

# Modern ColdFusion Application User Interfaces

Replace ColdFusion's built-in UI controls with HTML5 and modern CSS and JavaScript libraries.

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# ColdFusion UI Components

For a number of versions, ColdFusion has shipped a collection of UI components based on Ext JS or Flash / Flex.

Data tags	UI	UI	UI
cfajaximport	cfdiv	cfmenu	cftextarea
cfajaxproxy	cfgrid	cfmessagebox	cftree
cfspydataset	cfinput	cfpod	cftooltip
	cflayout	cfprogressbar	cfwindow
	cfmap	cfselect	

# Why use ColdFusion UI?

“If you know ColdFusion, you can create interactive User Interfaces”

- Easy to implement layout controls.
- Cross-browser UI controls.
- Remove the need to write JavaScript.
- Remove the need to know JavaScript.

# ColdFusion UI uses Ext JS

Many of the UI components that ship with ColdFusion are based on the Ext JS library.

<http://www.sencha.com/products/extjs/>

- ColdFusion 8: version 1.x
- ColdFusion 9: version 3.1
- ColdFusion 10: version 3.1
- Ext JS is currently at version 4.2

# ColdFusion UI also uses YUI

- Widgets like CFMENU use Yahoo's YUI library.
- <http://yuilibrary.com/>
- ColdFusion 10 ships with version 2.3.
- YUI is currently at version 3.9.1.

# ColdFusion UI even uses Spry

- The copy of SpryData.js that ships with ColdFusion 10 is “Pre-Release 1.6”.
- The latest version is “Pre-Release 1.6.1”.
- Spry was moved to open source on August 29, 2012. It hadn’t been updated since 2006-ish as far as I can find. <https://github.com/adobe/Spry>
- I’ve edited our application’s copy in order to provide missing functionality without refactoring to a different library.

# Backwards Compatibility

- Mostly backwards compatible.
- As you upgrade ColdFusion, things generally work the same.
- You still need to test before you upgrade production servers.



# Mixed instances are a nightmare.

- During the process of upgrading from CF 8 to CF9, many QA servers had instances of both versions on the same physical machine.
- JavaScript clashes were a daily occurrence.
- E.g. Ajax call instantiated by CF 8, answered by CF9 = missing arguments.

# CFMENU

- Here's some example code from [an obscure ColdFusion blog](#).
- It generates a simple menu with a 2<sup>nd</sup> level drop-down menu.
- CFMENU causes the server to parse CFML, generate HTML and load uncompressed JS and CSS files.
- This can cause add at least 328k to the first request.
- The server will generate HTML and JS on every request.

```
<cfmenu bgColor="##c0c0c0">
  <cfmenuitem display="Adobe" href="http://www.adobe.com" />
  <cfmenuitem display="Products">
    <cfmenuitem display="ColdFusion" href="http://www.adobe.com/go/coldfusion" />
    <cfmenuitem display="Flash" href="http://www.adobe.com/go/flash" />
  </cfmenuitem>
</cfmenu>
```



CFWINDOW

# Styling CF UI to Your Design



You can apply simple styling (fonts & colors).

# Friends don't let friends use CF UI

- Via Coding Standards, we've outlawed these tags and more in favor of native HTML5, JavaScript, jQuery and selected JS libraries.
- CSS libraries like BlueprintCSS, YUI, jQueryUI or Twitter Bootstrap provide simple, lightweight alternatives.
- If you want to use Ext JS UI components, just use Ext JS with CF providing data.

# Twitter Bootstrap

Bootstrap from Twitter was launched in late 2011, “a front-end toolkit for rapidly developing web applications. It is a collection of CSS and HTML conventions. It uses some of the latest browser techniques to provide you with stylish typography, forms, buttons, tables, grids, navigation and everything else you need in a super tiny (only 6k with gzip) resource”.

<http://twitter.github.io/bootstrap/index.html>

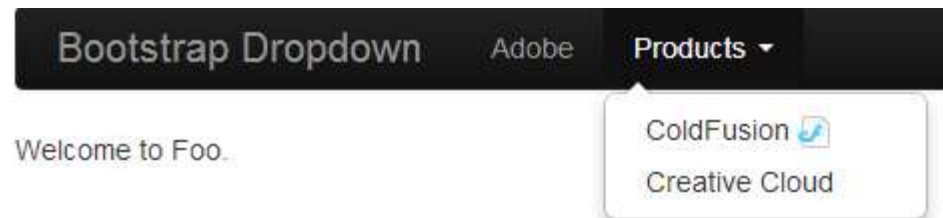
# Bootstrap is the De Facto Standard

- The Bootstrap developers knew it was a real hit when piles of Twitter phishing sites launched after its debut.
- So easy a CEO can do it.
- You don't need to know CSS or in some cases, JavaScript.
- Just read the documentation. It's just a few HTML pages.

# Bootstrap Dropdown

- Bootstrap is HTML w/ 1 min js & min css. **228k**

```
<ul class="nav">
  <li><a href="http://www.adobe.com">Adobe</a></li>
  <li class="dropdown">
    <a href="#" class="dropdown-toggle" data-toggle="dropdown">Products <b class="caret"></b></a>
    <ul class="dropdown-menu">
      <li><a href="http://www.adobe.com/go/coldfusion">ColdFusion </a></li>
      <li><a href="http://www.adobe.com/products/creativecloud.html">Creative Cloud</a></li>
    </ul>
  </li>
</ul>
```





# CFDIV vs. jQuery

- Load the content of a text input into a DIV.

```
<form>
  <input type="text" id="myText" name="myText" value="" />
</form>
```

```
<cfdiv bind="url:divsource.cfm?InputText={myText}" ID="myDiv"
  style="background-color:##CCFFFF; color:red; height:350"/>
```

**vs.**

```
<script type="text/javascript">
$(document).ready(function(){
  $('#myText').on('change', function(){
    $('#myDiv').html($(this).val());
  });
});
</script>
```

# CFWindow vs. TB Modal

# AutoSuggest vs. Typeahead

# CFTooltip vs. Tooltip

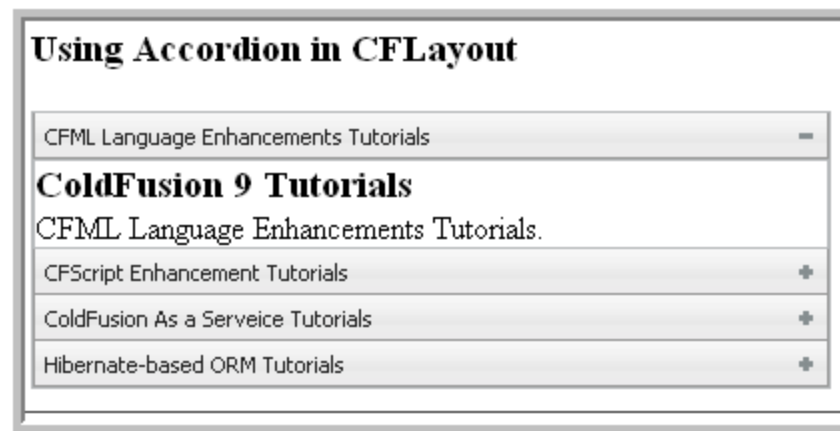
# CFFileUpload

- [http://www.adobe.com/devnet/coldfusion/articles/coldfusion\\_9\\_uicontrols.html](http://www.adobe.com/devnet/coldfusion/articles/coldfusion_9_uicontrols.html)
- `<cffileupload url="uploadFiles.cfm" bgcolor="##ffffff"/>`



# CFLayout

- <http://www.akbarsait.com/blog/index.cfm/2009/7/21/ColdFusion-9-Using-Accordion-in-CFLayout>



# CFGrid

- Ext.js grid

Name	Type
Lucky 13	Non-fiction
Shopping Mart Mania	Non-fiction
Stand Out Or Sit Down	Non-fiction
The Living Portrait	Non-fiction
The Look of Innovation	Fiction
The Road	Fiction
Velocity	Fiction

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# CFGRID has a width problem

- One thing I stumbled upon was the fact that CFGRID no longer supports percentages in the width attribute.

```
view plain    print    about
1 <cfgrid name = "FirstGrid" format="Flash"
2   height="320" width="100%" <!-- Works in CF8 -->
3   font="Tahoma" fontsize="12"
4   query = "GetCourses">
5 </cfgrid>
```

Run that code in ColdFusion 9 or 10 and BOOM!

Attribute validation error for the CFGRID tag.  
height/width attribute cannot be a percentage value.

- Things like this really ruin your day.



# jQuery DataTables

- <http://datatables.net>
  - Display from multiple data sources
  - i18n support
  - jQuery UI [Theme Roller support](#)
  - Twitter Bootstrap [support](#)
  - Backed by 2900 Unit Tests

# Handlebars.js for dynamic HTML

# UI Control Comparison

ColdFusion UI Controls	HTML, JavaScript & CSS
CFWindow CFMessageBox	Bootstrap: Modal
CFAutoSuggest	Bootstrap: Typeahead
CFTooltip	Bootstrap: Tooltip
CFFileUpload	HTML5: <input type="file" multiple>
CFGrid	jQuery: DataTables

# ColdFusion Art Gallery

- The rest of the presentation will be conducted in code.
- Using an Apache Derby Embedded database.
- Images licensed under Creative Commons
- Twitter Bootstrap
- jQuery
- Handlebars.js