

# Umbraco Anti-Patterns

# Popular Umbraco Gold Partner Moriyama

@marcemarc

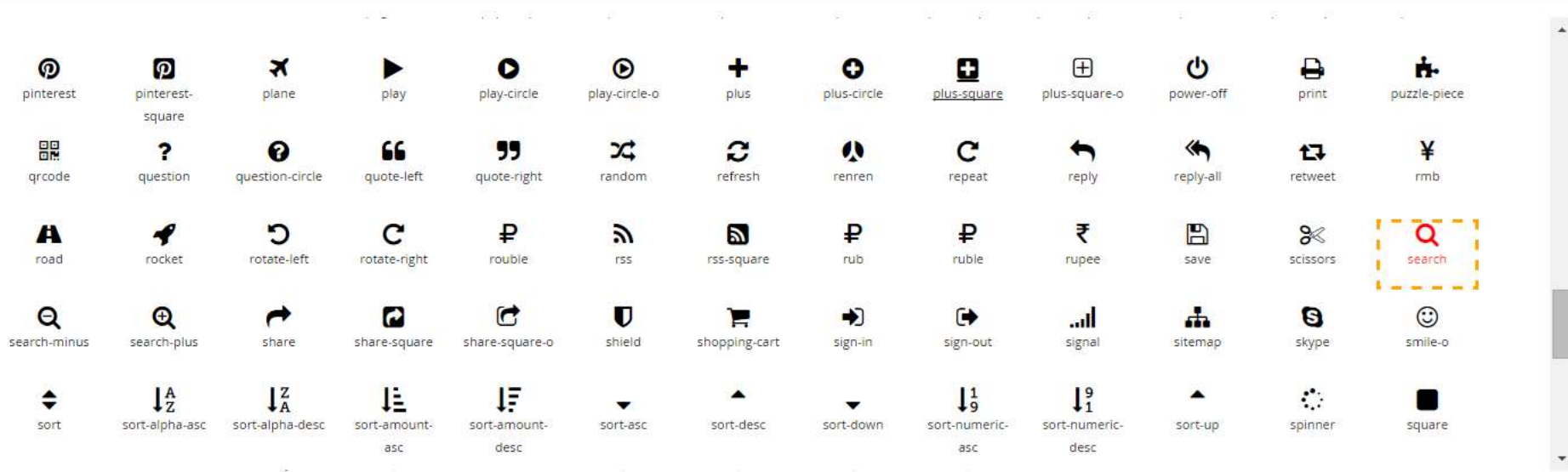
Umbraco Trainer



# Moriyama



# uCssClassNameDropdown





[Return to list](#)

[Preview](#)

[Save and publish](#)





# But what is this talk about ?

Not Learn by Doing...

Learn by Don't-ing™

We learn from our mistakes, far more than we learn when things go well...

Sites and names have been changed to protect the innocent...

... but all these cases are real actual Umbraco sites that I have encountered.

# Case 1 – Misusing Umbraco Properties

... and not knowing when to stop and refactor.



# TRAVEL BOOKING

THE DESTINATION OF YOUR DREAM IS JUST  
A CLICK AWAY



## CRUISE DEAL ALERT!

TRENDING CRUISES	NIGHTS	FROM
Baja California - Long Beach Round-Trip	4	\$249
E. Caribbean - Miami Round-Trip	7	\$299
Bahamas - Miami Round-Trip	4	\$129
E. Caribbean - Miami Round-Trip	7	\$329
W. Caribbean - Ft. Lauderdale Round-Trip	7	\$649
Bahamas - New York Round-Trip	5	\$324
E. Caribbean - New York Round-Trip	9	\$324
S. Caribbean - Miami Round-Trip	11	\$349

## FEATURED PROMOTIONS & DESTINATIONS



Sed in lacus

Praese vestibulum aenean  
nourmy hendrerit mauris.  
Cum sociis natoque



Quis autem vel eum

Praese vestibulum aenean  
nourmy hendrerit mauris.  
Cum sociis natoque



Illum qui dolorem

Praese vestibulum aenean  
nourmy hendrerit mauris.  
Cum sociis natoque



Vestibulum sed ante

Praese vestibulum aenean  
nourmy hendrerit mauris.  
Cum sociis natoque



## OUR FAVORITE CRUISE LINE OFFERS

Body text

View latest Ski Holidays

```
<umbraco:Macro runat="server" language="cshtml">
@inherits umbraco.MacroEngines.DynamicNodeContext

@if (Model.showSkiVermontAd)
{
    <h2>Ski Vermont</h2>
    
    <a href="/">Find out more..</a>
}
</umbraco:Macro>
```

Show Ski Vermont Ad

☒ Yes

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E. Caribbean - New York Round-Trip	9	\$324
S. Caribbean - Miami Round-Trip	11	\$349
Hawaii - Honolulu Round-Trip	9	\$999
Mexican Riviera - Los Angeles Round-Trip	9	\$649

## FEATURED PROMOTIONS & DESTINATIONS



Sed in lacus

Praese vestibulum aenean  
nummy hendrerit mauris.  
Cum sociis natoque [...](#)



Quis autem vel eum

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Cum sociis natoque [...](#)



Illum qui dolorem

Praese vestibulum aenean  
nummy hendrerit mauris.  
Cum sociis natoque [...](#)



Vestibulum sed ante

Praese vestibulum aenean  
nummy hendrerit mauris.  
Cum sociis natoque [...](#)

## OUR FAVORITE CRUISE LINE OFFERS



Nemo enim ipsam voluptatem quia voluptas sit  
dolorum magnam aliquam quaeerat volupta.

Proin dictum elementum velit. Fusce euismod consequat  
ante. Lorem ipsum dolor sit amet, consectetur adipiscing  
elit. Pellentesque sed dolor. Aliquam congue fermentum nisi.  
Mauris accumsan nulla vel diam. Sed in lacus ut enim  
adipiscing aliquet. Nulla venenatis.



**"I have a dream to make  
skiing affordable for all...  
even Geordies."**

Anthony Collins  
Travel Photographer



Body text

View latest Ski Holidays

```
<umbraco:Macro runat="server" language="cshtml">
@inherits umbraco.MacroEngines.DynamicNodeContext

@if (Model.showSkiVermontAd)
{
    <h2>Ski Vermont</h2>
    
    <a href="/">Find out more..</a>
}
@if (Model.showGeordieSkiAd)
{
    <h2>I have a dream to make skiing affordable for all... even Geordies</h2>
    
    <a href="/">Find out more..</a>
}
</umbraco:Macro>
```

Show Ski Vermont Ad

☒ Yes

Show Geordie Ski Ad

☒ Yes



Show Ski Vermont Ad

☒ Yes

Show Georgie Ski Ad

☐ Yes

Visit Fanoë Blue

Blue

☐ Yes

Visit Fanoë Red

Red

☒ Yes

Visit Fanoë White

White

☐ Yes



Visit Fanoe Blue  
Blue ☐ Yes

Visit Fanoe Red  
Red ☐ Yes

Visit Fanoe White  
White ☐ Yes

Show Advert 1 ☐ Yes

Show Advert 2 ☒ Yes

Show Advert 3 ☐ Yes

Show Advert 4 ☐ Yes

Show Advert 5 ☐ Yes

Show Advert 6 ☐ Yes

Show Advert 7 ☐ Yes

Show Advert 8 ☐ Yes

Show Advert 09  
Show advert ref 09 ☒ Yes

Show Advert 10  
Show advert ref 10 ☐ Yes



it doesn't  
stop here...

Show Advert 09  
Show advert ref 09

☐ Yes

Show Advert 10  
Show advert ref 10

☐ Yes

Show Advert 11

☐ Yes

Show Advert 12

☐ Yes

Show Advert 13

☐ Yes

Show Advert 14

☐ Yes

Show Advert 15

☐ Yes

Show Advert 16

☐ Yes

Show Advert 17

☐ Yes

Show Advert 18

☐ Yes

Show Advert 19

☐ Yes

Show Advert 20

☐ Yes

Or here...

Show Advert 19 ☐ Yes

Show Advert 20 ☐ Yes

Show Advert 21 ☒ Yes

Show Advert 22 ☒ Yes

Show Advert 23 ☒ Yes

Show Advert 24 ☒ Yes

Show Advert 25 ☒ Yes

Show Advert 26 ☒ Yes

Show Advert 27 ☒ Yes

Show Advert 28 ☒ Yes

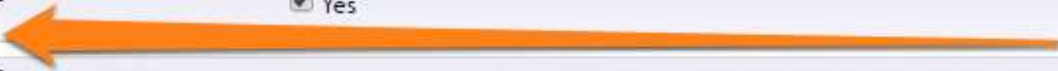
Show Advert 29 ☒ Yes

Show Advert 30 ☒ Yes



but it does  
stop here:

Show Advert 27	<input type="checkbox"/> Yes
Show Advert 28	<input type="checkbox"/> Yes
Show Advert 29	<input type="checkbox"/> Yes
Show Advert 30	<input type="checkbox"/> Yes
Show Advert 31	<input checked="" type="checkbox"/> Yes
Show Advert 32	<input checked="" type="checkbox"/> Yes
Show Advert 33	<input checked="" type="checkbox"/> Yes
Show Advert 34	<input checked="" type="checkbox"/> Yes
Show Advert 35	<input checked="" type="checkbox"/> Yes
Show Advert 36	<input checked="" type="checkbox"/> Yes
Show Advert 38	<input checked="" type="checkbox"/> Yes



37?

# If's forever...

```
<umbraco:Macro runat="server" language="cshtml">
@inherits umbraco.MacroEngines.DynamicNodeContext

@if (Model.showSkiVermontAd)
{
    <h2>Ski Vermont</h2>
    
    <a href="/">Find out more...</a>
}
@if (Model.showGeordieSkiAd)
{
    <h2>I have a dream to make skiing affordable for all... even Geordies</h2>
    
    <a href="/">Find out more...</a>
}
    @if (Model.visitFanoBlue)
    {
        <h2 class="blue">Visit Fano</h2>
        
        <a href="/">Find out more...</a>
    }
    @if (Model.visitFanoRed)
    {
        <h2 class="red">Visit Fano</h2>
        
        <a href="/">Find out more...</a>
    }
    @if (Model.visitFanoWhite)
    {
        <h2 class="white">Visit Fano</h2>
        
        <a href="/">Find out more...</a>
    }
    @if (Model.showAdvert1)
    {
        <h2>Canada</h2>
        
        <a href="/">Find out more...</a>
    }
    @if (Model.showAdvert2)
    {
        <h2>Delights of the Danube Cruise</h2>
        
        <a href="/">Find out more...</a>
    }
    @if (Model.showAdvert3)
    {
        <h2>Monaco Grand Prix</h2>
        
        <a href="/">Find out more...</a>
    }
}
```



# How on earth does this happen ?

We can only speculate

If something works, we repeat it

It's an anti-pattern.

# How could you do this ?

Advert Doc Type + Multi-node Tree Picker ?

Custom Property Editor

The Grid

Nested Content

Google Ad Code

Anything but this...

## Mitigating comments...

```
else
```

```
{
```

```
    // I'm sorry
```

```
    IEnumerable<int> ids = Tag.GetNodesWithTags(Request.QueryString["h
```

```
    allCaseStudies = new UmbracoHelper(UmbracoContext.Current).TypedCo
```

```
}
```

```
@using System.Globalization
```

```
@inherits Umbraco.Web.Mvc.UmbracoViewPage<Umbraco.Models.CampaignFormViewM
```

```
@{
```


```
    // Sorry Marc :) 
```

```
    var fieldsToHide = Convert.ToString(Umbraco.Field("fieldsToHide")).Split(',');
```


```
    bool hasFormAdvisoryText = Umbraco.Field("formAdvisoryText",altText:"") != nul
```

## Foundation + Bootstrap


```
<script src="/js/lib/jquery.fittext.js" type="text/javascript"></script>
<script src="/js/lib/matchMedia.js" type="text/javascript"></script>
<script src="/js/lib/fixedfixed.js" type="text/javascript"></script>
<script src="/js/lib/picturefill.js" type="text/javascript"></script>
<!-- help, they are making me do this -->
<script src="/js/vendor/foundation.js"></script>
<script src="/Scripts/bootstrap.min.js"></script>
<script src="/js/lib/svgeezzy.js" type="text/javascript"></script>
<script src="/js/init.js" type="text/javascript"></script>
```



```
20
21 // yes, this makes no sense to me either...
22 if (_Clients != null && _Clients.Count == 1)
23 {
24     foreach (ClientInfo client in _Clients.Values)
25     {
26         _CurrentClient = client;
27         break;
28     }
29     Session["CurrentClient"] = _CurrentClient;
30 }
31
```



```
private static void ProcessLine(string line, int lineNumber)
{
    try
    {
        List<string> cells = line.Split(',').ToList();
        if (cells.Count == 2)
        {
            int id = Convert.ToInt32(cells[0]);
            string email = cells[1];
            //not sure why this method errors, but try.. catch fixes it
            CustomerImport.LegacyCustomerSoapClient webservice = new CustomerImport
            bool imported = webservice.Import(id, email);
            if (imported) Log("Line " + lineNumber + " Imported");
            else Log("Line " + lineNumber + " NOT Imported");
        }
        else
        {
            Log("Line " + lineNumber + " has incorrect number of cells...");
        }
    }
    catch (Exception e)
    {
        Log(e.Message);
    }
}
```






# Credit gar til Greystate

```
<!-- Fetch all the documents in one go (!) - Credit går til Greystate-->  
<xsl:variable name="nodes" select="key('document-by-id', nodeId)" />  
  
<xsl:for-each select="nodeId">  
  <!-- Process the nodes in selected sort order - Credit går til Greystate-->
```

```
int i=0;
}

@foreach (var person in people){
    var imageUrl = Umbraco.TypedMedia(person.Id).Url;
    if (i%3==0){
        <div class="clear"></div>
    }
    <div class="col-md-4">
        <a href="@person.Url">
            <h2>@person.Name</h2>
            
            <span class="jobtitle">@person.GetPropertyValue("jobTitle")</span>
        </a>
    </div>

    // add one to the value i
    i++;
}
```



# Case Number 2 – Umbraco Versions

What exactly is your Versioning policy ?

# Rollback

Sooo Umbraco saves a version in the database for every change in content forever, so you can rollback:

## Rollback

Select a version to compare with the current version

Current version

Cartoon Test (Created: 25/02/2016 09:33)

Rollback to

Select version...

Select version...

Cartoon Test (Created: 25/02/2016 09:33)

Cartoon Test (Created: 25/02/2016 09:32)

Cartoon Test (Created: 20/05/2015 12:32)

Cartoon Test (Created: 20/05/2015 12:32)

Cartoon Test (Created: 20/05/2015 12:31)

Cartoon Test (Created: 02/05/2015 16:41)

Cartoon Test (Created: 02/05/2015 16:37)

Cartoon Test (Created: 16/04/2015 01:16)

Cartoon Test (Created: 16/04/2015 00:30)

Cartoon Test (Created: 15/04/2015 02:39)

Cartoon Test (Created: 15/04/2015 02:38)

Cartoon Test (Created: 15/04/2015 02:36)

Cartoon Test (Created: 15/04/2015 02:35)

Cartoon Test (Created: 15/04/2015 02:34)

Cartoon Test (Created: 15/04/2015 02:34)

Cartoon Test (Created: 15/04/2015 02:33)

Cartoon Test (Created: 15/04/2015 02:31)

Cartoon Test (Created: 15/04/2015 02:29)

Cartoon Test (Created: 15/04/2015 02:28)

# What's the anti-pattern here ?

What if you are programmatically updating content ?

No version ?

# Version !



# Tour booking site

## Copenhagen, Lübeck And Münster Christmas Markets

Denmark



**Duration:** 7 day(s)

**Board Basis:** Mixed Board

7 days from £609

Departure Points

Southport

Available dates

PRICE FROM ?  
**£609.00**  
per person

### Holiday Summary

- Travel: Coach

[More Info](#)

## Explore Germany's Baltic Coast, Denmark, Copenhagen & Lubeck

Denmark



**Duration:** 12 day(s)

**Board Basis:** Mixed Board

Explore this undiscovered corner of Germany, with its pretty harbour towns, crystal blue waters and tranquil villages. Our itinerary also takes in the delights of the Danish capital, Copenhagen and Lubeck, Queen of the Hanseatic Cities. 12 days f...

PRICE FROM ?  
**£1,195.00**  
per person

### Holiday Summary

- Travel: Coach

[More Info](#)

Departure Points

Southport

Available dates

14,006,050

rows



#### Project owner



**Matt Brailsford**  
Matt has 8222 karma points

#### Project Compatibility

This project is compatible with the following versions as reported by community members who have downloaded this package:

Untested or doesn't work on Umbraco as a Service  
7.4.x (untested)  
7.3.x (untested)  
7.2.x (100%)  
7.1.x (100%)  
7.0.x (untested)  
6.1.x (untested)  
6.0.x (untested)  
4.11.x (untested)  
4.10.0 (untested)  
4.9.1 (untested)  
4.9.0 (untested)

[Report compatibility](#)

#### Project Information

Project owner: Matt Brailsford

## UnVersion

### SUMMARY

This package automatically removes any previous versions for those times when a version history aren't important, and you don't want to take up the database space.

With Umbraco being such a versatile platform, it's very easy to develop small scale apps that go beyond the regular "Content" paradigm. In some situations, version history becomes unimportant, and a waste, so this package automatically cleans up any previous versions when a new version is published.

### HOW TO USE

The package is configured via an `unVersion.config` file located in the default umbraco config folder.

To define a new unversion rule, create an **add** element with the following attributes.

**docTypeAlias** [Optional] - The doc type alias of the documents to be unversioned, if undefined, applies to all (If you don't define `docTypeAlias`, it is advised you define `rootXPath` to narrow down the scope of the unversion).

**rootXPath** [Optional] - An xpath statment to define the root folder for the unversion rule, ie: `//NewsIndex`

**maxDays** [Optional] - The maximum number of days to keep versions. If attribute is not present, defaults to `int.MaxValue` (Pre v2.0 defaults to 0, so bare this in mind).

**maxCount** [Optional] - The maximum number of latest versions to keep. If attribute is not present, defaults to `int.MaxValue` (Pre v2.0 defaults to 0, so bare this in mind).

# How to resolve...

Short term: UnVersion

# Long Term

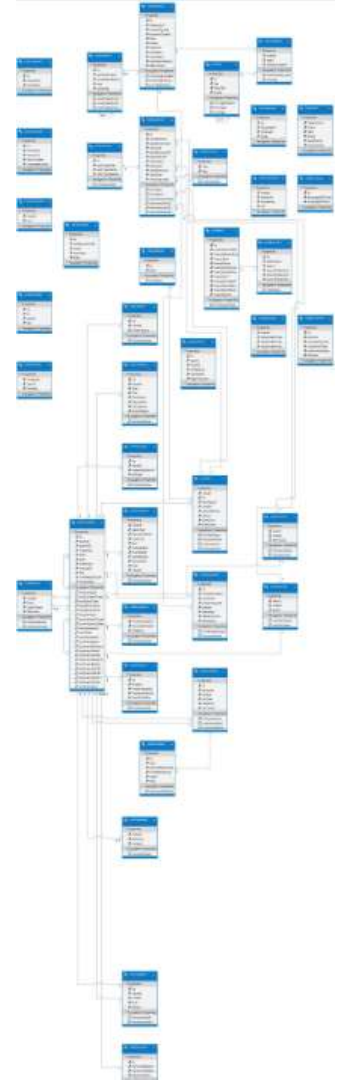
Rethink and re-architect the solution

So if Marc inherits my site in the future how can I make it a lot easier for him ?

Some quickfire don'ts...

- Don't use only one document type for every page on the site
- Don't create a new document type for every single page
- Don't mix your naming conventions for alias – Uppercase/Lowercase – stick to it
- Don't fire off a thousand things to happen on a content publish event (and complain that publish is slow)
- Don't use the Content Service to pull back content to display on your website (it's for CRUD only)
- Don't use the Entity Framework to access Umbraco database tables directly...

# Entity framework diagram For the Umbraco db



- Don't rely on Umbraco.TypedMedia it is not magic  
Umbraco.TypedMedia(id).Url has the capacity to YSOD
- Don't not check for nulls!

```
var thing = Umbraco.TypedContent(1234);
```

```
@if (thing != null){
```

```
<h2>@thing.Name</h2>
```

```
}
```

I still see Umbraco Logos...

... all the time

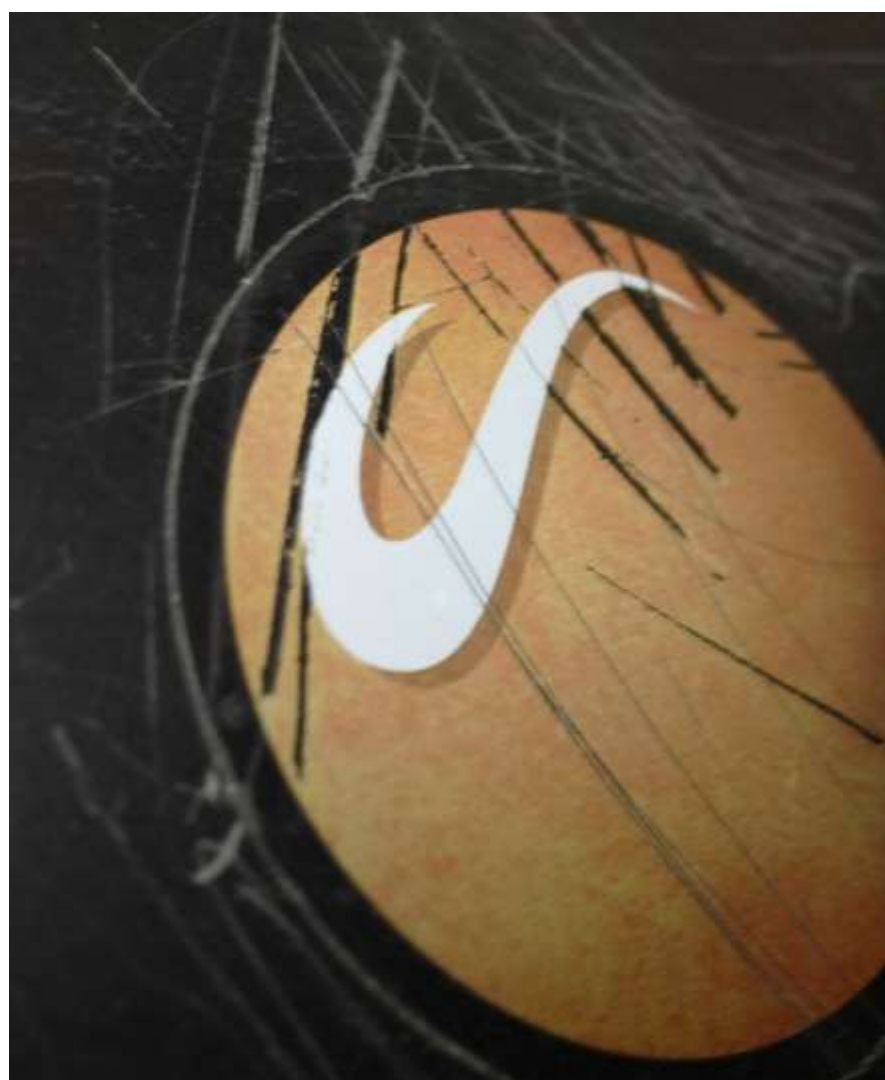
uDentistsLogo







uVendingMachineSticker



uPintHandle



# Case 3 – Examining Examine

Or Examine + Linq does not really support IQueryable...

# Simple search with Umbraco TypedSearch

@{

```
var searchResults = Umbraco.TypedSearch("fish").Where(f=>f.DocumentTypeAlias == "NewsArticle");  
var searchCount = searchResults.Count();  
foreach(var searchResult in searchResults)  
{  
    <h2>@searchResult.Name</h2>  
}
```

}


```
string searchTerm = "fish";  
var searcher = ExamineManager.Instance.SearchProviderCollection["ExternalSearcher"];  
ISearchCriteria criteria = searcher.CreateSearchCriteria(BooleanOperation.Or);  
var result = criteria.GroupedOr(new string[] { "title","bodyText" }, searchTerm).And().NodeTypeAlias("NewsArticle");  
//...  
// lots more complex Or conditions and boosting etc  
//...  
ISearchResults searchResults = searcher.Search(result.Compile());  
var itemCount = searchResults.TotalItemCount;
```

# Specialist Print Magazine - 16 years of news articles



## So close...

```
ISearchResults results = ArticleSearchHelper.Search(model.Keywords, model.OrderBy, model.ArticleTags, model.Regions);
model.TotalResultCount = results.TotalItemCount;
foreach (var result in results)
{
    IPublishedContent page = Umbraco.TypedContent(result.Id);
    CustomSearchResult searchResult = new CustomSearchResult();
    if (page != null)
    {
        // do stuff - get url of related image etc
        model.SearchResults.Add(searchResult);
    }
}
model.SearchResults = model.SearchResults.Skip(model.PageSize*(model.Page - 1)).Take(model.PageSize).ToList();
return PartialView("ArticleSearch",model);
```

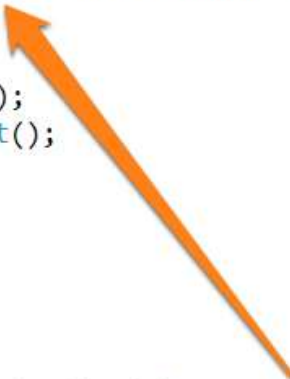


# Speedy Speed IIS Module

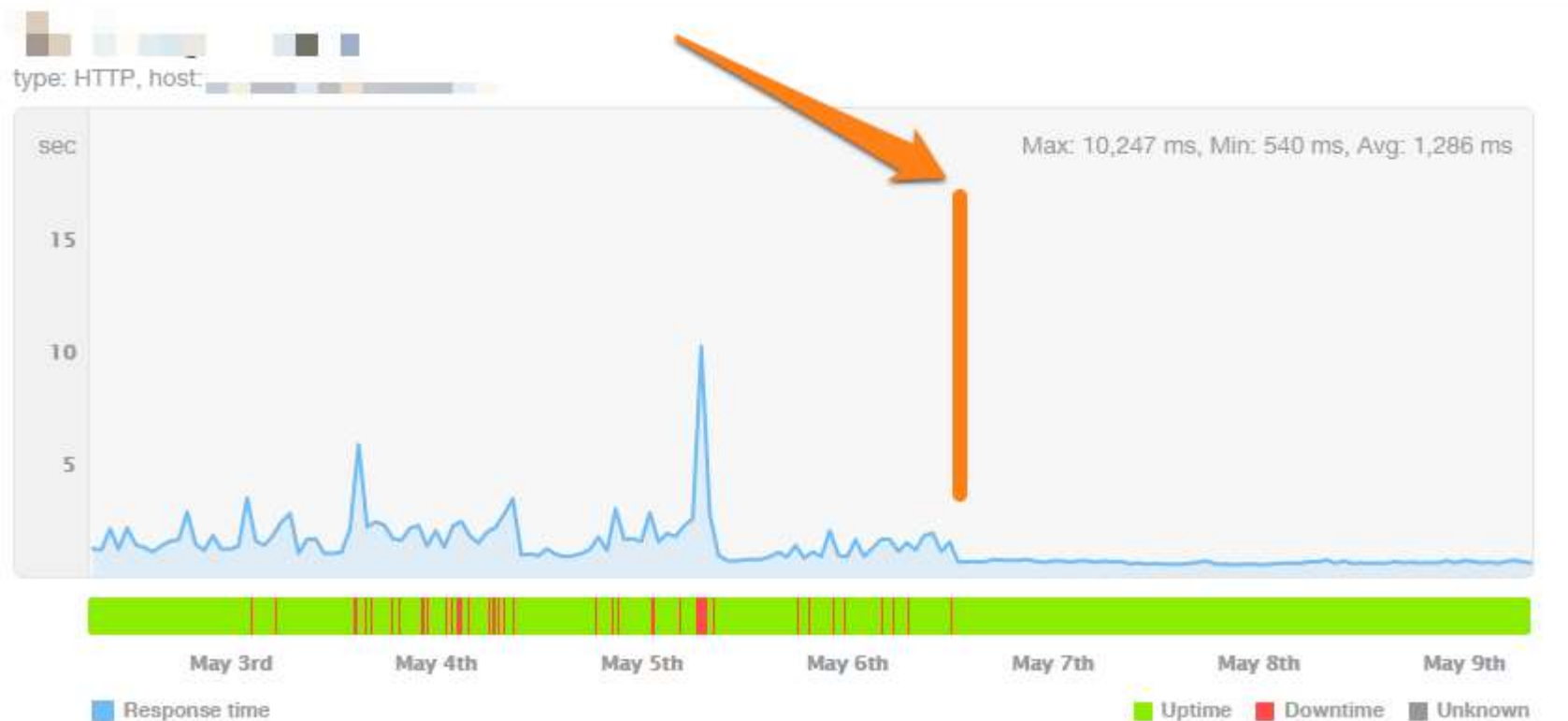
Official Google Pagespeedy speed speed Optimisation for Microsoft IIS



```
ISearchResults results = ArticleSearchHelper.Search(model.Keywords, model.OrderBy, model.ArticleTags, model.Region,
model.TotalResultCount = results.TotalItemCount;
var pagedResults = results.Skip(model.PageSize * (model.Page - 1)).Take(model.PageSize).ToList();
foreach (var result in pagedResults)
{
    IPublishedContent page = Umbraco.TypedContent(result.Id);
    CustomSearchResult searchResult = new CustomSearchResult();
    if (page != null)
    {
        // do stuff - get url of related image etc
        model.SearchResults.Add(searchResult);
    }
}
// model.SearchResults = model.SearchResults.Skip(model.PageSize*(model.Page - 1)).Take(model.PageSize).ToList();
return PartialView("ArticleSearch",model);
}
```



# Speedy Speed IIS Module Irony



# Umbraco Street Bingo

Spotting Umbraco logos is one thing...

Courier



Courier

# Concierge



Contour





# POCO Classes



uSinc ?



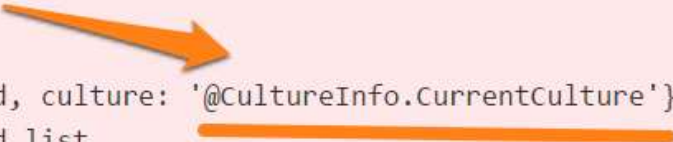


# Case 4 - Last minute changes

Can we just...

# Imagine a travel site...

```
$("#industry").change(function () {  
  
    var subIndustryList = $("#subindustry");  
    // clear subindustry list  
    subIndustryList.html('');  
    // get selected item  
    selectedIndustryId = $(this).val();  
    if (selectedIndustryId != '') {  
        // get list of child options for selected parent  
        $.get("/umbraco/api/Industry/List", { id: selectedIndustryId, culture: '@CultureInfo.CurrentCulture'}, function (data) {  
            // if no children, add current parent as option to child list  
            if (data == null || data.length == 0) {  
                subIndustryList.append('<option value="' + jQuery(this).val() + '">' + jQuery(this).text() + '</option>');  
            }  
            else {  
                // if lots of children, add each child to child list  
                $.each(data, function (index, element) {  
                    subIndustryList.append('<option value="' + element.Key + '">' + element.Value + '</option>');  
                });  
            }  
        });  
    }  
});
```



```
-        });  
-    });  
-  
-</script>  
+<script src="/scripts/campaignForm.js" type="text/javascript"></script>  
+ @Html.Partial("JqueryValidationErrorMessage")
```

```
$.get("/umbraco/api/Industry/List", { id:  
selectedIndustryId, culture: '@CultureInfo.CurrentCulture'}
```

# Peer review

... software testing alone has limited effectiveness...

**the average effectiveness of design and code inspections  
in finding problems is:**

**between 55 and 60 percent\*\***

(\*\* a meaningless figure plucked from the internet):

# How do we find ourselves in these situations?

It's all about context but consider these questions...

## How long will it take you to ?

## Could you just ?

## When will this be done ?

If you ask a developer how long ?

2 Minutes...

... half a day...

Maybe 3 days...

When is something actually done ?

Does Done mean Done ?

Is it 'Done Done' ?

We live in an era of relentless positivity...





When was the last time as a developer you said...

No.... ?

Do I say **Yes** too often ?

# The End

Sorry,

Fail...fail fast... fail often, bask in your failure, you are learning!

Come on the Official Umbraco Training!

Be as awesome as you care to be...

And find someone you like, and who likes you, to talk through your code with

Please leave comments in your code for future version of me to smile at...