The UCLA MWF

Framework Showcase

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Overview

1. Framework Semantics & Components
2. Advanced Use Cases for Content Providers
3. Framework Deployment for Service Providers
Framework Semantics & Components

The basic functionality offered by the MWF
Framework Components

- Base CSS and Javascript handlers:

  `<link rel="stylesheet" href="http://m.ucla.edu/assets/css.php">`

  `<script type="text/javascript"
    src="http://m.ucla.edu/assets/js.php">`

  `</script>`

- CSS Handler = Entities

- Javascript Handler = Interactivity
Semantic Entities - Header

• A full-width page header:

```html
<h1 id="header">
  <a href="{MOBILE_SITE_URL}">
    <img src="{LOGO_IMAGE_URL}">
  </a>
  <span>{HEADER_TEXT}</span>
</h1>
```
Semantic Entities - Footer

- A full-width page footer:

```html
<div id="footer">
  <p>{COPYRIGHT_MESSAGE}<br>
    <a href="{HELP_PAGE_URL}">Help</a> | <a href="{FULL_SITE_URL}">View Full Site</a>
  </p>
</div>
```
Semantic Entities – Menu

• A full-width navigation menu:

```html
<div id="menu-full">
  <h1>{MENU_HEADING}</h1>
  <ol>
    <li><a href="{LINK1_URL}">{LINK1_TEXT}</a></li>
    <li><a href="{LINK1_URL}">{LINK1_URL}</a></li>
  </ol>
</div>
```
Semantic Entities – Content

• A full-width multi-purpose content area:

```html
<div id="content-full">
  <h1>{CONTENT_HEADING}</h1>
  <p>{TEXT_CONTENT}</p>
</div>
```

Presentation Abstract

Divided into three sections, this session shall showcase many Mobile Web Framework features including (1) semantic entities and Javascript libraries available to content providers, (2) advanced use cases for content providers, and (3) deployment of the framework for service providers.
Semantic Entities – Button

• A full-width button element:

```html
<a class="button-full">
  {BUTTON_TEXT}
</a>
```
Javascript Libraries

- Additional Javascript libraries available:
  - Transitions
  - Touch Transitions
  - Geolocation

- Can be loaded through JS Handler:
  `<script type="text/javascript" src="http://m.ucla.edu/assets/js.php?standard_libs=geolocation&full_libs=transitions+touch_transitions"></script>`
Redirection Script

• JS Library available to include on full site
• User prompting option also available

<script type="text/javascript" src="http://m.ucla.edu/assets/redirect/js.php?m={MOBILE_PATH}"><!--></script>
Demo

building a basic mobile app
Advanced Use Cases

What the MWF has to offer for ADVANCED developers…
PHP Decorators

- Programmatic method for markup
- Abstracts and simplifies presentational layer
- Keeps code clean
- Simplifies reconfiguration
PHP Decorators

• HTML Decorators for generic markup
  – body_end/start
  – html_end/start
  – tag + tag_open/close

• Site Decorators for MWF specific markup
  – header
  – footer
  – menu
  – content
  – button
  – head
Body Class Telemetry

- Body classes written by MWF for telemetry
- Useful for targeting device/browser/OS
- Offers device knowledge to front-end code
Body Class Telemetry

• Classes include:
  - mwf_mobile/mwf_notmobile
    whether or not a device is regarded as mobile
  - mwf_standard/mwf_full
    what framework classification level the device falls under
  - mwf_browser_{name}
    the name of the device browser
  - mwf_browser_{name}_{version}
    device browser name and version
  - mwf_os_{name}
    device OS name
  - mwf_os_{name}_{version}
    device OS name and version
Custom CSS/JS Inclusion

- CSS/JS handlers allow custom file inclusion
- Optimizes page load speed
- Loads files based on device classification
Demo

building a basic mobile app...better
Framework Deployment

Setting up an institutional instance of the MWF
Framework Requirements

• Runs on LAMP stack
• Leverages WURFL PHP API and metadata
• For documentation on System Requirements, see bit.ly/MWF-reqs
Acquiring the Framework

- MWF is available at github.com/ucla/mwf
- Can be forked with git or downloaded
- Recommended git workflow (bit.ly/MWF-git)
  See “Framework Project Workflow” session at 10:30 tomorrow for more on git
Framework Configuration

- MWF has instance-specific config files
- Pathing configuration required (global.php)
- Other system configuration options exist:
  - Frontpage Configuration (frontpage.php)
  - Custom Stylesheet Configuration (css.php)
  - Analytics Configuration (analytics.php)
  - Preview Mode (preview.php)

See bit.ly/MWF-config for documentation on configuration settings
Institution Specific Styling

• Custom CSS stylesheets for each installation
• Add CSS directory and edit css.php config
• Custom styles will override MWF styles
Demo
Setting up an instance of the MWF
Questions?
Thank you
for listening.