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Why keep making the same (mistakes)?

Laura Neto / 28-09-2023

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So, who am I?

Laura Neto

- ➜ .NET Developer @ DEPT Agency 💼
- ➜ Over 4 years of experience
- ➜ Core Collaborators Community Team 👩‍💻
- ➜ Umbraco MVP ⭐

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01

The background 🦖

Once upon a time, there was a “little” agency… ✍️

They had been doing Umbraco websites for a while... ✨

umbraco

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But they were spending way too much time… just to get started! ⏳

- ➔ Error handling
- ➔ Setting up a new .NET project
- ➔ Installing Umbraco
- Building Sitemap.xml
- ➔ Adding default components (Header, Footer, Image, Text)
- ➔ Configuring settings
- ➔ Adding SEO fields to pages
- ➔ Adding basic structured data
- ➔ Adding default document types (Home page, Content Page, …)
- ➔ Set up caching
- ➔ Building Robots.txt
- ➔ AND much more…

And even when they were finished with the website… 😩

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Everyone did things differently.

When there are issues and the main developer is not available… Ups? 💥

Projects copied features from other projects.

(Also, bugs copied from other projects? Who is actually affected? Ups? 💥)

What about SEO?

Ups, forgot? 💥

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But why are we always re-doing everything everytime? 🥱

Someone (maybe, I wasn't actually there)

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So DEPT's Umbraco standard project was born… 🐣

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It wasn’t perfect… But overtime it kept growing and evolving. 🪴

Is there anything perfect, though? 🤔

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02

What is the Umbraco standard? 🛠️

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What is the Umbraco standard? 🛠️

- ➔ Starter kit
- ➔ Development booster
- ➔ Includes all of the boilerplate and basic functionality
- ➔ Let's stop reinventing the wheel!! 💪

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What does it include? 🐣

- Basic types
- Components
- Error handling
- SEO features
- Multilingual support
- Search
- Caching
- Local setup
- Helpful helpers
- Infrastructure
- CI/CD
- Code consistency

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Basic types 📝

- ✓ Basic document and data types
    - ◆ Page types and compositions
    - ◆ Blocks
    - ◆ Settings

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Components 📦

- ✓ Built-in components based on our front-end setup and shelf
- ✓ View Components everywhere!

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Error handling 🤕

✓ Custom 404 and 500 pages

✓ API exception handling

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SEO features 📈

- ✓ Sitemap
- ✓ Robots.txt
- ✓ Basic SEO composition

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Multilingual support 🌍

✓ Hreflang tags

✓ Language switcher

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Search 🔎

✓ Basic search implementation

- ◆ Examine
- ◆ Elastic Search

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Caching

🦾

- ✓ Response caching
- ✓ Cache tag helper
- ✓ Cache headers (CDN)

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Local setup 💻

✓ Local database (file)

✓ uSync Content Edition 🙌

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Helpful helpers ⚒️

- ✓ Helper extensions
- ✓ Tag helpers
- ✓ Services

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Infrastructure 🦾

- ✓ Best practices for running Umbraco in Azure web apps and load balanced environments
- ✓ Terraform Umbraco “standard”

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CI/CD 🤖

- ✓ Azure DevOps build pipeline file
- ✓ SonarCloud for code analysis

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Code consistency✨

✓ .editorconfig

✓ Analyzers

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03

What are the benefits? 🌟

What are the benefits? 🌟

- Consistency ⚖️
- Quality 👌
- Faster onboarding 🚀
- Focus on what really matters 💭
- Feedback loop 🔄
- Proven solutions 🏆

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04

What are the challenges? 🏋️‍♂️

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Time

Internal work is hard to sell…

Feedback loop

“I forgot” or “I didn’t have time”.

Unused code

Updates

No update path…

Lack of documentation

It has been a little forgotten (or under prioritized)...

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What are some cool features we built?

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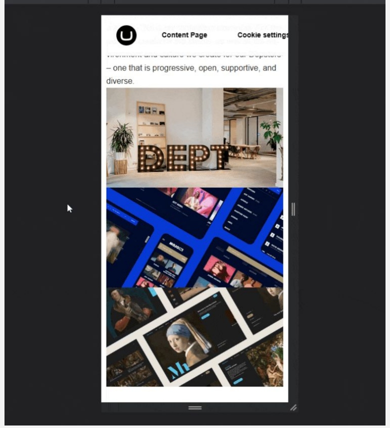
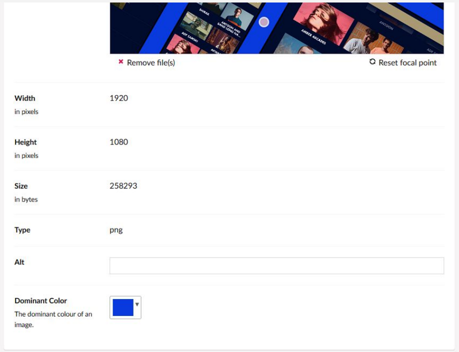
Using source generators…🤖

Source Generators is a C# compiler feature, released in .NET 5, that allows developers to generate new source files while the project is compiling.

For our standard we developed multiple source generators to help us in many ways. You will see some examples in the next slides.





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Height in pixels	1080
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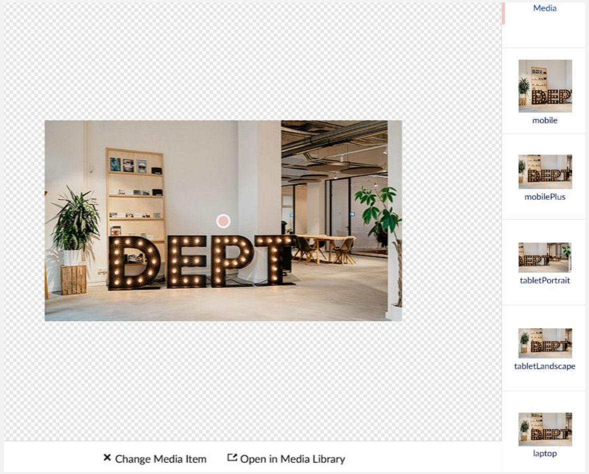
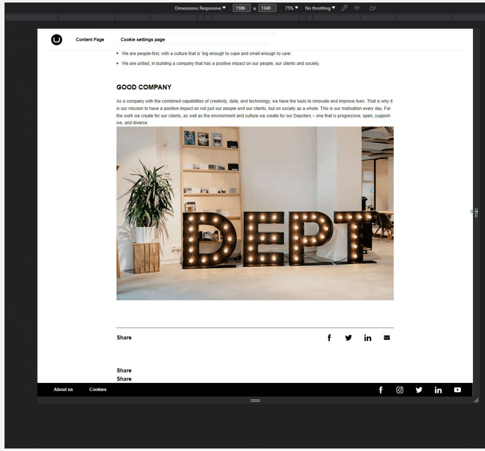
Dominant Color The dominant colour of an image.	🟦





- We are people-first, with a culture that is 'big enough to cope and small enough to care'.
- We are united, in building a company that has a positive impact on our people, our clients and society.

GOOD COMPANY

As a company with the combined capabilities of creativity, data, and technology, we have the tools to innovate and improve lives. That is why it is our mission to have a positive impact on not just our people and our clients, but on society as a whole. This is our motivation every day. For the work we create for our clients, as well as the environment and culture we create for our Depsters – one that is progressive, open, support-ive, and diverse.

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(Built using Source Generators)

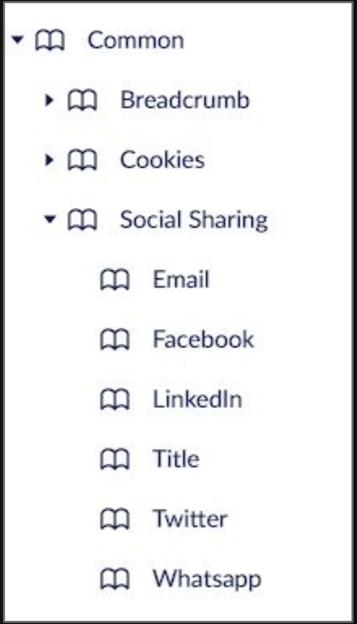
Typed translation keys 🌍

Automatically generates code based on the translation uSync export files.

```
/* Generated code */
public partial class SocialSharingTranslationEntry : TranslationEntry
{
    public SocialSharingTranslationEntry() : base("Common.Social Sharing")
    {
    }

    public readonly TranslationEntry Email = new TranslationEntry("Common.Social Sharing.Email");
    public readonly TranslationEntry Facebook = new TranslationEntry("Common.Social Sharing.Facebook");
    public readonly TranslationEntry Linkedin = new TranslationEntry("Common.Social Sharing.LinkedIn");
    public readonly TranslationEntry Title = new TranslationEntry("Common.Social Sharing.Title");
    public readonly TranslationEntry Twitter = new TranslationEntry("Common.Social Sharing.Twitter");
    public readonly TranslationEntry Whatsapp = new TranslationEntry("Common.Social Sharing.Whatsapp");
}
```

```
<!-- Usage: example using a custom tag helper. -->
<h3 class="social-share__title" asp-translation="@TranslationAliases.Common.SocialSharing.Title"></h3>
```



(Built using Source Generators)

Typed asset paths 📁

Automatically generates constants containing the paths of files, maintaining the file structure, which can be configured through an attribute.

```
[FileAliasesGenerator("../../../../frontend/source/assets/svg", RelativeTo = "../../../../frontend/source",
SearchPattern = "*.svg", Separator = '/')]
public static partial class SvgAliases
{
    // SVG aliases are auto-generated based on the directories specified above.
}
```

```
/* Usage */
var youtubeLogoPath = SvgAliases.Social.Youtube;
```

```
/* Generated code */
public static partial class SvgAliases
{
    public const string Logo = "/assets/svg/logo.svg";
    public static partial class Brand
    {
        public const string Apple = "/assets/svg/brand/apple.svg";
        public const string GooglePlay = "/assets/svg/brand/google-play.svg";
    }

    public static partial class Icons
    {
        public const string ChevronRight = "/assets/svg/icons/chevron-right.svg";
    }

    public static partial class Social
    {
        public const string Email = "/assets/svg/social/email.svg";
        public const string Facebook = "/assets/svg/social/facebook.svg";
        public const string Instagram = "/assets/svg/social/instagram.svg";
        public const string Linkedin = "/assets/svg/social/linkedin.svg";
        public const string Twitter = "/assets/svg/social/twitter.svg";
        public const string Whatsapp = "/assets/svg/social/whatsapp.svg";
        public const string Youtube = "/assets/svg/social/youtube.svg";
    }
}
```

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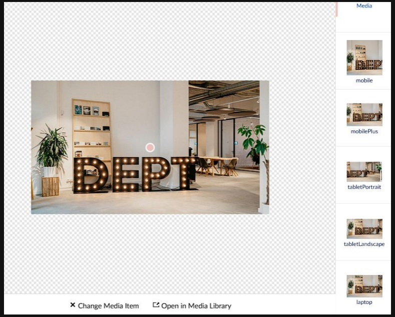
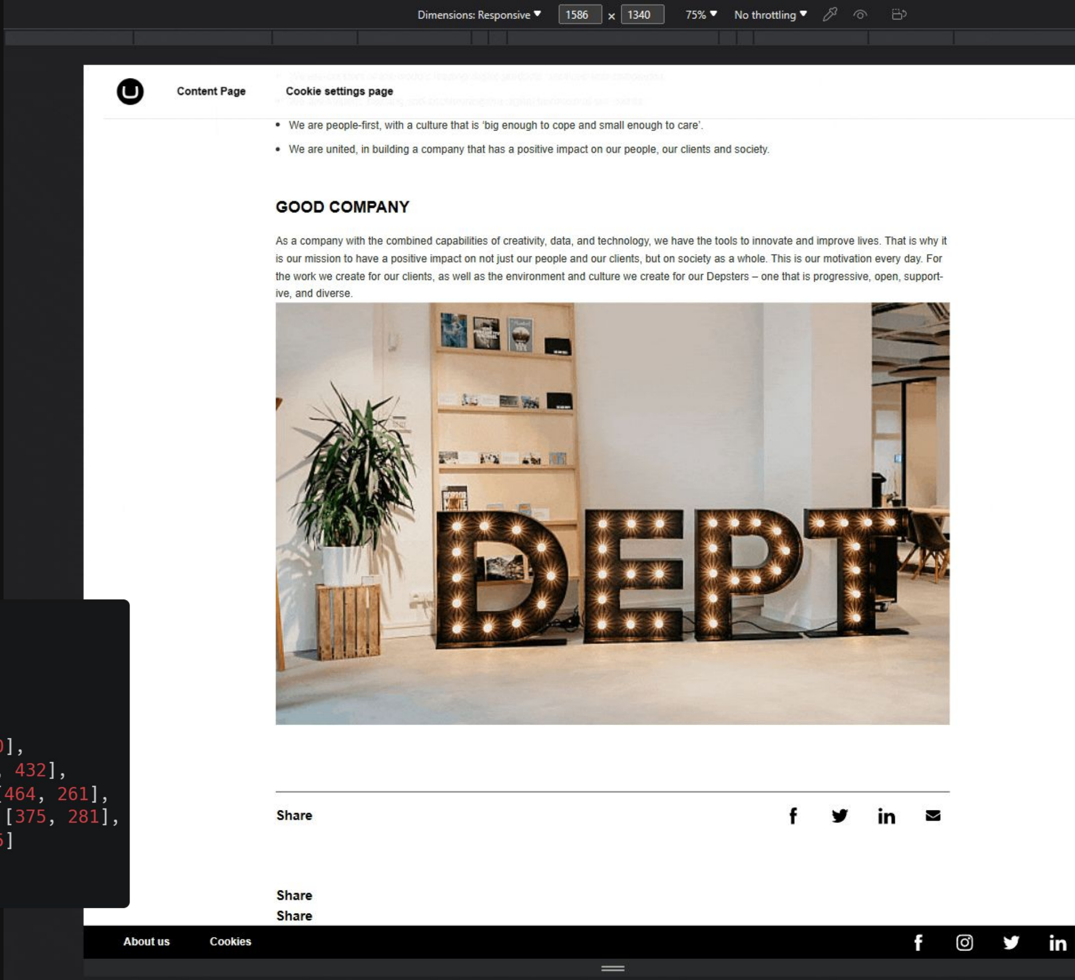
(Built using Source Generators)

Crops generation

Generate the uSync files for Media Picker 3 data types based on configuration files, which are set according to the different front-end screen breakpoints.



```
{
  "aspect": [4, 3],
  "breakpoints": {
    "mobile": [480, 270],
    "mobilePlus": [768, 432],
    "tabletPortrait": [464, 261],
    "tabletLandscape": [375, 281],
    "laptop": [500, 375]
  }
}
```



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Share

Share
Share

About us Cookies

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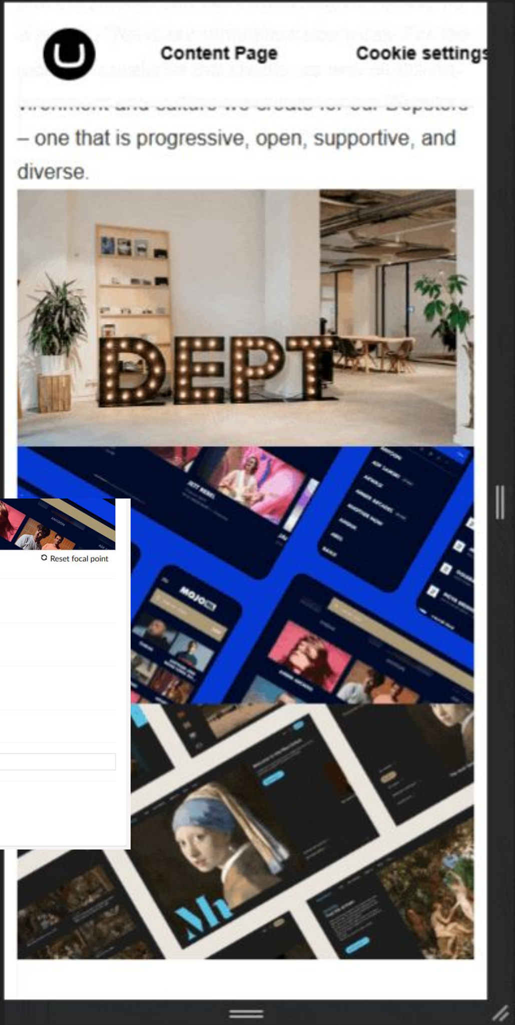
Image color placeholder

On upload, the dominant color of an image is calculated and stored in a property.

When rendering an image on a page, we first place a static svg with the dominant color of the image, until it is replaced with the actual image (once it loads).



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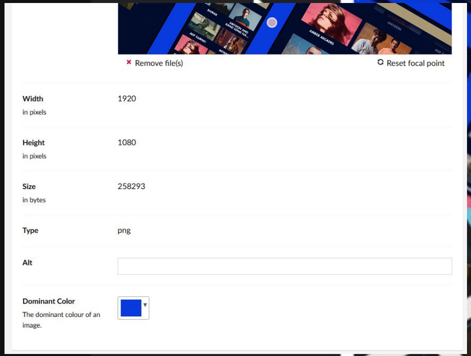

Width in pixels	1920
Height in pixels	1080
Size in bytes	258293
Type	png
Alt	
Dominant Color The dominant colour of an image.	🟦

Fun fact: I had to use network throttling in order for the

effect to show properly in the gif 😅

Tag helpers

We built several tag helpers in order to minimize the need to have logic in the templates.

```
<!-- Tag helper that replaces the SVG tag with the content of the provided 'src' -->
<svg src="@SvgAliases.Icons.ChevronRight"/></span>
```

```
<!-- Tag helper 'asp-translation' that fills in the content of the tag with the actual translation -->
<h3 class="social-share__title" asp-translation="@TranslationAliases.Common.SocialSharing.Title"></h3>
```

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Custom build targets

We developed a couple of custom build targets (checks) to ensure that certain settings are filled or updated when starting from the standard. If not, that will cause the build to fail.

```xml
<!-- Ensure solution is renamed in forks -->
<Error Condition="'$(SolutionName)' == 'UmbracoStandard' And !$(IsUmbracoStandard)" File="../UmbracoStandard.sln"
Text="Please rename your solution to something other than '$(SolutionName)'." />
```

```xml
<!-- Ensure Umbraco Global Id is changed in forks -->
<GetJsonProperty Condition="'$(AppSettingsContent)' != ''" JsonPayload="$(AppSettingsContent)"
PropertyXPath="/Umbraco/CMS/Global/Id" ContinueOnError="true">
  <Output PropertyName="UmbracoGlobalId" TaskParameter="PropertyValue" />
</GetJsonProperty>
<Error Condition="'$(UmbracoGlobalId)' == 'ffffffff-ffff-ffff-ffff-ffffffffffff' And !$(IsUmbracoStandard)"
File="appsettings.json" Text="Please update the Umbraco Global Id in 'appsettings.json' to a random GUID." />
```

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06

Who is using it?

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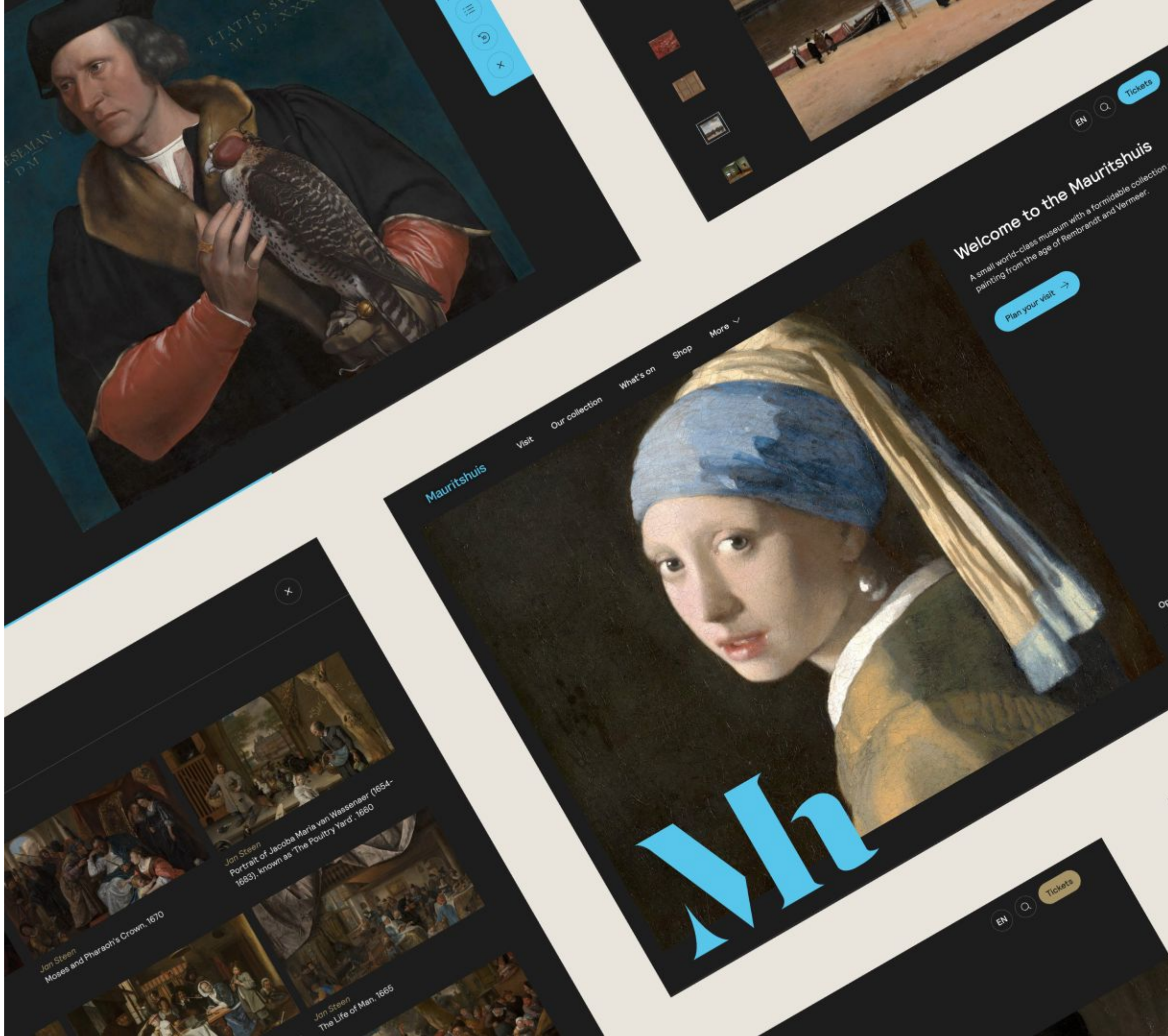
Mauritshuis.nl

- ➜ Museum
- ➜ Best Gold Partner Solution 2022🏆
- ➜ Umbraco 8
- ➜ 10 different languages


Mauritshuis
Visit
Our collection
What's on
Shop
More
EN
Tickets
Welcome to the Mauritshuis
A small world-class museum with a formidable collection painting from the age of Rembrandt and Vermeer.
Plan your visit
Jan Steen
Moses and Pharaoh's Crown, 1670
Jan Steen
Portrait of Jacoba Maria van Wassenaer (1654-1683), known as 'The Poultry Yard', 1660
Jan Steen
The Life of Man, 1665
Mh

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Mojo.nl

- ➜ Organizer of many concerts and festivals
- ➜ Umbraco 10
- ➜ Syncs events and artists from multiple sources into content nodes

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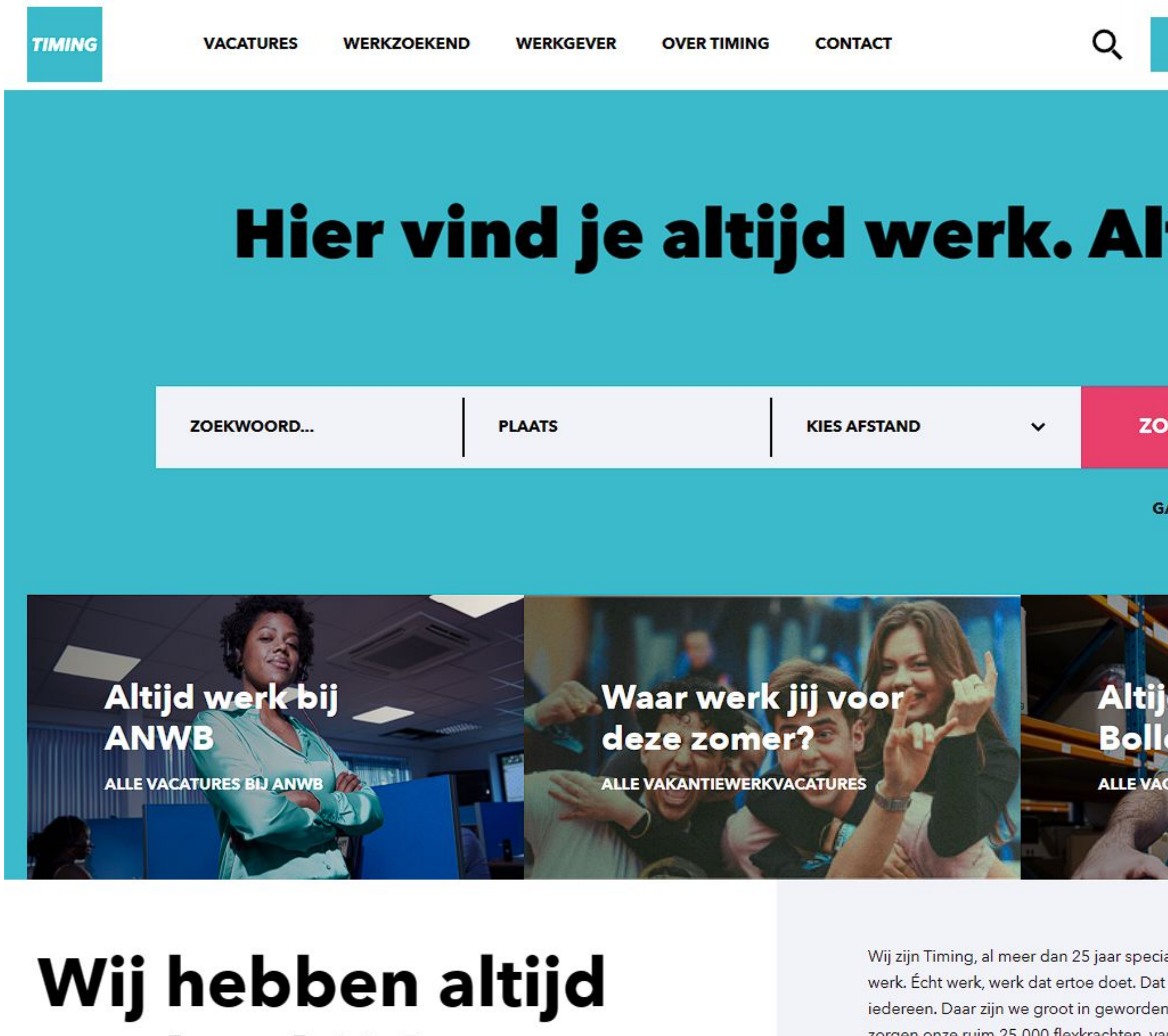
Timing.nl

- ➜ Umbraco 11
- ➜ Custom headless solution (there was no Content Delivery API yet🥲)
- ➜ Although acting just as an API for the NextJS website, a lot of features were still used



TIMING

VACATURES WERKZOEKEND WERKGEVER OVER TIMING CONTACT

Hier vind je altijd werk. Al

ZOEKWOORD... PLAATS KIES AFSTAND ZO

G

Altijd werk bij ANWB
ALLE VACATURES BIJ ANWB

Waar werk jij voor deze zomer?
ALLE VAKANTIEWERKVACATURES

Altij Boll
ALLE VAC

Wij hebben altijd

Wij zijn Timing, al meer dan 25 jaar specia
werk. Écht werk, werk dat ertoe doet. Dat
iedereen. Daar zijn we groot in geworden
zorgen onze ruim 25.000 flexkrachten, v

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07

How can it still improve?

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Documentation

- Not a focus until now…
- Will improve efficiency and decrease “people” bottlenecks

Use the latest Umbraco features

- Block Grid?
- Content Delivery API?

Dotnet template(s)

- Include and exclude features based on requirements

Keep building features

- No more re-inventing the wheel!

Look into community packages

- A lot of fear up until now…
- Look into it with a more open mindset.

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And that's mainly it... 🙌

If you have any feedback/questions or just want to connect you can find me at:

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