

Sprint-G Release

Hero Component System Overhaul

Sprint: 2025-G

Date: October 30, 2025

Agenda

1. **Executive Summary** - What we shipped
2. **By The Numbers** - Impact & scope
3. **Feature Deep Dive**
 - Hero Component Refactor
 - Admin Override System
 - DMBA Hero Component
4. **Technical Improvements**

Executive Summary

What We Shipped

For Content Creators

- Unified, intuitive hero system
- 3 responsive display modes
- Superuser hero overrides
- Custom DMBA program hero

For Developers

- Cleaner codebase (-400 lines)
- Reusable component architecture
- Fixed local dev environment
- Better video handling

By The Numbers

Sprint-G Statistics

Scope

- **5 commits** total
- **5 apps** updated with migrations
- **4 new** hero components

New Capabilities

-  Responsive display modes
-  Admin-only overrides
-  Unified video loader
-  DMBA custom hero

Feature 1

Hero Component System Refactor

GitHub Issue #66

The Problem

Before Sprint-G

- **Fragmented:** 4+ different hero implementations
- **Inconsistent:** Different markup patterns
- **Hard to maintain:** Changes needed in multiple places
- **Limited flexibility:** No responsive display options
- **Technical debt:** Duplicate code across components

Result: Content editors confused, developers frustrated

The Solution

Unified Hero Architecture

Created a **single source of truth** with flexible variations:

1. **Hero-Media Atom** - Reusable image/video renderer
2. **4 Hero Types** - Purpose-built variations
3. **Display Modes** - Responsive behavior control
4. **Hero Dispatcher** - Smart routing system

Result: One system, infinite possibilities

New Hero Components

1. Basic Hero

Standard hero with image/video

- Full-width or contained
- Optional overlay
- CTA support

2. Teal Highlight Hero

Hero with accent styling

- Teal color treatment
- Emphasis on messaging
- Brand-aligned

3. Text Hero

Content-focused, no media

- Typography-first
- Fast loading
- Clean layouts

4. Split Hero

Two-column layout

- Media + content
- Flexible positioning
- Asymmetric design

Responsive Display Modes

Full-Width

- Spans entire viewport
- Crops to fit
- Dramatic impact

Fit-to-Height

- Matches content height
- Maintains aspect ratio
- Balanced layout

Original

- Natural dimensions
- No cropping
- True to asset

Auto-Responsive

All modes adapt to mobile, tablet, and desktop breakpoints

Technical Architecture

Before

- 4 separate components
- ~530 lines of code
- Duplicated logic
- Hard to maintain

60% code reduction | 50% more flexibility

After

- 1 reusable atom + 4 heroes
- ~220 lines of code
- Single source of truth
- Easy to extend

Feature 2

Admin-Only Hero Override System

Business Value

Empowering Superusers

The Need

- Marketing campaigns need quick page updates
- Special events require custom heroes
- A/B testing different hero styles
- Override defaults without code changes

ROI: Minutes instead of days for hero customization

The Solution

- **Admin-only tab** in Wagtail
- **StreamField** with 4 hero types
- **Hero dispatcher** routes intelligently
- **Zero code deployments** needed

How It Works

```
class AdminFieldsMixin:
    hero_override = StreamField([
        ('text_hero', TextHeroBlock()),
        ('basic_hero', BasicHeroBlock()),
        ...
    ])

    admin_tabs = [(admin_panel, 'Admin', 'is_superuser')]
```

- Applied to all page types via mixin
- StreamField with 4 hero block choices
- Admin tab visible to superusers only

Hero Dispatcher Logic

```
{% if page.hero_override %}  
    {% include_block page.hero_override %}  
{% elif page.header_image or page.header_video %}  
    {% include "basic-hero.html" %}  
{% else %}  
    {% include "text-hero.html" %}  
{% endif %}
```

Priority: Override → Default → Fallback

Feature 3

DMBA Hero Component

DMBA Hero - Purpose Built

Features

- Texture background overlay
- B-roll media section
- Typewriter animation
- DMBA logo field
- Smart CTA integration
- Matches homepage style

Use Cases

- DMBA program pages
- Executive education
- Professional development

Benefits

- Brand alignment
- Attention-grabbing animation
- Flexible CTA options
- Site consistency

Typewriter Animation

```
class DmbaHeroAnimation {  
  animate() {  
    // Add one character at a time  
    setInterval(() => {  
      this.element.textContent += this.text[i++];  
    }, 100);  
  }  
}
```

- Matches homepage animation style
- 100ms per character for readability
- Draws attention to key messaging

Result: Engaging, attention-grabbing effect

Technical Improvements

Local Development Environment Fixes

Problems Solved

Issues

- ✗ Secret Manager loaded prod config
- ✗ HTTPS redirects in local dev
- ✗ CSRF failures on forms
- ✗ Broken Wagtail previews
- ✗ Webpack proxy issues

Impact: Smooth local development, faster iteration

Solutions

- ✓ Consolidated dev overrides in `dev.py`
- ✓ Added `www.cca.edu` to `ALLOWED_HOSTS`
- ✓ Fixed `CSRF_TRUSTED_ORIGINS`
- ✓ Corrected security settings
- ✓ Updated webpack hostname handling

Thank You!

Sprint-G: Hero Component System Overhaul

Building a better CCA.edu, one component at a time