

UBCMS Master Class

REST API Embedding

Kevin Eye - 5/8/2014

<http://bit.ly/ubcms-rest>

Recap: External Embed

The screenshot displays the UBCMS Demo Site interface. The browser address bar shows the URL: <https://ubcms-author.buffalo.edu/content/demo/components/developer/external.html>. The site header includes the University at Buffalo logo and the text "University at Buffalo The State University of New York | REACHING OTHERS". A search bar is located in the top right corner.

The main navigation bar includes tabs for "Template Examples", "Component Examples", "Design Examples", and "Tests". Below this, a breadcrumb trail reads: "UBCMS Demo Site > Component Examples > Developer Components > External Embed".

The left sidebar, titled "Component Examples", lists various component categories: "Content Components", "Shared Content Components", "Developer Components", and "Special Purpose Components". Under "Developer Components", the following items are listed: "Shared Content Reference", "HTML Package", "HTML Snippet", "External Embed", "Errors", and "Tab Panel". The "External Embed" item is currently selected.

The main content area is titled "External Embed". It contains the following text: "This content is drawn in on demand from an [external location](#) through a server-side HTTP request using the CQ 'External' component." Below this text, a section titled "From external.html" lists three options: "Go to page 2", "External page (Google.com)", and "Page with assets". A dashed box below these options is labeled "External Embed - Example Embed".

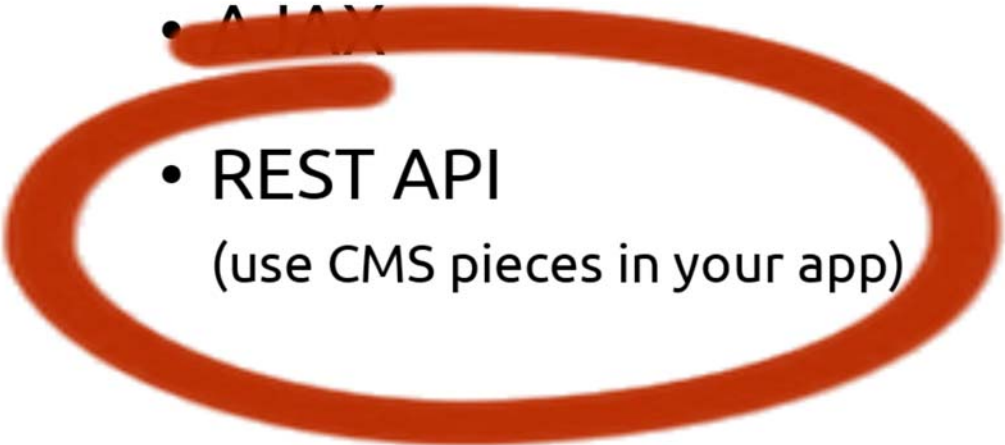
On the right side of the main content area, there is a dashed box labeled "Drag components or assets here".

On the far right, a "CQ5" component palette is visible, showing a list of components: "Core Components", "Form Components", "More Components", "JUnit Testing", "RWD Components", "Related Content Components", "Sidebar Components", "Specialist Components", "External Embed", "HTML Package", and "HTML Snippet". The "External Embed" component is highlighted in the palette.

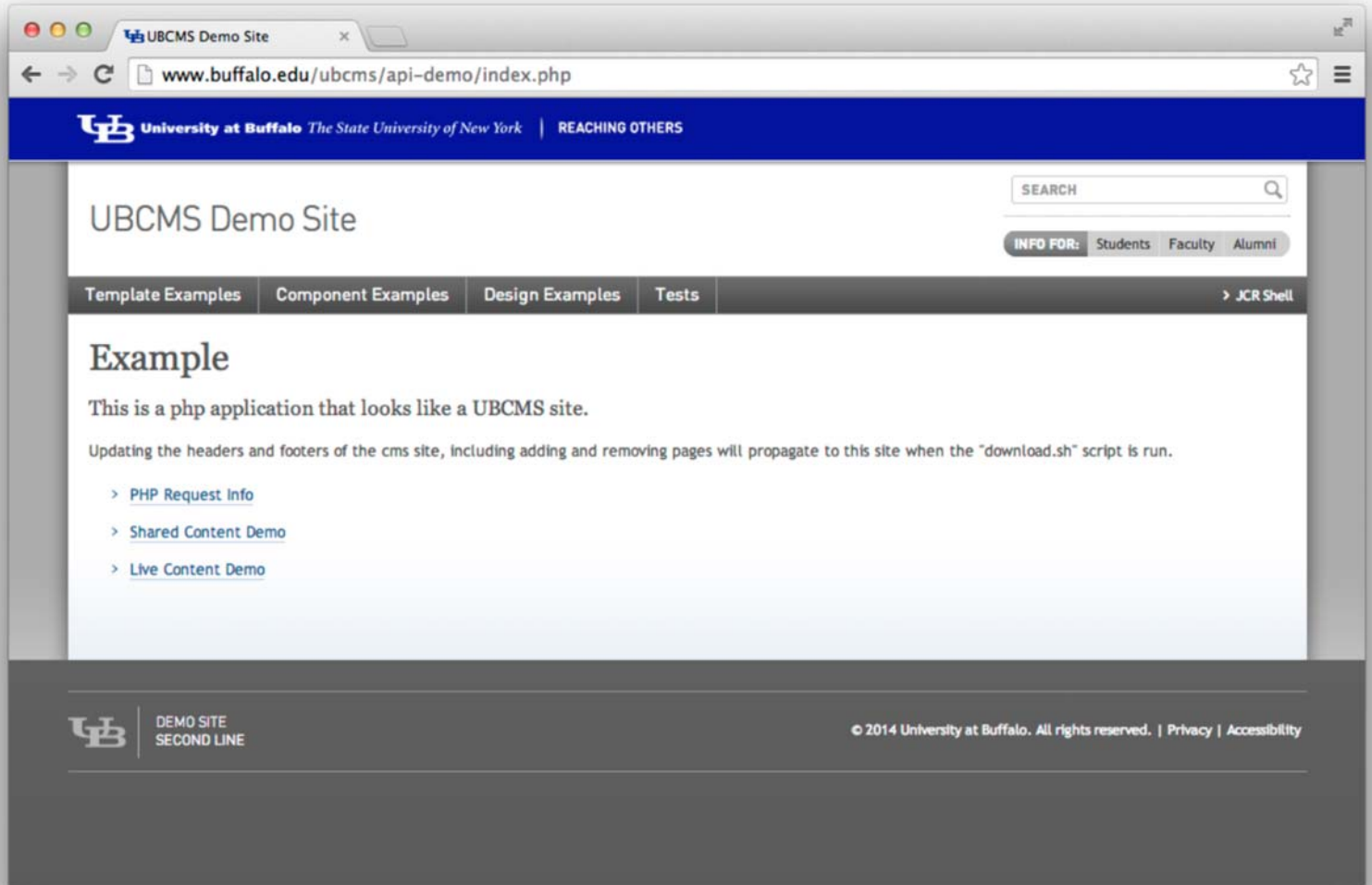
Alternatives

- HTML Component
- <iframe>
- AJAX
- REST API
(use CMS pieces in your app)

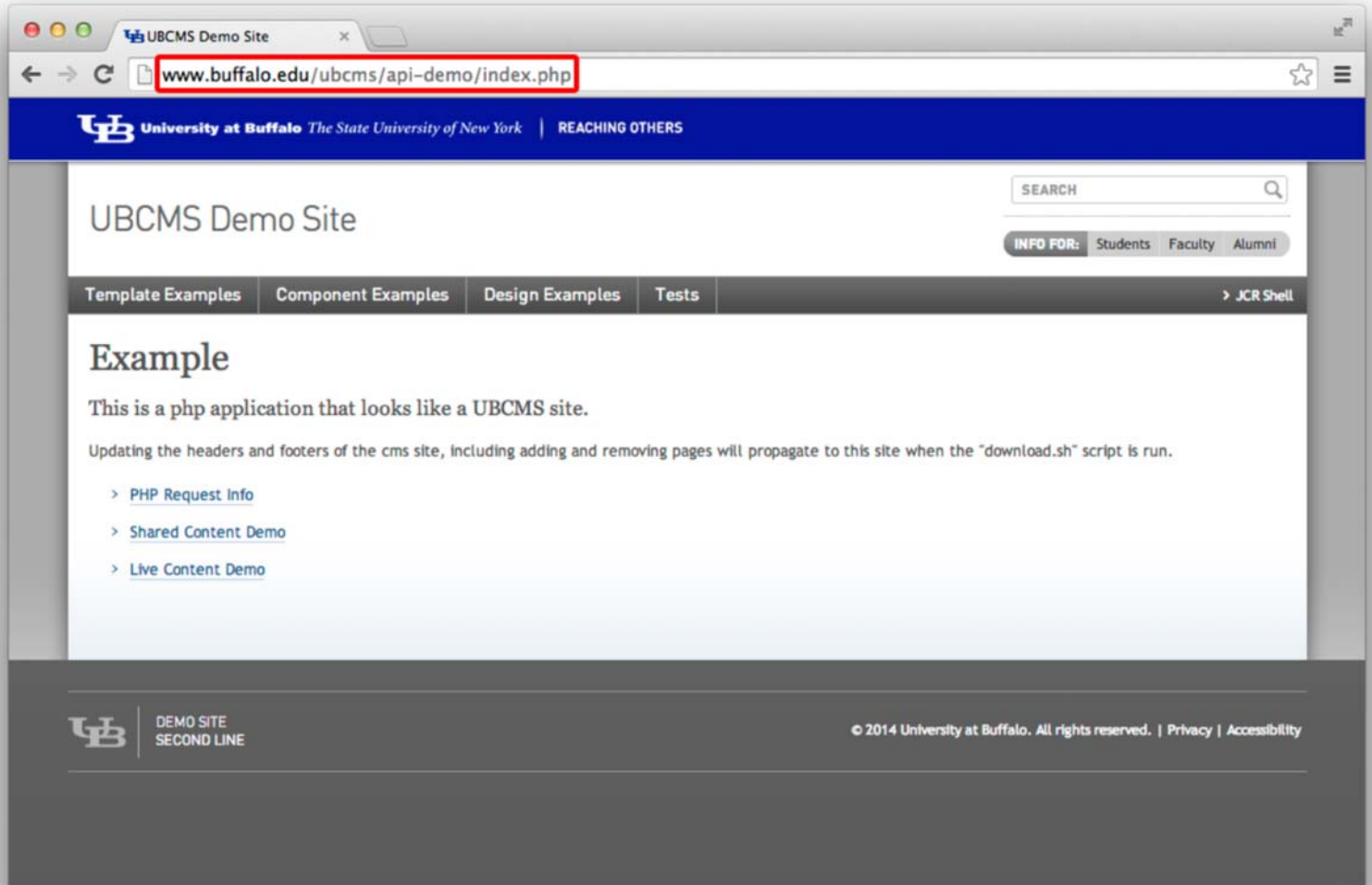
Alternatives

- HTML Component
 - <iframe>
 - ~~AJAX~~
 - REST API
(use CMS pieces in your app)
- 

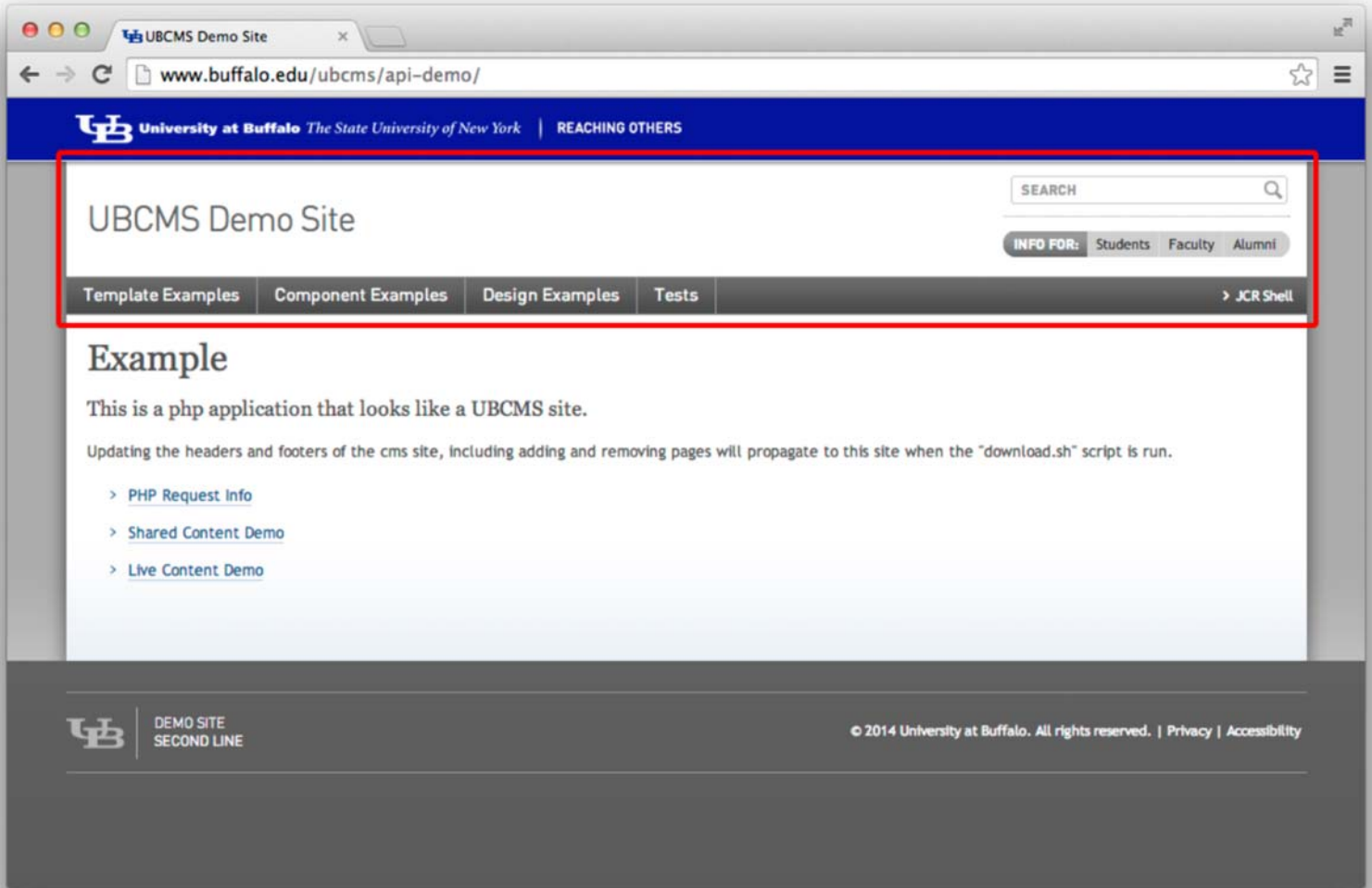
External App with CMS Pieces



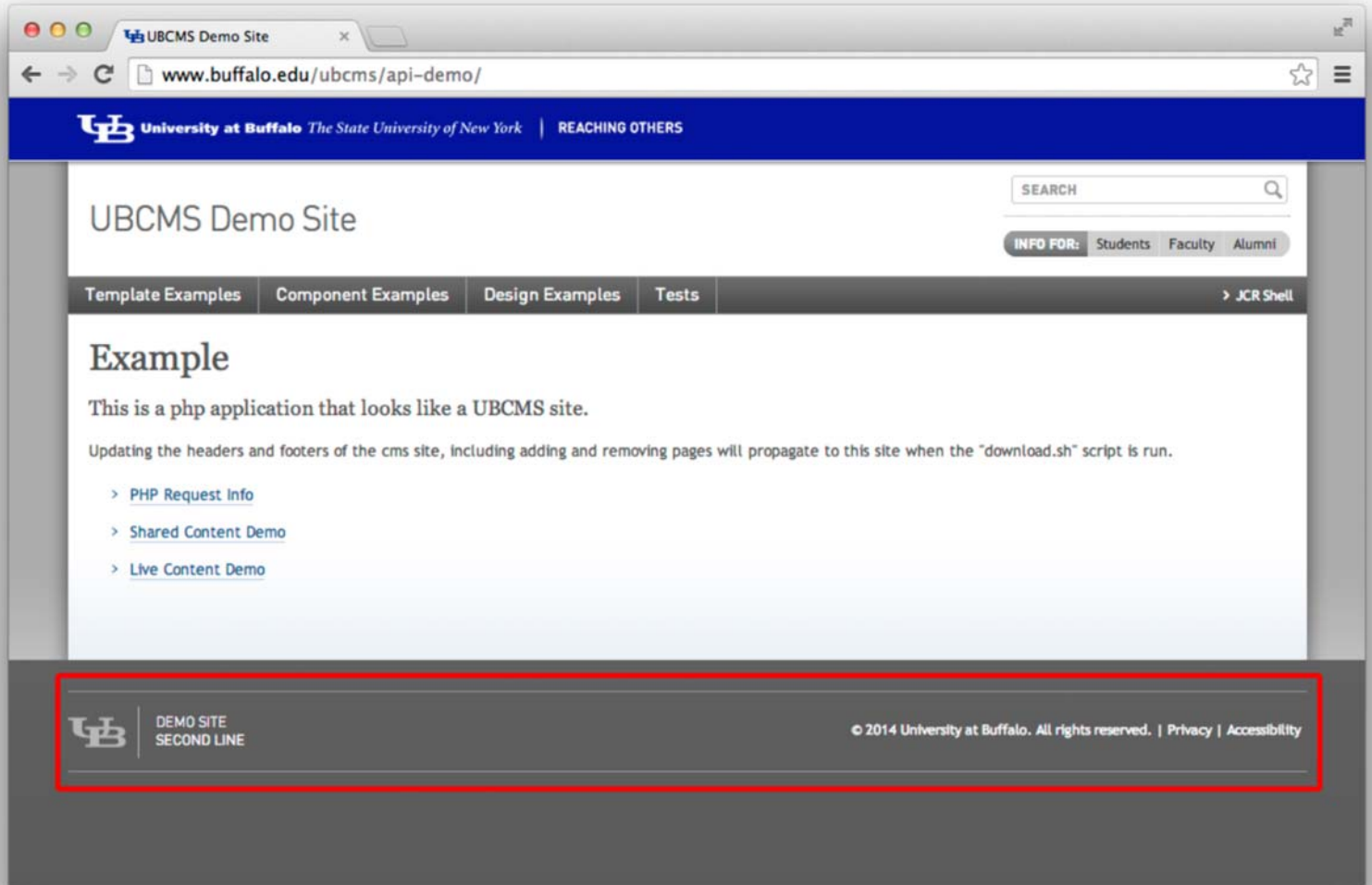
External App with CMS Pieces



External App with CMS Pieces



External App with CMS Pieces



External App with CMS Pieces

```
1 <!DOCTYPE HTML>
2 <html>
3 <head>
4   <meta http-equiv="content-type" content="text/html; charset=UTF-8">
5   <meta name="viewport" content="width=device-width,initial-scale=1">
6   <title>UBCMS Demo Site</title>
7   <link rel="stylesheet" href="//www.buffalo.edu/etc/designs/ubcms/clientlibs.min.css" type="text/css">
8   <link rel="stylesheet" href="//www.buffalo.edu/etc/designs/ubcms/clientlibs-rwd.min.css" type="text/css">
9   <link rel="stylesheet" href="css/main.css" type="text/css">
10  <script type="text/javascript" src="//www.buffalo.edu/etc/designs/ubcms/clientlibs.min.js"></script>
11  <script type="text/javascript" src="//www.buffalo.edu/etc/designs/ubcms/clientlibs-rwd.min.js"></script>
12 </head>
13 <body class="page contentpage">
14   <div class="outerheader ubheader">
15     <div class="inner">
16       <a class="ublogo" href="http://www.buffalo.edu/">
20   </div>
21   <div id="page"><div class="page-inner"><div class="page-inner-1"><div class="page-inner-2"><div class="page-inner-2a"></
22   <div class="innerheader"><? include "ubcms/header.html" ?></div>
23   <div id="columns" class="one-column clearfix"><div class="columns-bg columns-bg-1"><div class="columns-bg columns-bg
24     Your content here.
25   </div></div></div></div></div></div>
26 </div></div></div></div></div>
27 <div class="footer"><? include "ubcms/footer.html" ?></div>
28 </body>
29 </html>
```

External App with CMS Pieces

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```

External App with CMS Pieces

```
1  #!/bin/bash
2
3  mkdir -p includes/ubcms
4  cd includes/ubcms
5
6  curl -fsSo header.html http://www.buffalo.edu/content/demo/config/header/jcr:content/par.html
7  curl -fsSo footer.html http://www.buffalo.edu/content/demo/config/footer/jcr:content/par.html
8
9  curl -fsSo article.html http://www.buffalo.edu/content/demo/shared/articles/example_news_article.detail.html
10 curl -fsSo slidedeck.html \
11     http://www.buffalo.edu/content/demo/components/shared/slide-deck-vertical-new/jcr:content/par/slidedeck2v.html
```

Deconstructing a Page

<https://ubcms.author.buffalo.edu/content/demo.html>

CRXDE Lite

<https://ubcms.author.buffalo.edu/crx/de/>

Java Content Repository

- Content Repository API for Java
 - JSR-170 (version 1)
 - JSR-283 (version 2)
- Apache Jackrabbit (reference implementation)
- Adobe CRX (Content Repository Extreme)

Java Content Repository

- Queryable records with fields, like database
 - holds structured data
- Tree structure, like a folders and files
 - natural organization and URLs
- Terminology
 - folders/files/records = “nodes”
 - fields = “properties”
 - tables = “node types”

Deconstructing a Page

<https://ubcms.author.buffalo.edu/content/demo.html>

<https://ubcms.author.buffalo.edu/content/demo/>

<https://ubcms.author.buffalo.edu/content/demo/jcr/content/>

<https://ubcms.author.buffalo.edu/content/demo/jcr/content.xml>

<https://ubcms.author.buffalo.edu/content/demo/jcr/content.json>

<https://ubcms.author.buffalo.edu/content/demo/jcr/content.json>

<https://ubcms.author.buffalo.edu/content/demo/jcr/content/col/flexmodule.json>

<https://ubcms.author.buffalo.edu/content/demo/jcr/content/col/flexmodule.html>

```
curl -u user:pass -
```

```
https://ubcms.author.buffalo.edu/content/demo/jcr/content.json
```

```
curl -u user:pass -
```

```
https://ubcms.author.buffalo.edu/content/demo/jcr/content/col/flexmodule.html
```

Deconstructing a Page

<http://www.buffalo.edu/content/demo.html>

<http://www.buffalo.edu/content/demo/>

<http://www.buffalo.edu/content/demo/jcr/content/>

<http://www.buffalo.edu/content/demo/jcr/content.xml>

<http://www.buffalo.edu/content/demo/jcr/content.json>

<http://www.buffalo.edu/content/demo/jcr/content.json>

<http://www.buffalo.edu/content/demo/jcr/content/col1234567890flexmodule.json>

<http://www.buffalo.edu/content/demo/jcr/content/col1234567890flexmodule.html>

curl <http://www.buffalo.edu/content/demo/jcr/content.json>

curl http://www.buffalo.edu/content/demo/jcr/content/col1234567890flexmodule.html

Deconstructing a Page

Finding a URL:

1. Go to page on author
2. Change “.html” to “/” in URL
3. Navigate into jcr:content and to component
4. Add “.html” or “.json”
5. Change that URL to published URL

Or use CRXDE:

1. Open <https://ubcms-author.buffalo.edu/crx/de>
2. Drill down /content -> site -> page -> component
3. Copy node path at top

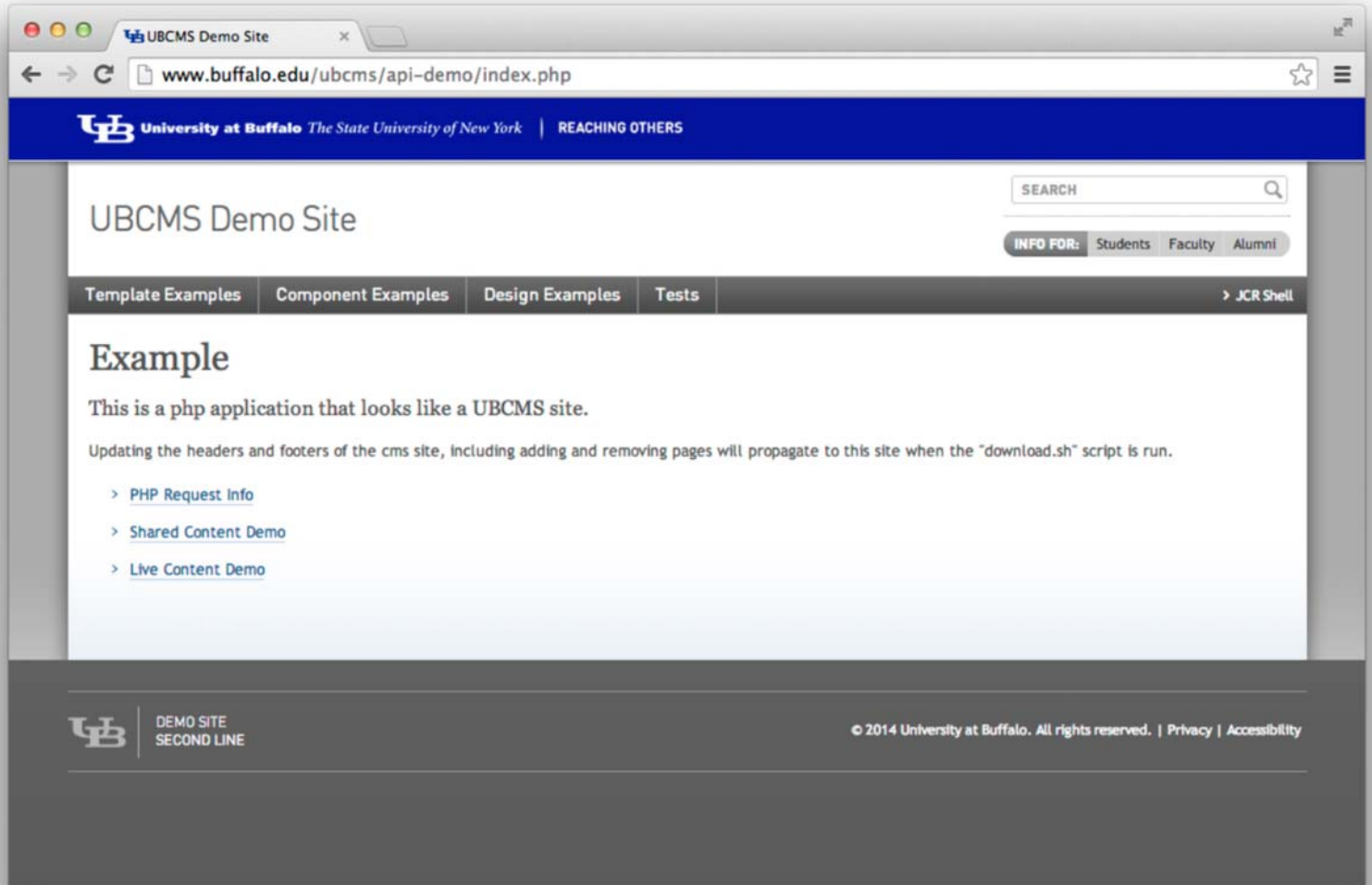
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External App with CMS Pieces



Gotchas

- Tightly coupled with UBCMS HTML, CSS, JS
- Links to pages and assets (images) are relative
- Dependency tracking - what pages are used where?

Manipulating Content

- Looked at content retrieval (GET)
- Almost anything can be POSTed, too

<https://ubcms.author.buffalo.edu/content/demo/jcr/content/col/flexmodule/json>

<https://ubcms.author.buffalo.edu/content/demo/jcr/content/col/flexmodule/jcr/title>

```
curl -u user:pass -X
```

```
https://ubcms.author.buffalo.edu/content/demo/jcr/content/col/flexmodule/jcr/title
```

```
curl -u user:pass -Xjcr:title=Hello World -X
```

```
https://ubcms.author.buffalo.edu/content/demo/jcr/content/col/flexmodule
```

Manipulating Content

□

```
□jcr:primaryType□□ □cq:Page□□
□jcr:content□□ □
  □pageType□□ □threeColumn□□
  □sling:resourceType□□ □wci:components□page□contentpage□□
  □jcr:title□□ □REST Demo Page□□
  □jcr:primaryType□□ □cq:PageContent□□
  □cq:template□□ □apps□wci□templates□contentpage□□
  □par□□ □
    □sling:resourceType□□ □foundation□components□parsys□□
    □title□□ □
      □sling:resourceType□□ □wci:components□content□title□□
      □type□□ □h□□□
    □□
    □text□□ □
      □jcr:lastModifiedBy□□ □eye□□
      □textIsRich□□ □true□□
      □sling:resourceType□□ □wci:components□content□text□□
      □text□□ □<p>This is some text□<□p> □
```

□

□

□

□

Manipulating Content

Sling POST Servlet

<http://bit.ly/sling-post-servlet>

```
curl -u user:pass -F operation=import -F contentType=json -F contentFile=@page.json -F nameHint=rest-demo https://ubcms.author.buffalo.edu/content/demo
```

```
curl -u user:pass -F operation=delete https://ubcms.author.buffalo.edu/content/demo/rest-demo
```


Links

- **Presentation**

<http://bit.ly/ubcms-rest>

<http://bit.ly/ubcms-rest.pdf>

- **Example code**

<http://github.com/kevineye/ubcms-rest-example>

- **CRXDE Lite**

<https://ubcms.author.buffalo.edu/crxde>

- **Content repository API for Java**

http://en.wikipedia.org/wiki/Content_repository_API_for_Java

- **Sling Post Servlet**

<http://bit.ly/sling-post-servlet>