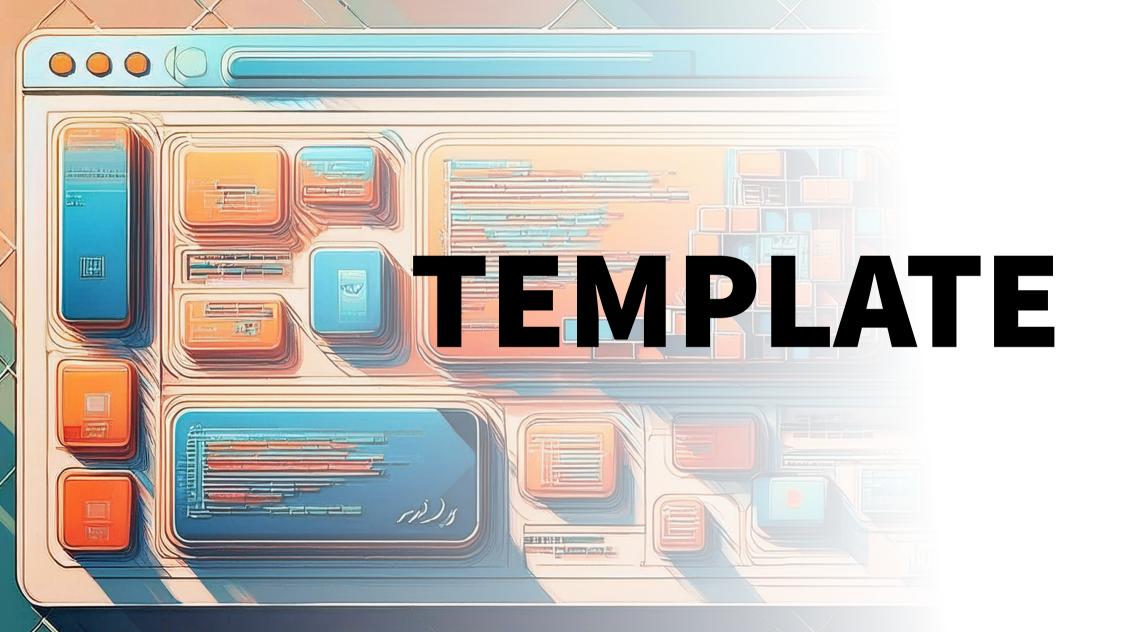


▼ Silverstripe CMS Demo

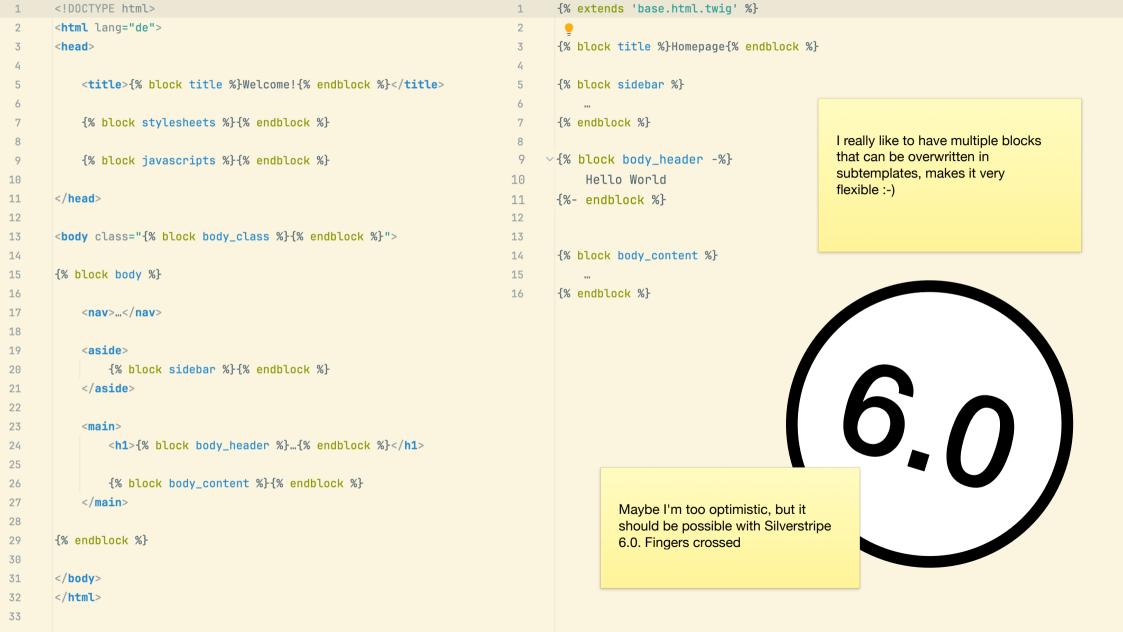
- **Home**
- ► About
- Features
- ▼ ↑ Theme
 - Styles Demo
 - Responsive
 - Customisable MODIFIED
 - Contact
 - Page not found
 - Server error

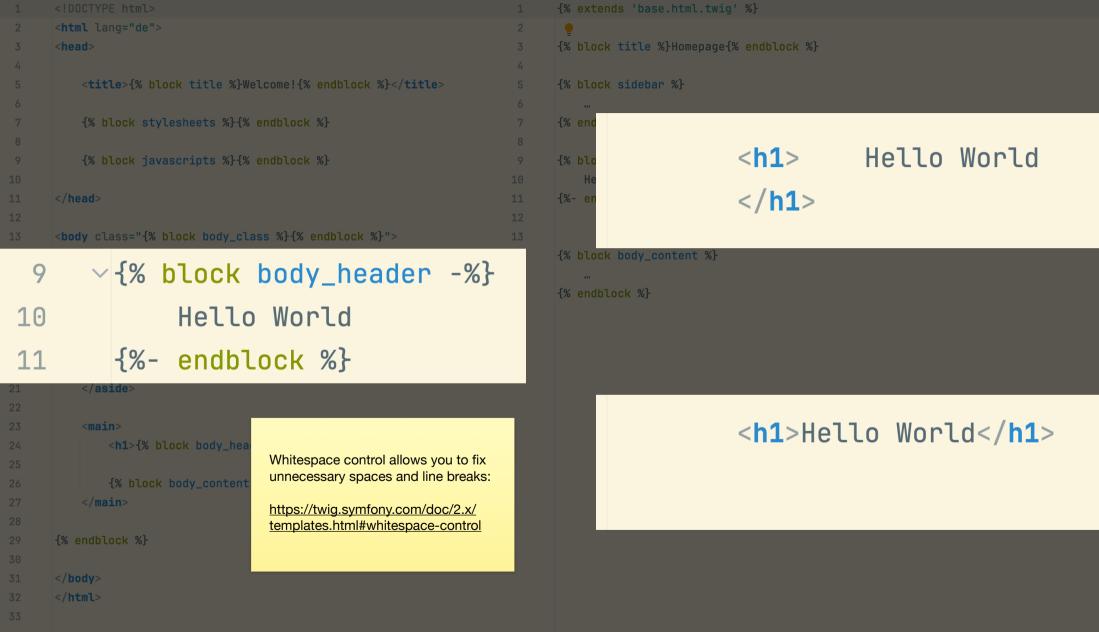
My "favorite" bug in the interface...

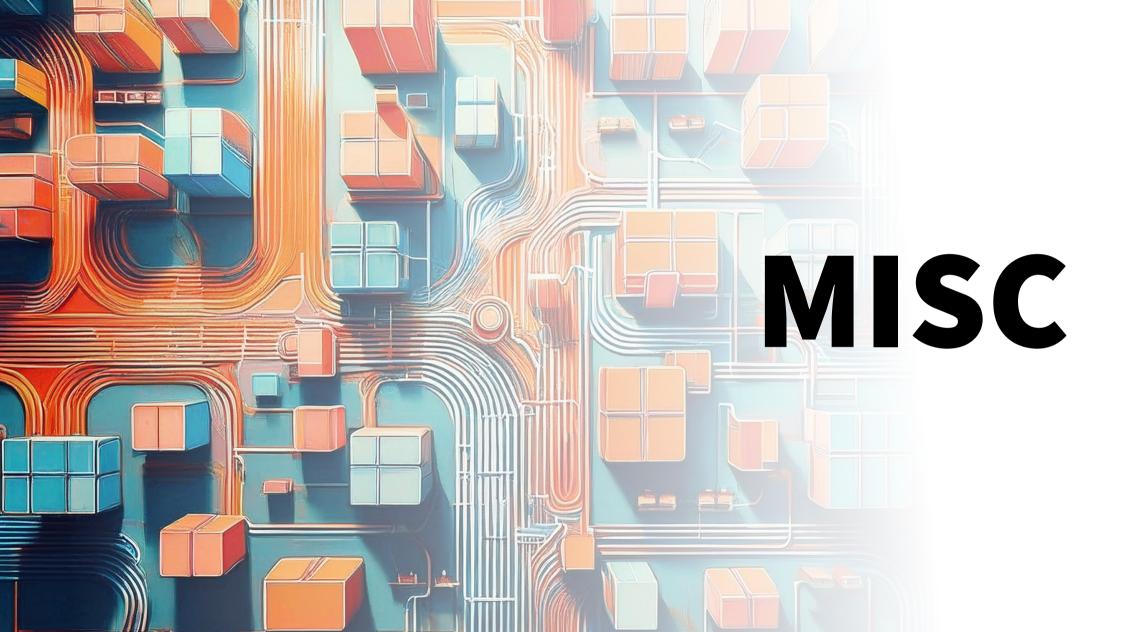




```
<!DOCTYPE html>
      <html lang="de">
      <head>
           <title>{% block title %}Welcome!{% endblock %}</title>
 5
          {% block stylesheets %}{% endblock %}
 8
          {% block javascripts %}{% endblock %}
 9
10
      </head>
11
12
      <body class="{% block body_class %}{% endblock %}">
13
14
      {% block body %}
15
16
                                                                                                                                                 twig
           <nav>...</nav>
17
18
           <aside>
19
              {% block sidebar %}{% endblock %}
20
           </aside>
21
22
           <main>
23
              <h1>{% block body_header %}...{% endblock %}</h1>
24
25
              {% block body_content %}{% endblock %}
26
          </main>
27
28
      {% endblock %}
29
30
      </body>
31
      </html>
32
33
```







Forms

Forms are difficult to style and customize, in any framework I have tried yet. So I guess there isn't much to improve here.





Asset-Management

I think it could work better, especially if you have lots of assets and want to handle storage locations for your users. There are also cases where out customers don't want to expose the original files, just smaller versions - but publishing always happens for original and variants together.





Performance

From our experience this can be a major issue on more complex websites. There is a lot you can do, caching in the template, but there is a certain overhead that is difficult to tackle - the template rendering is not the fastest around, ORM and DataExtensions can cause a certain overhead and so on...



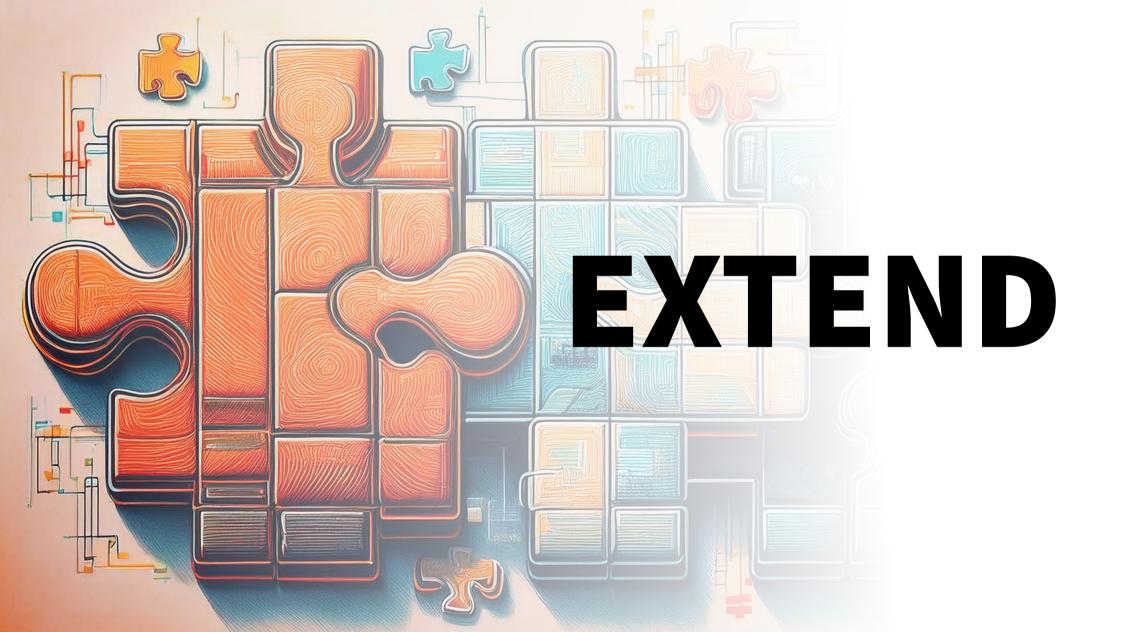


Community

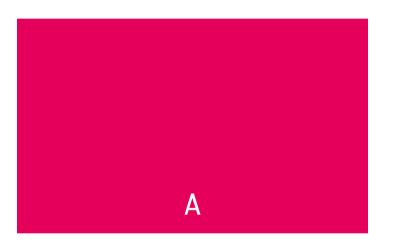
That's a good or even awesome part. I believe what really helps is, that you need to have a certain technological know-how in order to use the CMS as there is no way to do something useful without coding.







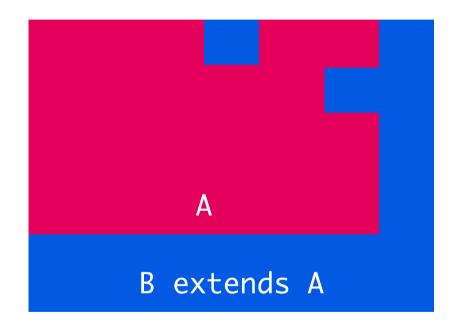
Okay, bear with me. I try to point out why extending Silverstripe works the way it works and why this is well thought (aka awesome).



So this is a class A



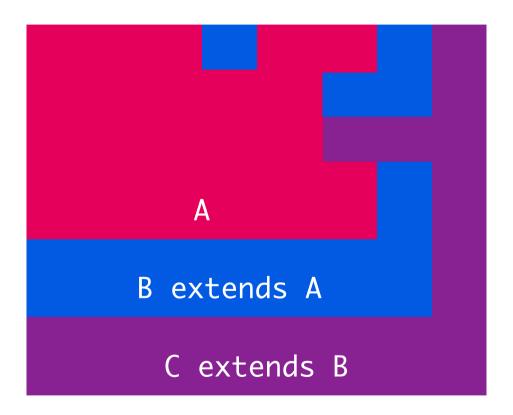




The typical way to add new and modify existing behavior is by subtyping the class.





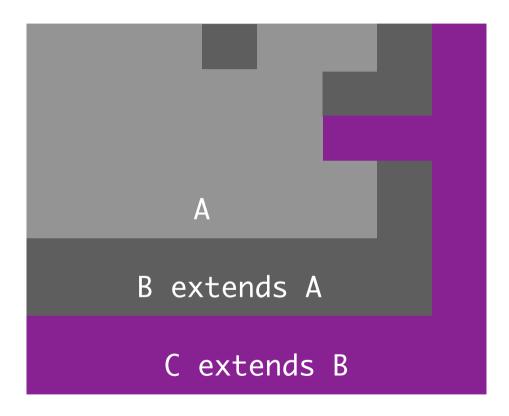


This works reasonably well, even on multiple levels.







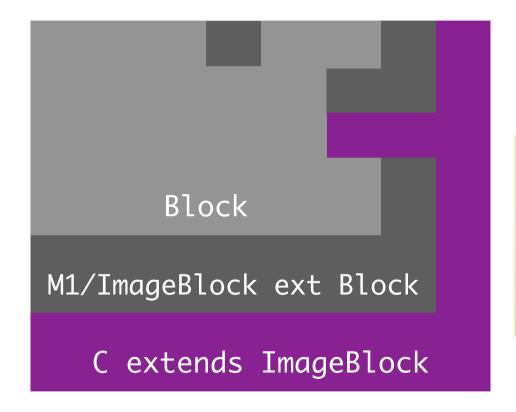


And it even works if the base classes (A, B) are not modifyable by us, but are part of a framework.







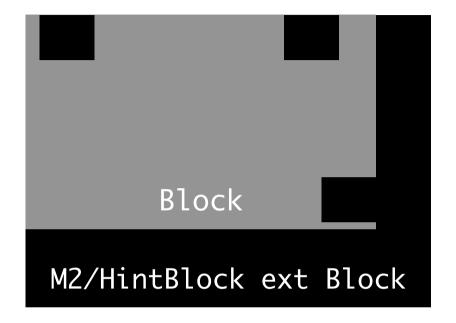


Let's make this example a little bit more real world. Let's assume we have some content Block (inside some core package) and a derived ImageBlock (inside some other package M1) and some custom block C in our app that wants to modify some implementation details,

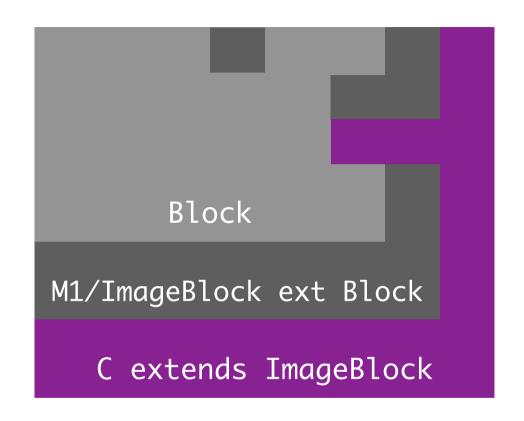






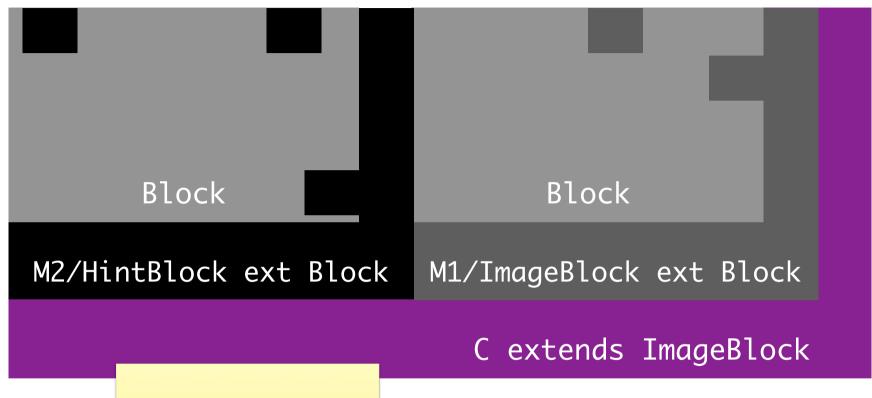


Let's assume that we have another module M2 that proves a HintBlock. And our custom block C wants to be a HintBlock and an ImageBlock...







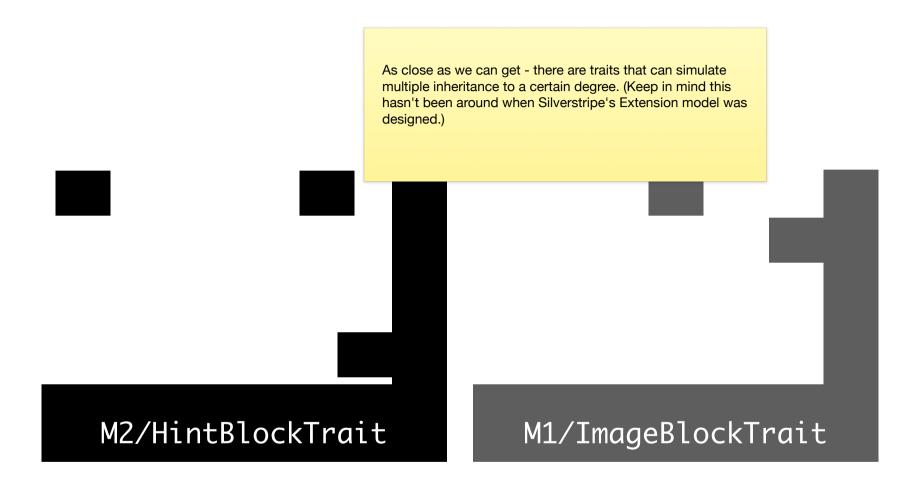


No way, there is no multiple inheritance in PHP, but...



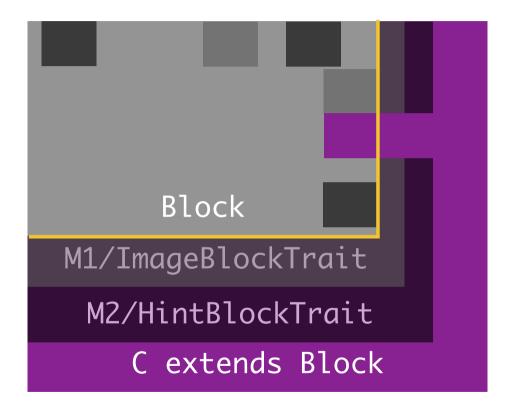










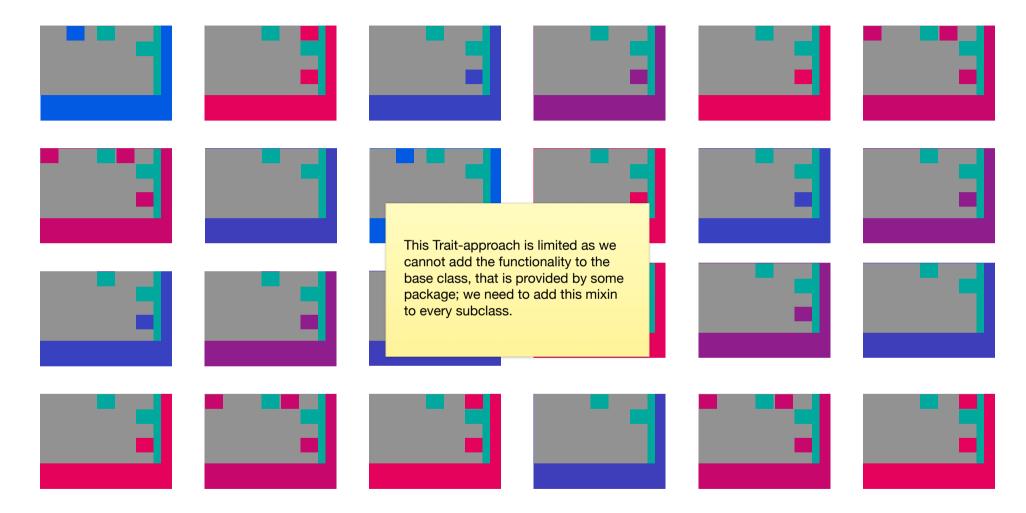


Also keep in mind that the traits are part of C, they can not be used to add behavior to the Block (as we need to modify a class in order to add a Trait)

Typically this approach is called a "mixin" allowing to flexible mix functionalities. Think "composition over inheritance"





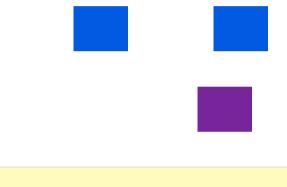








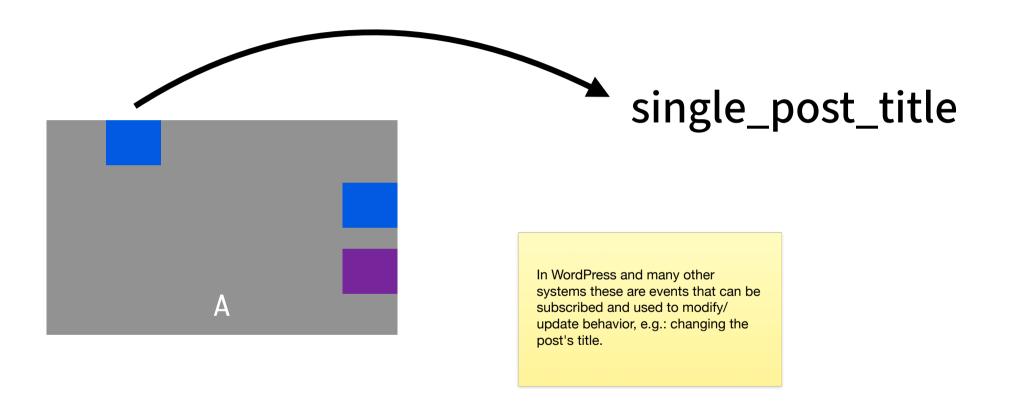




In order to add functionality to a base class, this class needs to be designed in a way that allows us to use composition/configuration to modify it's behavior without actually changing the base class. Graphically speaking, there are some holes in implementation that can be filled by custom implementations.

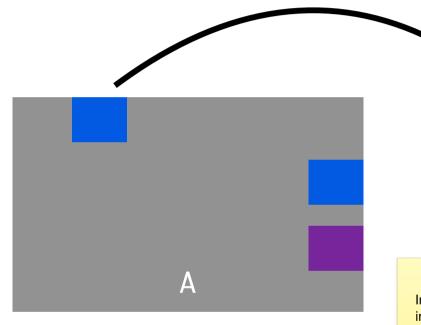












PostTitleDriverInterface#generate

DefaultTitleDriver#generate

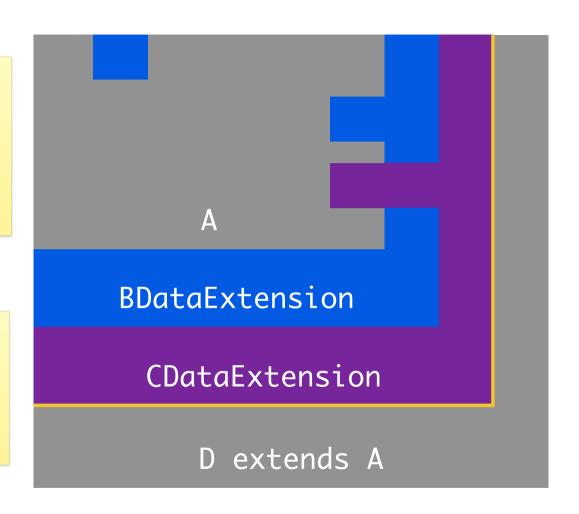
In Symfony we could use drivers that implement a certain functionality and are configured via dependency injection.





This is utilized by Silverstripe as well, the extension points are just a variant of this composition pattern. This allows us to add behavior to a class A even if we don't control the base class (or any subclass).

Where Silverstripe really shines is, that these Extensions also allow to add public methods to the base class, combining advantages of composition and inheritance.









State of Silverstripe Survey

Some random idea. You might know "State of HTML" or "State of CSS" - I think it would be beneficial to get a feeling for how people use Silverstripe and what are the parts where improvements should be made.





```
<?php
namespace {
    use SilverStripe\CMS\Model\SiteTree;
    use SilverStripe\ORM\HasManyList;
    class Page extends SiteTree
        private static array $has_many = [
            'Likes' => PageLike::class,
```

```
. . .
                                         SILVERSTRIPE
<?php
  use App\Models\PageLike;
                                          O
  use SilverStripe\CMS\Controllers\ContentControll
                                          and the awesome parts
```



