



Extending Mura CMS

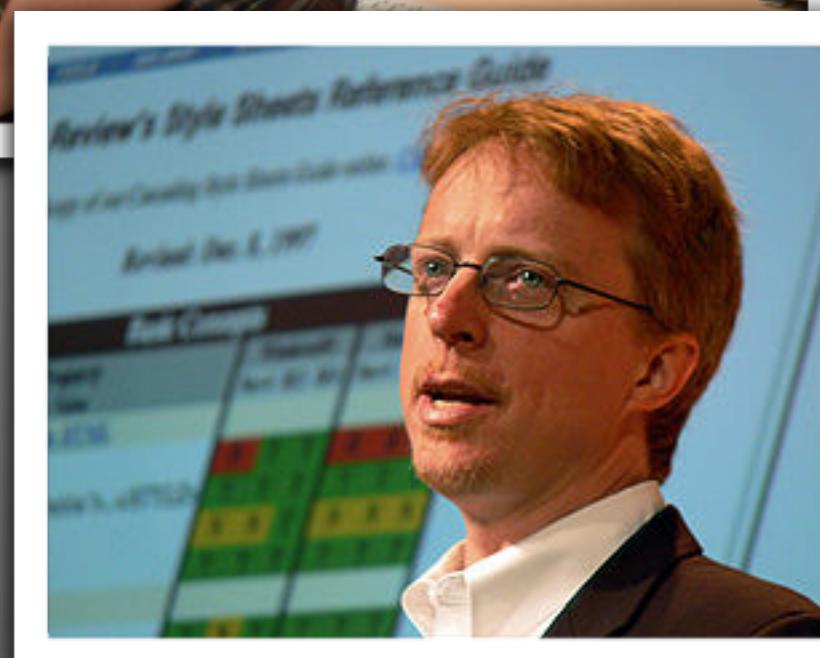
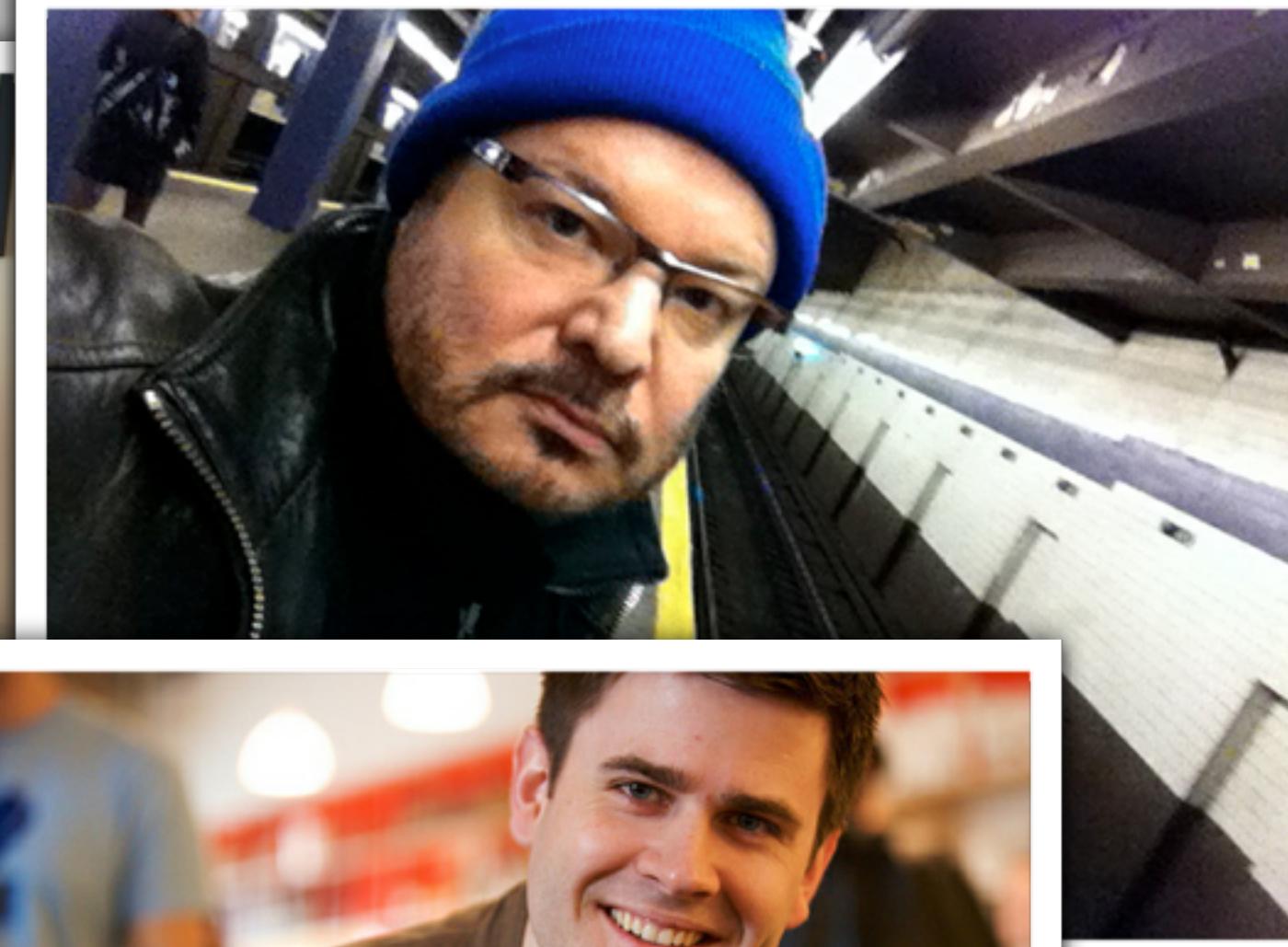
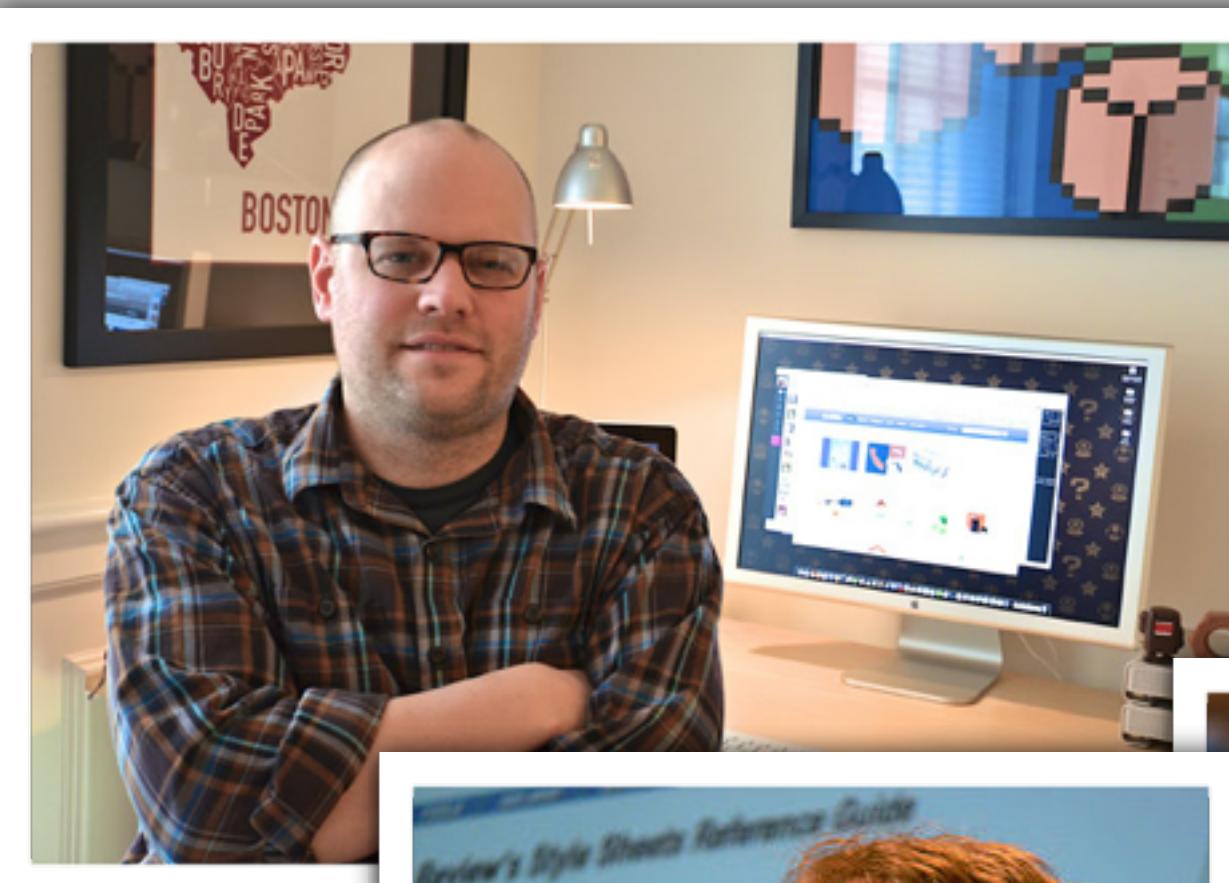
Plugins & Themes







mura



[Twitter](#)

960 GRID SYSTEM

Download - CSS, sketch paper, and templates for: Acorn, Fireworks, Flash, InDesign, GIMP, Inkscape, Illustrator, OmniGraffle, Photoshop, QuarkXPress, Vato, Exp Design, Repository at [GitHub](#).

blueprint

Blueprint is a CSS framework, which aims to cut down on your development time. It gives you a solid foundation to build your project on top of, with an easy-to-use grid, sensible typography, useful plugins, and even a stylesheet for printing.

HTML5 ★ BOILERPLATE

A rock-solid default for HTML5 awesome.

I'm new here: plz explain why it's good, first.

DOWNLOAD BOILERPLATE 3.0.2 UPDATED FEB 19TH

DOWNLOAD BOILERPLATE OR DOWNLOAD BOILERPLATE 'STRIPPED' OR CUSTOMIZE BOILERPLATE

KEEP THE HINTS AND LINKS NO COMMENTS, JUST THE BUSINESS. 100% HIPSTER.

READ THE DOCS ★ CONTRIBUTE ON GITHUB ★ FOLLOW ON TWITTER

HTML5 BOILERPLATE IS 3.0!

MONDAY, FEB 19TH, 2012

The key feature of this update is making Boilerplate smaller. Most of the changes have been working towards that. We have significant work done to our build script, so much so that we thought it deserved its own repository. Meanwhile, here is what's new.

CHANGELOG

3.0 gets some major updates. Here are all the commits since last release.

Should you upgrade existing sites? Short answer: nah, you're good.

Skeleton

- What & Why
- Grid
- Typography
- Buttons
- Tabs
- Forms
- Media Queries
- Support
- Examples
- Download

Less Framework 4
An adaptive CSS grid system.

It Is

Bootstrap is a CSS framework for building websites. It contains many components and preset styles, all

Designed for everyone, everywhere.

Need reasons to love Bootstrap? Look no further.

Built for and by nerds
Like you, we love building awesome products on the web. We love it so much, we decided to help people just like us do it easier, better, and faster. Bootstrap is built for you.

For all skill levels
Bootstrap is designed to help people of all skill levels – designer or developer, huge nerd or early beginner. Use it as a complete kit or use to start something more complex.

Cross-everything
Originally built with only modern browsers in mind, Bootstrap has evolved to include support for all major browsers (even IE7) and, with Bootstrap 2, tablets and smartphones, too.

12-column grid
Grid systems aren't everything, but having a durable and flexible one at the core of your work can make development much simpler. Use our built-in grid classes or roll your own.

Responsive design
With Bootstrap 2, we've gone fully responsive. Our components are scaled according to a range of resolutions and devices to provide a consistent experience, no matter what.

Styleguide docs
Unlike other front-end toolkits, Bootstrap was designed first and foremost as a styleguide to document not only our features, but best practices and living, coded examples.

Bootstrap, from Twitter

Simple and flexible HTML, CSS, and Javascript for popular user interface components and interactions.

[View project on GitHub](#)

[Download Bootstrap \(v2.0.2\)](#)

Upgrading from 1.4 Download with docs Submit issues Roadmap and changelog

[Watch](#) 26,077 [Fork](#) 8,011 [Follow @bootswatch](#) 15.8K followers [Tweet](#) 43.7K



mura

mura

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Home Photo Albums About News Blog Contact Mura

November 17, 2010 **Ut Urna Urna, Rhoncus Eget**
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin pellentesque, est ut venenatis aliquam, lorem quam porttitor ligula, eget ultrices velit dui sed quam. Praesent vehicula placerat lectus. Nulla pede.
By John Doe Tags: [ut](#), [urna](#)

1 2 3 4 5

Sana 
Descender counter california job case clarendon hyphen kerning pair pica cap asterisk typophile, display clarendon thick display bitmap.
[Read More](#)

Humanist Stroke 
Descender counter california job case clarendon hyphen kerning pair pica cap asterisk typophile, display clarendon thick display bitmap.
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Ascender Dunc 
Descender counter california job case clarendon hyphen kerning pair pica cap asterisk typophile, display clarendon thick display bitmap.
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FROM OUR BLOG

JANUARY 12, 2011 **Praesent Hendrerit Etiam**
Proin pretium dui et nulla. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin pellentesque, est ut venenatis aliquam, lorem quam porttitor ligula, eget ultrices velit dui sed quam.

JANUARY 12, 2011 **Pellentesque Neque Massa**
Pellentesque neque massa. Proin pellentesque, est ut venenatis aliquam, lorem quam porttitor ligula, eget ultrices velit dui sed quam.

JANUARY 6, 2011 **Four New Themes Now Available!**
Praesent hendrerit etiam. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin pellentesque, est ut venenatis aliquam, lorem quam porttitor ligula, eget ultrices velit dui sed quam.

MURA BLOG

[Creating a Display Configuration](#)
[Mura CMS 5.6](#)

COSUMNES

HOME ABOUT NEWS BLOG CONTACT MURA

FEBRUARY 17, 2011 **Pellentesque Neque Massa**
By John Doe
Proin pellentesque, est ut venenatis aliquam, lorem quam porttitor ligula, eget ultrices velit dui sed quam.

1 2 3 4

Sana 
[READ MORE](#)

Humanist Stroke 
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Ascender Dunc 
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[About Us](#) | [News](#) | [Blog](#) | [Contact](#)

FROM OUR BLOG

JANUARY 12, 2011 **Proin Pretium Dui et Nulla**
By John Doe

JANUARY 12, 2011 **Praesent Hendrerit Etiam**
Proin pretium dui et nulla. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin pellentesque, est ut venenatis aliquam, lorem quam porttitor ligula, eget ultrices velit dui sed quam.

FEBRUARY 14, 2011 **Attend OpenCF Summit!**
Mura CMS 5.4 Available!

FEBRUARY 3, 2011 **Mura CMS 5.4 Available!**

NOVEMBER 8, 2010 **Using the Mura Iterator to Create Custom Navigation from a Local Index**

©2011 Cosumnes



The screenshot collage includes:

- A top banner with a blue gradient background featuring a large white "SOLVED" text and a skyscraper image.
- A sidebar with a "CONSULTING" section and a "News & Events" list.
- A main content area with a "THE SKY'S THE LIMIT" heading and a "SECOND BUSINESS STATEMENT GOES HERE PROFESSIONAL ONLINE PRESENCE." sub-section.
- A bottom section with a "Welcome," "Latest News," "Testimonials," and "Latest works" grid.

The website features a header with "studio" and navigation links: HOME, ABOUT, SERVICES, PORTFOLIO, BLOG, CONTACT. Below the header are three columns: "Quality" (with a checked checkbox), "Creativity" (with a lightbulb icon), and "Integrity" (with a shield icon). Each column contains placeholder text.

The website has a dark header with "One Straight Line" and a search bar. The main content area features a large image of a landscape with the text "WELCOME TO ONE STRAIGHT LINE. WE ARE WORKING ON WEBDESIGN AND PHOTOGRAPHY". On the left, there's a sidebar with links: Home, About Us, Portfolio, Blog, Contact Us. At the bottom, there's a "LATEST PROJECTS" section with three thumbnail images: "ROCK-A-VOTE", "PopGrapht", and "diplo".



mura

The screenshot shows the Utopian theme's user interface. At the top, there's a navigation bar with links for Home, Blog, Portfolio, About, and Contact. A dropdown menu for Portfolio is open, showing options like 1-Column Post, 2-Column Post, 3-Column Post, and 4-Column Post. Below the navigation is a large image of a forest. Overlaid on the image is the text "Few experience a site this easy to build." and a green "Get Started" button.

The screenshot shows the Arthouse theme template. It features a large landscape image at the top. Below it is a slider with the text "Colorful, powerful, flexible". Underneath the slider are three sections: "UNLIMITED COLORS", "FLEXIBLE LAYOUTS", and "DETAILED HELP FILE". Each section has a small image and some descriptive text. At the bottom, there are sections for "FROM THE BLOG" and "FEATURED WORK".

The screenshot shows the Forceful theme template. The header is dark orange with white text. It features a call-to-action "This theme is hot and tasty!" and a snippet of text: "Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab". Below the header is a large image of a bottle of Martini.

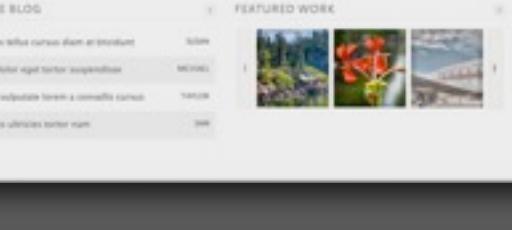
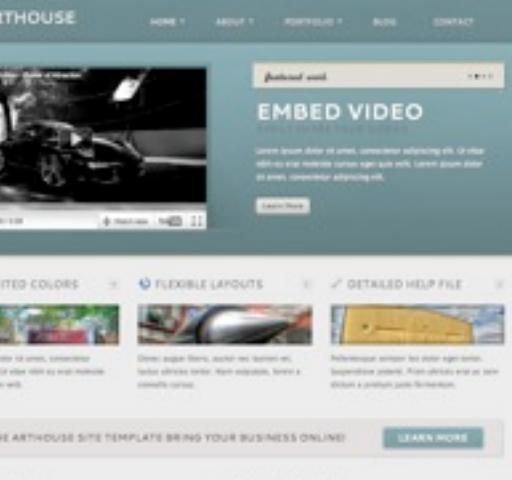
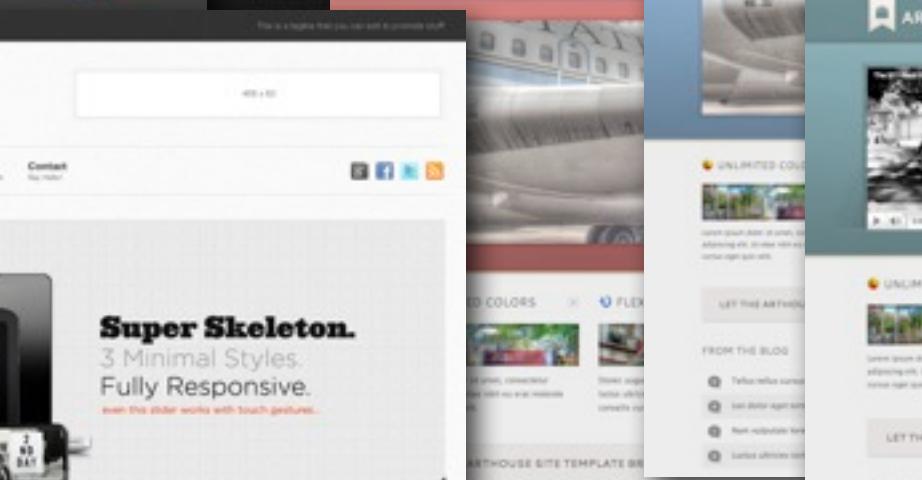
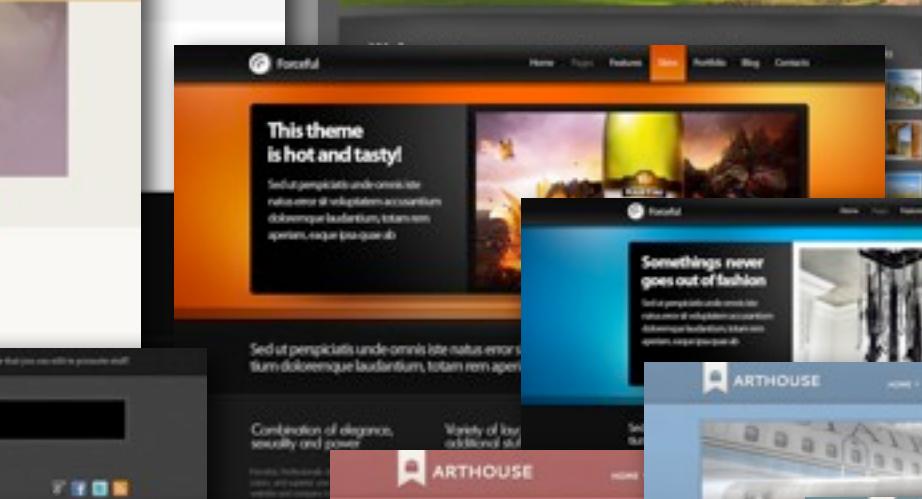
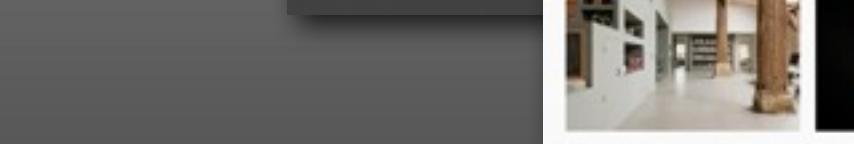
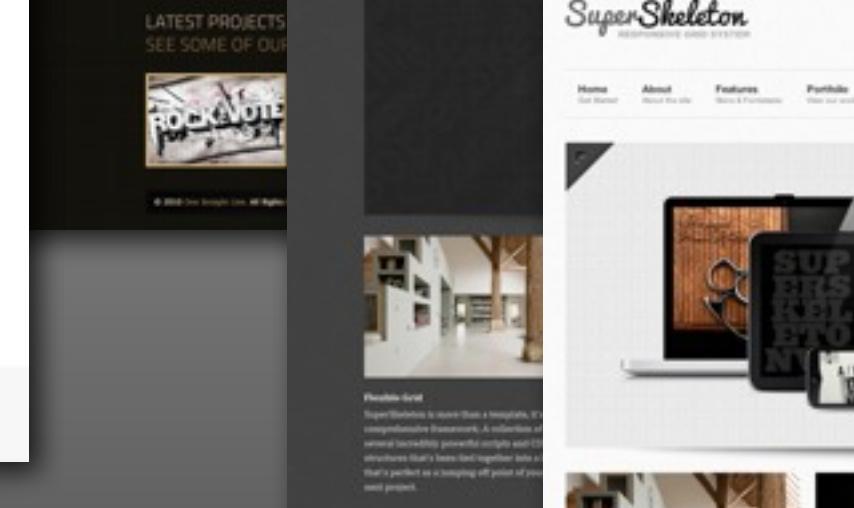
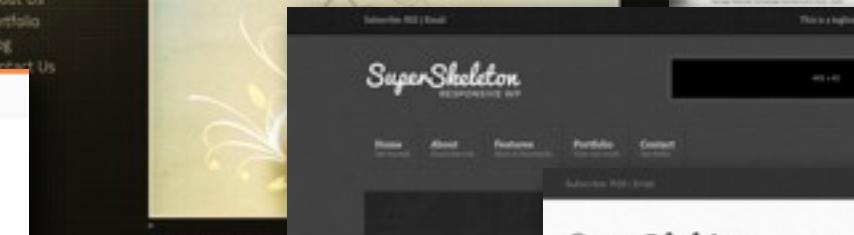
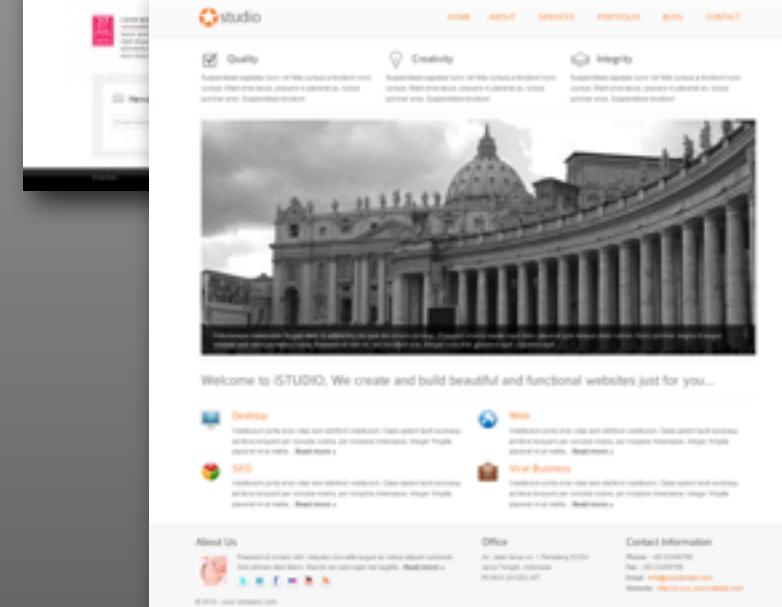
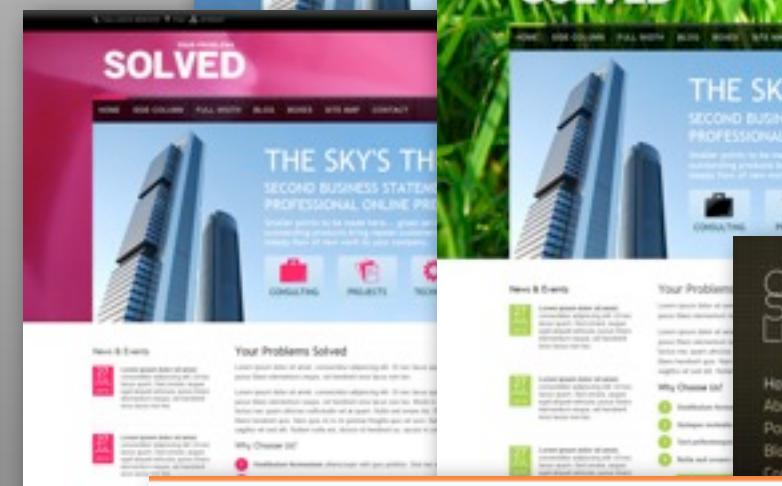
The screenshot shows the SuperSkeleton theme template. It features a large image of a smartphone and a laptop displaying the theme's design. To the right, there are three main sections: "Super Skeleton.", "3 Minimal Styles. Fully Responsive.", and "even this slider works with touch gestures..". Below these are three smaller images: a hallway, a wooden box with scissors, and a circular logo.

Super Skeleton.
3 Minimal Styles.
Fully Responsive.
even this slider works with touch gestures..

Flexible Grid
SuperSkeleton is more than a template, it's a comprehensive framework; A collection of several incredibly powerful scripts and CSS structures that's been tied together into a kit that's perfect as a jumping off point of your next project.

Responsive & Bulletproof
SuperSkeleton is responsive (try resizing your browser)... that means that it'll flex to fit massive screens, or itty bitty iPhone screens (and everything in between). Touch gestures even work on the slider!

Minimalist Styling
SuperSkeleton is well organized. Take what you love, leave what you don't, customize the rest. It's completely in your hands - turn it into the next big thing, or just as your little personal projects, it's up to you.



What's in it for me?

- Save Money
- Save Time
- Convenient
- Peace of Mind

Where To Find Files

- **{context}** = where Mura CMS resides within the website root
- **Site Level (*Site Directory Root*)**
`{context}/{SitelD}/`
- **Theme Level (“*Theme*” *Directory*)**
`{context}/{SitelD}/includes/themes/{ThemeName}`

Site Level

- **{context}/{SiteID}/**
 - /assets/
 - /cache/
 - /css/
 - /images/
 - /jquery/
 - /js/
 - /mobile/
 - /includes/
 - contentRenderer.cfc
 - eventHandler.cfc
 - /display_objects/
 - /themes/

Theme Level

- **{context}/{SiteID}/includes/themes/{ThemeName}/**
 - **/compiled/** (*ignore this directory*)
 - **/css/**
 - **/display_objects/**
 - **/images/**
 - **/js/**
 - **/resourceBundles/**
 - **/templates/**
 - **contentRenderer.cfc**
 - **eventHandler.cfc**

Site & Mura-Specific CSS

- **{context}/{SiteID}/css/**
 - **default.css** (deprecated)
simply imports reset.css and mura.css
 - **editor.css** (used if not in theme)
 - **mura.css** (mura.min.css)*
 - **print.css** (used if not in theme)
 - **reset.css** (reset.min.css)*
 - **shadowbox.css** (shadowbox.min.css)

Theme CSS

- **{context}/{SiteID}/includes/themes/{ThemeName}/css/**
 - **/core/**
 - merced.css
 - typography.css
 - **/editor/editor.css**
 - **/ie/**
 - **/mobile/mobile.css**
 - **/print/print.css**

JavaScript & jQuery

- **Found in:**
 - site root (/js/ & /jquery/)
 - **display_objects** (e.g. feedslideshow)
 - **theme**
- **Loads only when needed by default**
- **contentRenderer.cfc**
jsLib='jquery' & jsLibLoaded=true
- **Can be loaded dynamically**
 - \$.addToHTMLHeadQueue('path/to/file.cfm')
 - \$.addToHTMLFootQueue('path/to/file.cfm')

CfStatic

- Minifies and concatenates CSS & JavaScript
- Can also parse {less} css!
- <https://github.com/DominicWatson/cfstatic/wiki/About-CfStatic>

```
<!-- Theme-Specific Styles -->
<!-- ** Optimized Method of CSS Inclusion ** -->
<cf_Cache0Matic key="globalheadercss">
#$.static()
    .include("/css/core/")
    .include("/css/print/")
    .include("/css/ie/lte7/")
    .renderIncludes("css")#
</cf_Cache0Matic>
```

Where does markup live?

- Layout Templates
- Content Display Objects
- Components
- Content Templates (*within the Editor*)

Markup: Conventions

```
<h1> Site Name/Logo  
<ul class="navUtility"> Utility Navigation  
<form class="svSearch"> Search Form  
<ul id="navPrimary"> Primary Navigation  
<h2 class="pageTitle"> Page Title ("Title" field when editing)  
<h3> First Subhead and any Content Object Headings  
    <h4> Second Subhead  
    <h5> Third Subhead  
    <h6> Fourth Subhead
```

Layout Templates

- {context}/{SiteID}/includes/themes/{ThemeName}/**templates/**
- **Structure**
 - default.cfm
 - Layout Templates (home.cfm, two_col_SR.cfm, etc.)
 - /inc/ Directory
- **Template Variables**
- **CSS hooks**
 - Template Level
 - Object Level

Markup: Layout Template

```
<cfoutput>
<cfinclude template="inc/html_head.cfm" />
<body id="#$.getTopID()#" class="twoColSL depth#arrayLen($.event('crumbdata'))#">
<div id="container" class="#$.createCSSid($.content('menuTitle'))#">
    <cfinclude template="inc/header.cfm" />
    <div id="content" class="clearfix">
        <aside id="left">
            #$.dspObjects(1)#
        </aside>
        <article>
            <nav>#$.dspCrumbListLinks("crumblist","&ampnbsp&quo;&ampnbsp")#</nav>
            #$.dspBody(body=$.content('body'),pageTitle=$.content('title'),crumbList=0,
                      showMetaImage=1)#
            #$.dspObjects(2)#
        </article>
    </div>
    <cfinclude template="inc/footer.cfm" />
</div>
</body>
</html>
</cfoutput>
```

Display Regions

Site Settings

► Class Extension Manager ► Trash Bin ► Update Site Files to Latest Version ► Create Site Bundle

Basic Contact Info Shared Resources Modules Email Images Extranet Display Regions Deploy Bundle

Number of Display Regions
3

Primary Display Region (Dynamic System Content such as Login Forms and Search Results get displayed here)
2

Display Region Names ("^" Delimiter)
Left Column^Main Content^Right Column

Delete Update

Content Objects

Edit Content Type: Page Status: Published Update: 05/18/2012 10:23 AM

 Home

[View Active Content](#) [View Content Version](#) [Version History](#) [Permissions](#)

Type: **Page**

[Basic](#) [Meta Data](#) [Content Objects](#) [Categorization](#) [Related Content](#) [Extended Attributes](#) [Advanced](#)

Inheritance Rules

Inherit Cascade Start New Cascade Do Not Inherit Cascade

Content Objects

Available Content Objects

Select Object Type

>> **Left Column Content Objects** <<

Up
Down

>> **Main Content Content Objects** <<

Up
Down

Homepage Features – Local Index Slide Show [Summ Component – [Home] Features

Show Me The...



The Mura \$cope

- In CFML:
 - #\$.content('title')# OR #mura.content('title')#
- Within Content (via the WYSIWYG Editor):
 - [mura]\$.content('menuTitle')[/mura]

\$.content('attribute')

- Audience
- Body
- ContentID
- Created
- Credits
- Display
- DisplayStart
- DisplayStop
- FeatureStart
- FeatureStop
- FileExt
- FileID
- Filename
- Title
- HTMLTitle
- URLTitle
- MenuTitle
- KeyPoints
- LastUpdate
- LastUpdateBy
- MetaDesc
- MetaKeywords
- Notes
- ReleaseDate
- Summary
- Tags
- Template
- Type
- SubType
- **Plus custom class extensions!**
\$.content('myField');

Class Extension Manager

- **SubTypes / Extended Attributes**
(Think “Custom Fields”)
- **Adding and Managing Attributes Sets**
(Think “Sets of Custom Fields”)

`$.content('attribute', 'value')`

- `body = "<h3>I'm Sexy & I Know It</h3>";`
- `$.content('body', body);`
- `$.content().save();`

\$content()

- Access to all built-in contentBean methods:
 - save()
 - getParent()
 - getKidsIterator()
 - getRelatedContentIterator()
 - getURL()
 - getAllValues()
 - etc.

Mobile Support

- Based on jQuery Mobile
- Auto-detects mobile devices
- Serves mobile.cfm to any mobile device
- Mobile Navigation Toggle
- Mobile-Specific Content Option
(via *Extended Attribute called “MobileContent”*)
- MobileMura plugin
(<https://github.com/Lagaffe/MobileMura>)

EXTREMESURFING

TEMPLATE DESIGN BY CSS TEMPLATES

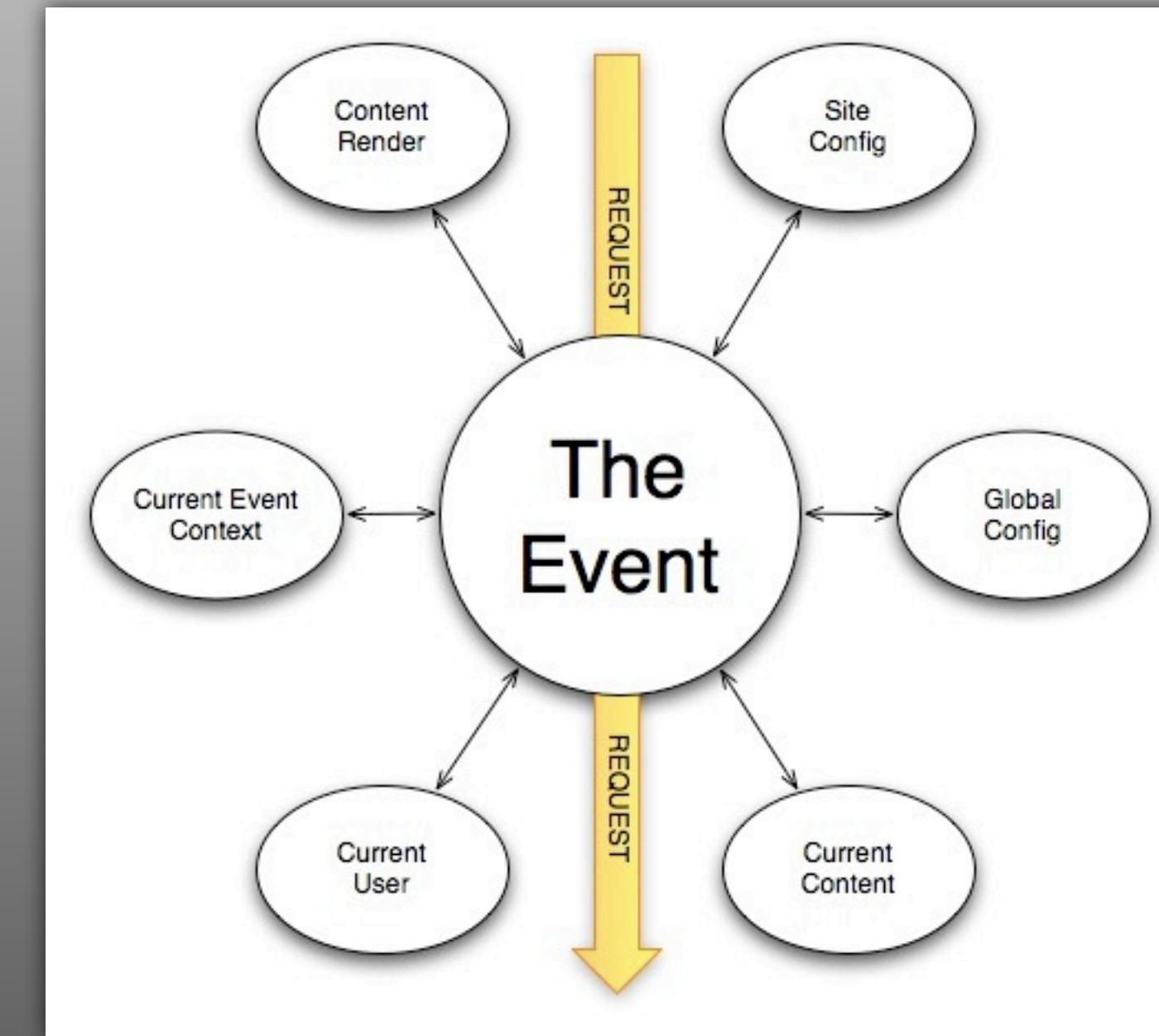
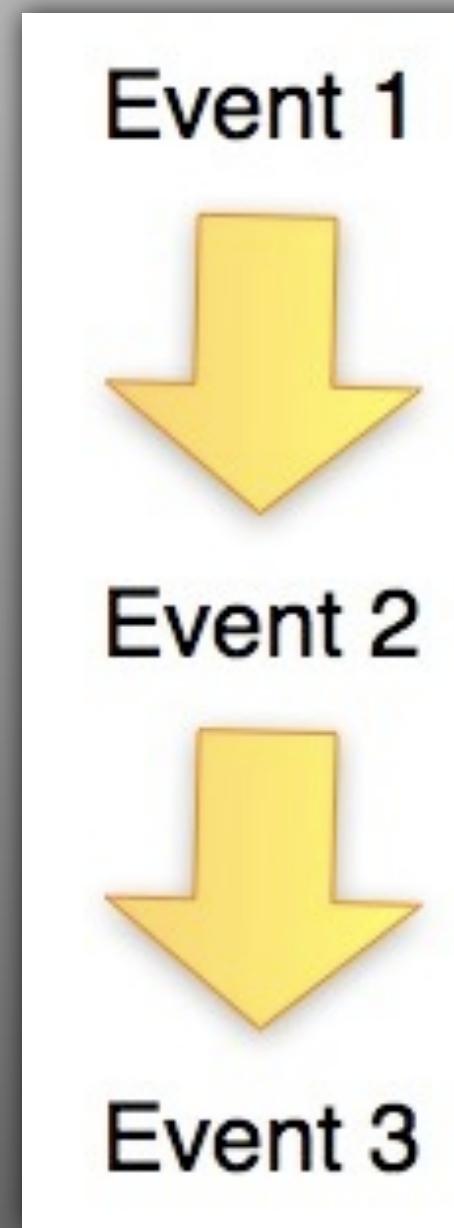
[HOMEPAGE](#)[BLOG](#)[PHOTOS](#)[ABOUT](#)[LINKS](#)[CONTACT](#)

Other \$scopes

- **\$event()**
- **\$siteConfig()**
- **\$globalConfig()**
- **\$component()**
- **\$currentUser()**

Mura Events

- applicationFlow = “chain of events that fire in sequence”;
- Each link in the chain can be intercepted to:
 - Provide additional OR,
 - even *replace* business logic.



Mura Plugins

- Extend Mura CMS or Add Functionality
- Distributable Package
- Custom Administrator
- Display Objects
- Event Handlers

Talking to Mura via \$

- Direct access to the Bean Factory: `$.getBean()`
- Mura events: `$.event()`, `$.announceEvent()`, etc.
- Sub-scopes: `$.content()`, `$.currentUser()`,
`$.globalConfig()`, `$.siteConfig()`, etc.
- Helpers: `$.getContentRenderer()`, `$.getPlugin()`, etc.
- Loading: `$.getBean('user').loadBy(username='steve')`

Plugin Anatomy

- *index.cfm**
- **/plugin/**
 - **config.xml.cfm**
 - *plugin.cfc**
 - *config.cfm**
- **Optional*

Plugin Anatomy

- *index.cfm**
- **/plugin/**
 - **config.xml.cfm**
 - *plugin.cfc**
 - *config.cfm**
- **Optional*
- *That's all you need...really!*

config.xml.cfm

- **Plugin Configuration File**
 - **Setup Variables** (base & custom)
 - **Register Display Objects**
 - **Register Event Handlers**

config.xml.cfm

```
<cfoutput>
    <plugin>
        <name>Plugin 1</name>
        <package>plugin1</package>
        <directoryFormat>packageOnly</directoryFormat>
        <loadPriority>5</loadPriority>
        <version>0.0.1</version>
        <provider>Blue River Interactive Group</provider>
        <providerURL>http://getmura.com</providerURL>
        <category>Application</category>
        <settings />
        <eventHandlers></eventHandlers>
        <displayObjects location="global"></displayObjects>
    </plugin>
</cfoutput>
```

config.cfm

Hooking Into Mura

```
<cfscript>

    if ( !IsDefined('$') ) {
        $ = application.serviceFactory.getBean('muraScope').init(session.siteid);
    }

    if ( !IsDefined('pluginConfig') ) {
        pluginConfig = $.getBean('pluginManager').getConfig('packageName');
    }

</cfscript>
```

pluginConfig =

- `$.getBean('pluginManager').getConfig('packageName');`
- Some of the available methods:
 - `.getDirectory()`
 - `.getPackage()`
 - `.getName()`
 - `.getApplication()`
 - `.getSession()`
 - `.getAssignedSites()`
 - `.getSetting(), getSettings()`
 - etc.

index.cfm

```
<cfscript>

    include 'plugin/config.cfm';

    savecontent variable='body' {
        WriteOutput('<h2>' & HTMLEditFormat(pluginConfig.getName()) & '</h2>');
        WriteOutput('<p>This is my first Mura CMS plugin!</p>');
    };

    WriteOutput(
        $.getBean('pluginManager').renderAdminTemplate(
            body = body
            , pageTitle = pluginConfig.getName()
        )
    );

</cfscript>
```

Admin Template

- Optionally use the Mura CMS Admin look and feel

The screenshot shows the Mura CMS Admin interface. The top navigation bar includes links for Administrative Users, Site Settings, Edit Profile, and Help. A welcome message for Steve Withington indicates an automatic logout in 2:59:17. The left sidebar menu lists various site management options: Select Site, Dashboard, Site Manager, Change Sets, Components, Plugins (which is currently selected), Categories, Content Collections, Forms, Site Members, Advertising, Email Broadcaster, Mailing Lists, File Manager, Permissions, and Reload Application. The main content area displays the title "My First Plugin" and the sub-content "This is my wicked plugin!". A large black callout box highlights the following code snippet:

```
$ .getBean('pluginManager').renderAdminTemplate(  
    body = myBodyVariable,  
    pageTitle = pluginConfig.getName()  
)
```

Core Version 5.6.4910
Site Version 5.6.4910



plugin.cfc

```
component accessors=true extends='mura.plugin.plugincfc' output=false {

    // Plugin's config is automatically available as 'variables.pluginConfig'

    public any function install() {
        // Do custom installation stuff
        super.install();
    };

    public any function update() {
        // Do custom update stuff
        super.update();
    };

    public any function delete() {
        // Do custom delete stuff
        super.delete();
    };

}
```

Display Objects

Edit Content

Type: Page Status: Published Update: 03/30/2012 5:56 PM

Home

► View Active Content ► View Content Version ► Version History ► Permissions

Type: **Page**

Basic Meta Data **Content Objects** Categorization Related Content Extended Attributes Advanced

Inheritance Rules 

Inherit Cascade Start New Cascade Do Not Inherit Cascade

Content Objects

Available Content Objects

Plugins
Select Plugin

>> << Up Down

Left Column Content Objects

>> << Up Down

Main Content Content Objects

Display Objects

```
<displayObjects location="global">

    <displayObject name="Display Hello from CFM File"
        displayobjectfile="extensions/inc/dsp_hello.cfm" />

    <displayObject name="Display Hello from CFC Component"
        component="extensions.displayObjects"
        displaymethod="dspHello"
        persist="false" />

</displayObjects>
```

Display Objects: .CFM

```
<cfsilent>
<!--

    This is essentially just a simple 'include' file.
    You could do whatever you need here (e.g. db lookups, etc.)
    Also, since this will be rendered via the front-end,
    you have access to the Mura $cope!

-->
</cfsilent>
<cfoutput>
    <h3>Hello from dsp_hello.cfm</h3>
</cfoutput>
```

Display Objects: .CFC

```
component extends='mura.plugin.pluginGenericEventHandler' {  
    public any function dspHello(struct $) {  
        return '<h3>Hello from dspHello()</h3>';  
    };  
}
```

Event Handlers

- Mura has a strong event model
 - Front End Requests
 - Contextual
 - Renderer & Handler Events

Event Handlers

```
<eventHandlers>

    <eventHandler event="onApplicationLoad"
                  component="extensions.eventHandler"
                  persist="false" />

</eventHandlers>
```

eventHandler.cfc

```
component extends='mura.plugin.pluginGenericEventHandler' output=false {  
    public any function onApplicationLoad(struct $) {  
        variables.pluginConfig.addEventHandler(this);  
    };  
  
    public any function onPageDefaultBodyRender(struct $) {  
        var local = {};  
        $.content('title', 'Hijacked!');  
        local.body = '<h3>' & $.content('title') & '</h3>' & $.content('body');  
        return local.body;  
    };  
}
```

Advanced Options

- Frameworks: FW/1, ColdBox, Mach II, Fusebox, etc.
- ORM Friendly
- Custom Events
- Install: custom databases, bundles

Why Plugins?

- Update Safe
- Packaged
- Distributable
- Licensing
- Framework-Friendly

When Plugins?

- **NO**

Small extensions and modifications to Mura CMS

No chance you are distributing or extending

- **YES**

Distributed

Related files

Large or complex

Support

- Mura CMS Forum
- Mura Show
- Paid Support Plans: Short-Term & Annual
- In-Person Training: Admin, Front-End, Back-End
- Online Training: Customized for Your Needs

More Information

- GetMura.com
- BlueRiver.com
- MuraHosting.com
- Github.com/blueriver