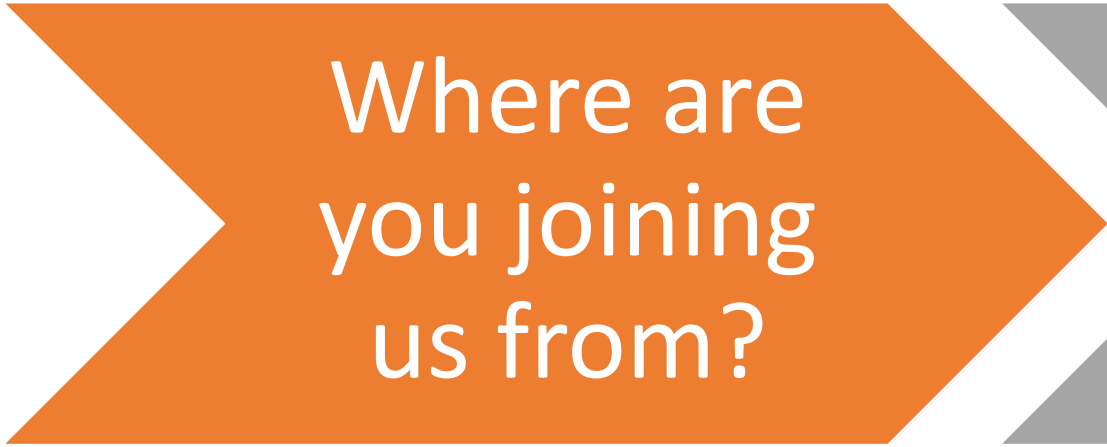


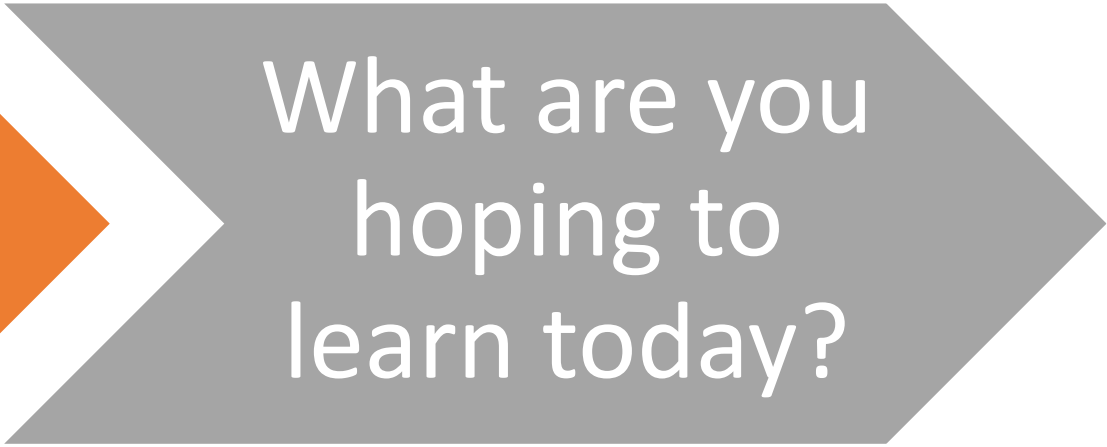
Empowering Developer Excellence with AEM Core Components

Kartik Sharma | Director, Solutions Architecture at Wiley

Share in chat



Where are
you joining
us from?



What are you
hoping to
learn today?



Kartik Sharma

About me

- Working as Director, Solutions Architecture at Wiley
- 15+ years of experience with the Adobe Stack (AEM (Day CQ), Analytics (Site Catalyst), Target, Campaign (Neolane), RTCDP, Workfront)
- 2023 Adobe Experience Manager Champion
- Holds Various Adobe Certifications
- AEM SME created various certification exams like AEM Dev/Ops, AEM Sites Developer, AEMaaCS Migration Expert
- Implemented AEM for various customers
- LinkedIn: <https://www.linkedin.com/in/kartiksharma84>

About me



Tommy Miller

- AEM Customer Success Architect at Adobe
- Focuses on leading and guiding users on best utilizing Adobe Experience Manager.
- 11+ years of experience in enterprise content management implementations and web application development.
- 11+ years of experience providing technical leadership with Adobe Experience Manager and other Marketing Cloud products.
- Experienced in leading implementations with organizations in the following verticals: Retail, Finance, Travel, Food, Manufacturing, Entertainment, and Energy.
- LinkedIn: <https://www.linkedin.com/in/tommymiller84/>

Agenda



AEM Core Components



Customize Core Component
(Convert teaser core component to a card component)

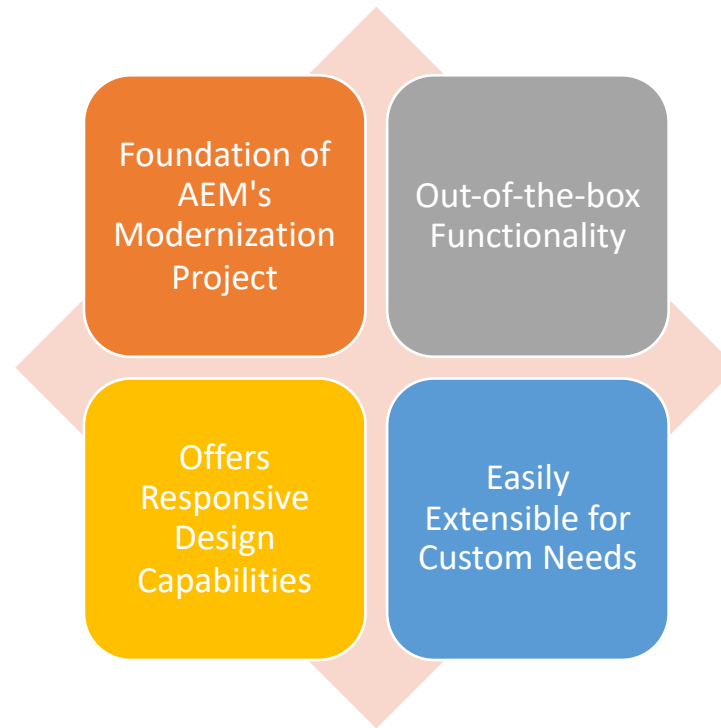


Use Style Systems to create variations of same component



Deploy & test UI changes using Frontend pipelines

AEM Core Components: Overview



Core Components: Benefits

Standardized Set of Components

Speed up Development Time

Reduce Maintenance Cost

Improved User Experience

Core Components: Features

- Production-Ready
- Cloud-Ready
- Versatile
- Configurable
- Trackable
- Accessible
- SEO-Friendly
- WebApp-Ready
- AMP Support
- Design Kit
- Themeable
- Customizable
- Versioning
- Localizable
- Open Sourced

Core Components: Types



Template components:
Page, Navigation,
Breadcrumb



Page Authoring
Components: Title, Text,
Teaser, Image, Embed



Container Components:
Container, Carousel,
Tabs, Accordion



Form Components:
Form Container, Form
Text, Form Options

Core Components: Templates

A thick yellow horizontal bar spans the width of the slide, with a vertical yellow bar extending downwards from its right end.

- Breadcrumb
- Language Navigation
- Navigation
- Page
- Table of Contents

Edit and Design Dialogs

	Description	What it Controls	Examples
Edit Dialog	Options that a page author can modify during normal page editing for the placed components	The content displayed by the component and how it will ultimately appear on the page.	Formatting of content text, rotate an image on a page
Design Dialog	Options that a template author can modify when configuring a page template.	What options the page author has available when editing the component	Which text formatting options are available, which image in-place options are available

Breadcrumb: Design

Home > First Level > Second Level

Properties

Then adjust the settings of the selected policy to configure the component


Main


Styles


Navigation Start Level




2

☐ Show hidden navigation items 

☐ Hide current page 

☐ Disable shadowing 

Breadcrumb: Edit

Breadcrumb ? 

Properties Styles

Navigation Start Level ?

^

2

☐ Show hidden navigation items ?


☐ Hide current page ?

☐ Disable shadowing ?

ID ?


Cancel

Done

Breadcrumb ? 

Properties **Styles**

Styles

None 

Cancel

Done

Language Navigation: Design

- English
- Español
- German

Properties

Then adjust the settings of the selected policy to configure the component

Properties

Styles

Navigation Root *

Language Structure Depth

1

Language Navigation: Edit

Language Navigation

?

Properties

Accessibility

Styles

Navigation Root *

Language Structure Depth

ID

Cancel

Done

Language Navigation

?

Properties

Accessibility

Styles

Label

Cancel

Done

Language Navigation

?

Properties

Accessibility

Styles

Styles

None

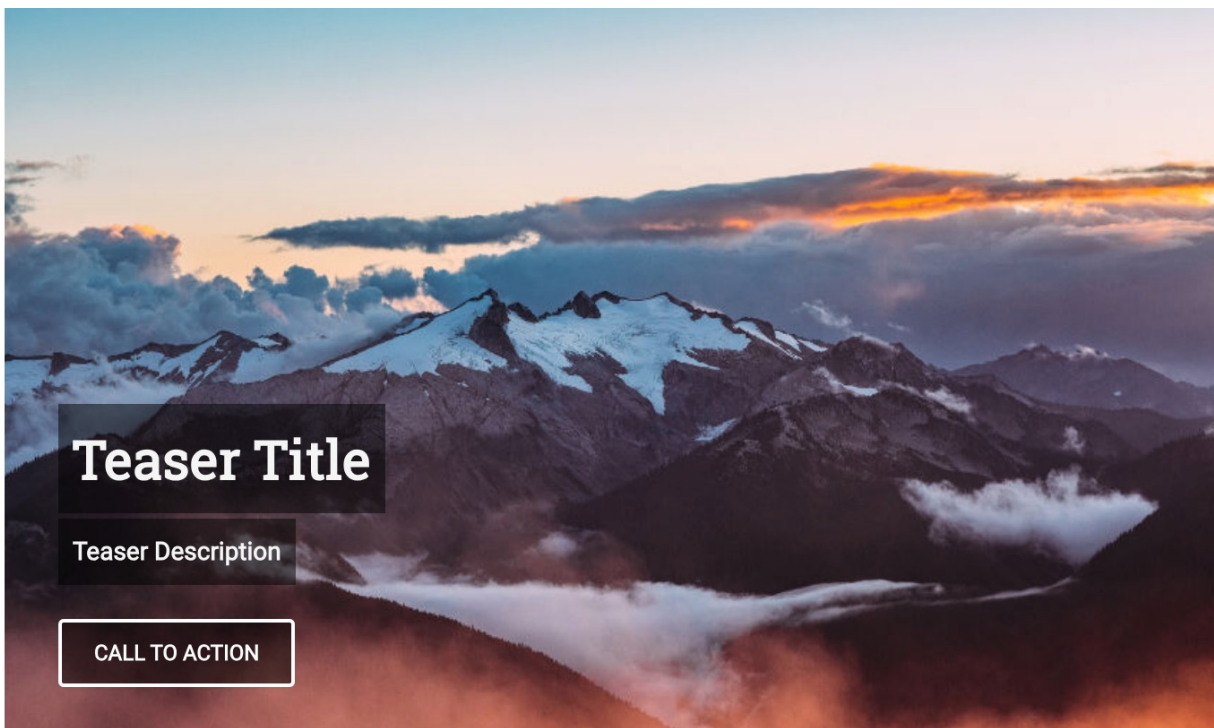
Cancel

Done

Core Components: Page

- Title
- Text
- Image
- Button
- Teaser
- Download
- List
- Experience Fragment
- Content Fragment
- Content Fragment List
- Embed
- Separator
- Progress Bar
- PDF Viewer

Teaser: Design



Properties

Then adjust the settings of the selected policy to configure the component

Teaser

Styles

Call-To-Actions

☐ Disable Call-To-Actions

Elements

☐ Hide pretitle

☐ Hide title

☐ Show title type

☐ Hide description

Default Title Type

(default)



Image Delegate

Image rendering is delegated to the Image (v3) component.

Teaser: Edit

Teaser

Links

Text

Asset

Styles

The teaser title, description and image can be inherited from the linked page, or from the page linked in the first call to action. If neither a link nor a call to action is specified, then the title, description and image will be inherited from the current page.

Link

☐

Open link in new tab

Call-to-actions

Add

Cancel

Done

Teaser

Links

Text

Asset

Styles

Pretitle

Title

Sample Article 1

☒ Get title from linked page

Description

☒ Get description from linked page

ID

Cancel

Done

Teaser

Links

Text

Asset

Styles

☒ Inherit featured image from page

Alternative text for accessibility *

☒ Inherit alternative text from page

☐ Don't provide an alternative text

Cancel

Done

Teaser

Links

Text

Asset

Styles

Styles

None

Cancel

Done

Download: Design

Custom Title

Custom description

lava-into-ocean.jpg

495 KB

image/jpeg

DOWNLOAD

Properties

Then adjust the settings of the selected policy to configure the component

Properties

Styles

☐ Allow upload from file system ⓘ

Title Type ⓘ

(default) ▾

☒ Display File Size ⓘ

☒ Display File Format ⓘ

☒ Display Filename ⓘ

Download: Edit


Download

Asset

Properties

Styles

Download Asset



Drop an asset here.

Cancel

Done

Download

Asset

Properties

Styles

Title

☒ Get title from DAM asset

Description

T

T

≡

🔗

🔄

🔊

☒ Get description from DAM asset

Action Text

☐ Display inline

ID

Cancel

Done

Download

Asset

Properties

Styles

Styles

None

Cancel

Done

Core Components: Container

A thick yellow horizontal bar spans the width of the slide, with a vertical yellow bar extending downwards from its right end.

- Container
- Carousel
- Tabs
- Accordion

Accordion: Design

Item 1	>
Item 2	>
Item 3	>

Properties

Then adjust the settings of the selected policy to configure the component

Properties

Allowed Components

Styles

Allowed Heading Elements *



Select



h2 ×

h3 ×

h4 ×

h5 ×

h6 ×

Default Heading Element



h3



Accordion: Edit

Accordion

?

Items

Properties

La

Item 1

La

Item 2

Add

Cancel

Done

Accordion

?

Items

Properties

☐ Single item expansion

i

Expanded Items

Select

i

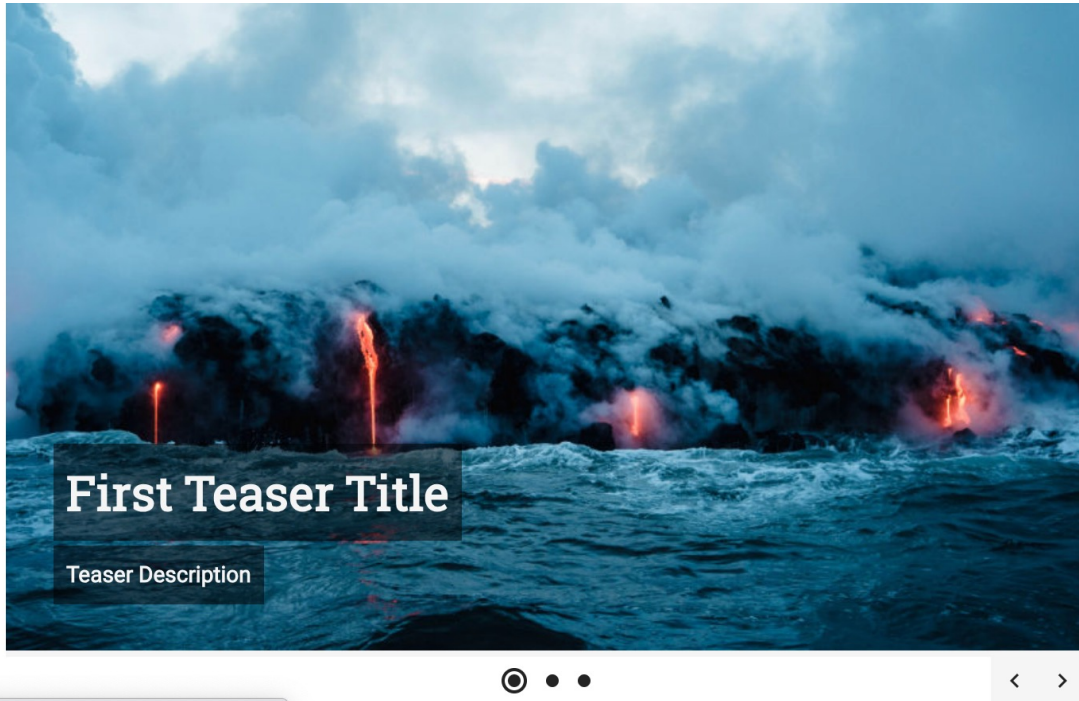
ID

i

Cancel

Done

Carousel: Design



Properties

Then adjust the settings of the selected policy to configure the component

Properties

Allowed Components

Styles

☐ Automatically transition slides ⓘ

☐ Prepend control elements ⓘ

Carousel: Edit


Carousel



?


Items



Properties


Accessibility



Image 1



Image 2



Image 3



Add

Cancel

Done

Carousel

?

Items

Properties

Accessibility

Active Item

Default

☒ Automatically transition slides

Automatic transitions are previewed with the 'View as Published' page action.

Transition Delay (milliseconds)

5000

☐ Disable automatic pause on hover

ID

Cancel

Done

Carousel

?

Items

Properties

Accessibility

Label

Previous

Next

Play

Pause

Tablist

☐ Sets carousel item's aria label to its title

Cancel

Done

Core Components: Form



- Form Container
- Form Text
- Form Options
- Form Hidden
- Form Button

Form Button

Name


E-Mail


Form Button





Type

Button

Title

Name

Value

ID

Cancel

Done

Form Options

Venue Planning

We like to plan our events and prepare the meals in advance, please help us by choosing your preferences

- ☐ I attend alone
- ☐ I attend with spouse
- ☐ I eat meat
- ☐ I am vegetarian
- ☐ Spouse is vegetarian
- ☐ Spouse eats meat

Form Options Field

Main

Type

Checkboxes

Title *

Name *

Source

Local

Options

Add

About

Help Message

ID

Cancel

Done

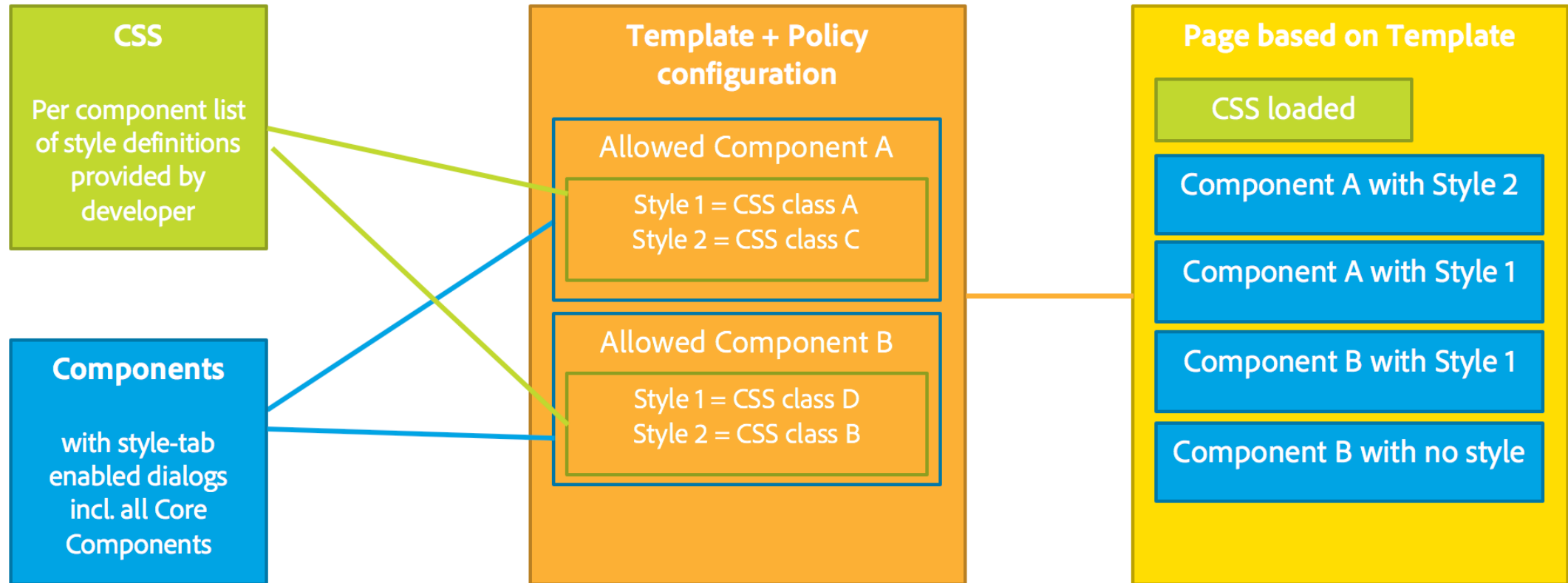
Style System



Style System: Overview

- **Layout Styles** – affect many elements of a Component to create a well define and identifiable rendition (design and layout) of the component, often aligning to a specific re-useable Brand concept
- **Display Styles** - are used to affect minor variations to Layout styles, however, they do not change the fundamental nature or intent of the Layout style

Style System



Styles: Teaser component (Featured)



Featured Article

Camping in Western Australia

The Australian West coast is a camper's heaven. Endless miles of desert roads leading to secret beaches, vast canyons and crystal clear rivers, and the very few people you are likely to meet on your journey will be some of the most easy-going characters you'll find anywhere in the world.

[READ MORE](#)

STYLE

Featured



List

Hero

Hero Image Top

Hero Image Bottom

Card

Styles: Teaser Component (Hero)



Featured Article

Camping in Western Australia

The Australian West coast is a camper's heaven. Endless miles of desert roads leading to secret beaches, vast canyons and crystal clear rivers, and the very few people you are likely to meet on your journey will be some of the most easy-going characters you'll find anywhere in the world.

[READ MORE](#)

STYLE

Featured

List

Hero



Hero Image Top

Hero Image Bottom

Card

Styles: Teaser Component (Design)

Teaser

Styles

Editing the styles can have a visual impact on existing components.

Default CSS Classes

Allowed Styles

Style

☐ Styles can be combined

Styles

Featured

cmp-teaser-f...

List

cmp-teaser-list

Hero

cmp-teaser-h...

Hero Image Top

cmp-teaser-h...

Hero Image B...

cmp-teaser-h...

Card

cmp-teaser-c...

Add

Variation

☐ Styles can be combined

Styles

Secure

cmp-teaser-s...

Style Name

CSS Classes

Add

Add

Style Organization: Best Practices

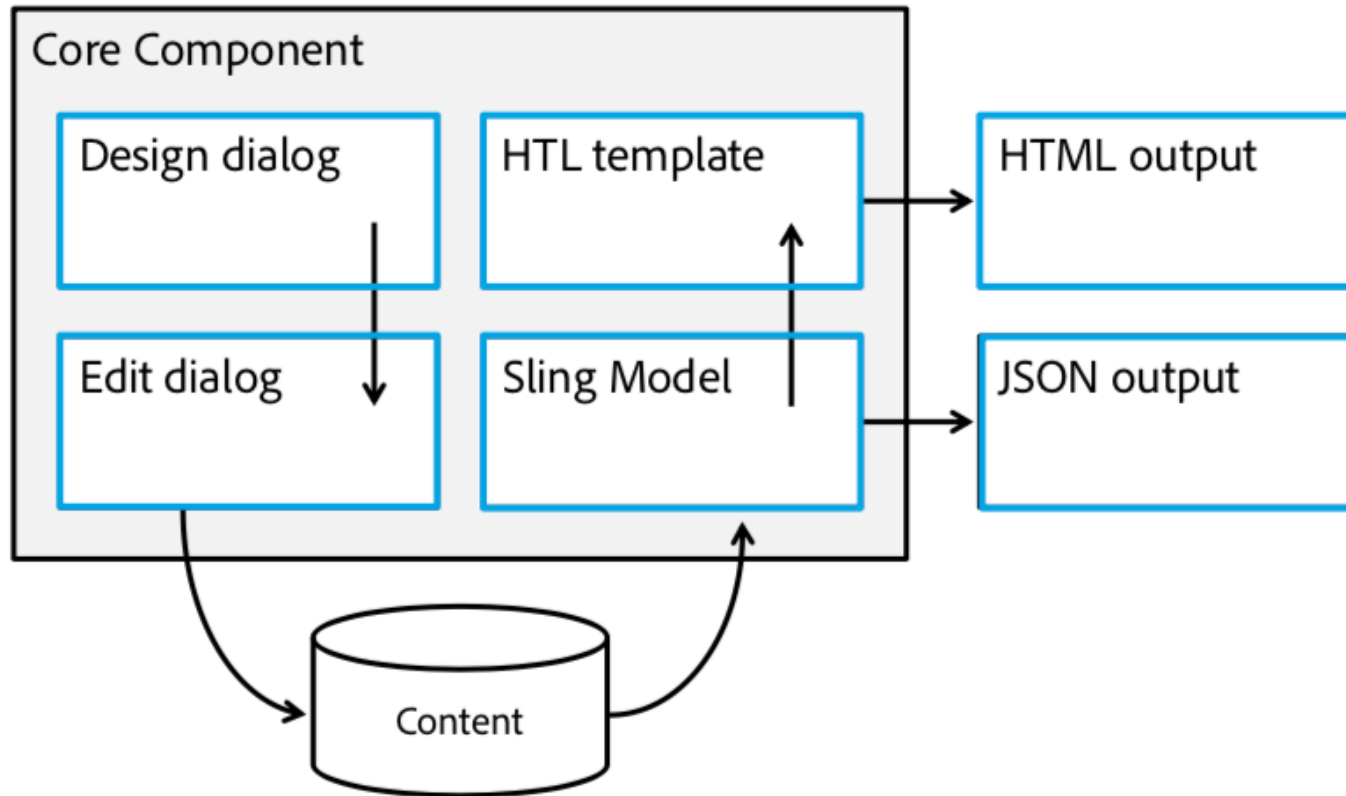
A thick yellow horizontal bar spans the width of the slide, with a vertical yellow bar extending downwards from its right end.

- Name styles using a vocabulary understood by the authors
- Minimize the number of style options
- Only expose style options and combinations that are allowed by brand standards
- Only expose style combinations that have an effect

Customizing Core Components



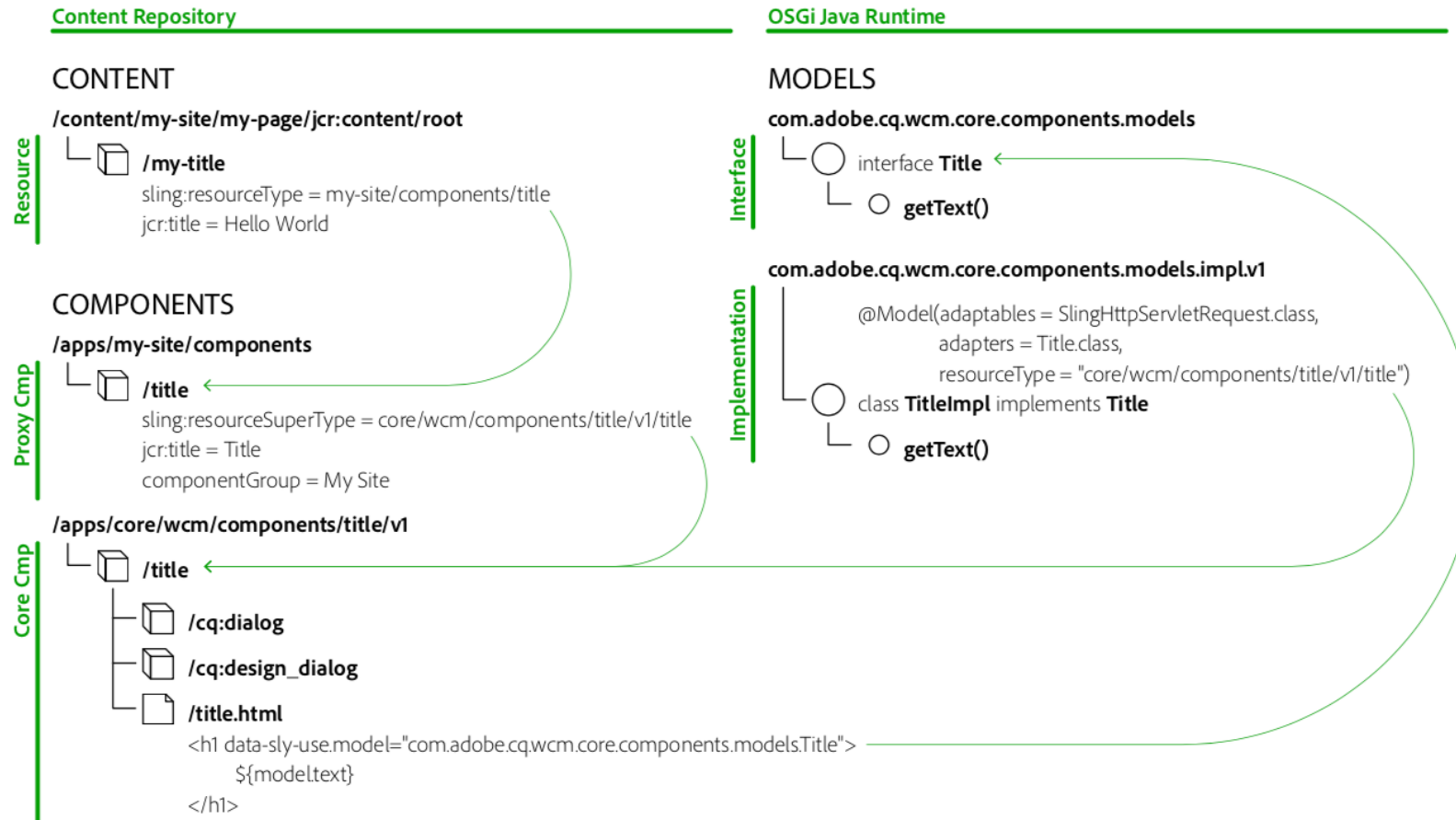
Core Component Architecture



Core Component Architecture



Core Component Architecture





How to Succeed with Core components

- Start Early
- Map your designs to the core components
- Reference the component Library
- Use the UI Kit for Adobe XD
- Only create custom components if the functionality can not be achieved by extending core component

AEM Front-End pipeline



AEM Front-End Pipeline

Create

Edit (e)

Properties (p)

Lock

Copy (⌘+c)

Move (m)

Quick Publish

Manage Publication

Restore

Delete (backspace)

1 selected (escape) X

Site ▾

Sites

Select All ▾

By enabling the front-end pipeline you can manage the front-end code of the site (Javascript and CSS) independently from the full stack code.

Enable Front End Pipeline

☐

campaigns

☒

My Site
mysite

>

☐

My Landing Page
my_landing_page

>

Title

Name

Template

Language

Published

Preview

My Site

mysite

Content Page

English

Not published

Not previewed

AEM Front-End Pipeline

Enable Front End Pipeline Confirmation

This action will have following effects:

- All pages of the site will include one additional CSS and JS file, which can be modified by deploying updates through a dedicated Cloud Manager front end pipeline.
- The added CSS and JS files will initially be empty, but a "theme sources" folder can be downloaded to bootstrap the folder structure that allows to deploy CSS and JS code updates via that pipeline.
- This change can only be undone by a developer, by deleting the SiteConfig and HtmlPageItemsConfig nodes that this operation creates below /conf/SITENAME/sling:configs.
- This action won't automatically convert the existing client libraries of the site to use the font end pipeline. Moving these sources from the client library folder to the front end pipeline folder is a task that requires manual work by a front end developer.

Cancel

Confirm

Configure Pipeline using CM

The screenshot shows the 'Add Non-Production Pipeline' dialog box in the Cloud Manager interface. The dialog is titled 'Add Non-Production Pipeline' and has two tabs: 'Configuration' (selected) and 'Source Code'. Below the tabs, it says 'Select the type of pipeline you want to create:'. There are two options: 'Code Quality Pipeline' (unselected) and 'Deployment Pipeline' (selected). The 'Deployment Pipeline' option is highlighted with a blue border and a blue dot. Below the options, there is a section titled 'Pipeline Configuration' with a text input field for 'Non-Production Pipeline Name' containing the text 'Deploy UI changes to Dev'. Below that, there is a section titled 'Deployment Options' with a 'Deployment Trigger' section containing two radio buttons: 'Manual' (selected) and 'On Git Changes' (unselected). At the bottom right of the dialog, there are two buttons: 'Cancel' and 'Continue'. The background shows the Cloud Manager interface with a sidebar on the left and a top navigation bar.

Cloud Manager Overview Environments Pipelines Repositories Activity Reports Learn My Org ? 9+

Sandbox Sandbox Program

NAME & TYPE

Deploy to Dev
Non-Production • Deployment

Add Non-Production Pipeline 1 Configuration > Source Code

Select the type of pipeline you want to create:

Code Quality Pipeline ☐
A pipeline that handles builds, runs unit tests and evaluates Code Quality

Deployment Pipeline ☒
A pipeline that handles builds, runs unit tests, evaluates Code Quality and deploys to an Environment

Pipeline Configuration

Non-Production Pipeline Name
Deploy UI changes to Dev

Deployment Options

Deployment Trigger
☒ Manual ☐ On Git Changes

Cancel Continue

FAST RUN
Oct 11, 2022-4:42 PM

?

Configure Pipeline using CM

Add Non-Production Pipeline

1 Configuration > 2 Source Code

Full Stack Code
Code for your complete AEM application

Targeted deployment
Code targeted to a specific part of your AEM application.

Include:

Config ⓘ

✓ Front End Code ⓘ

Web Tier Config ⓘ

Eligible Deployment Environments

sandbox-dev ▼

Source Code

Define Source Code location for your new pipeline.

Repository

MyOrgRepo ▼

Cancel

Save

Configure Pipeline using CM

Add Non-Production Pipeline

1 Configuration > 2 Source Code

sandbox-dev

Source Code

Define Source Code location for your new pipeline.

Repository

MyOrgRepo

Git Branch

main

Code Location

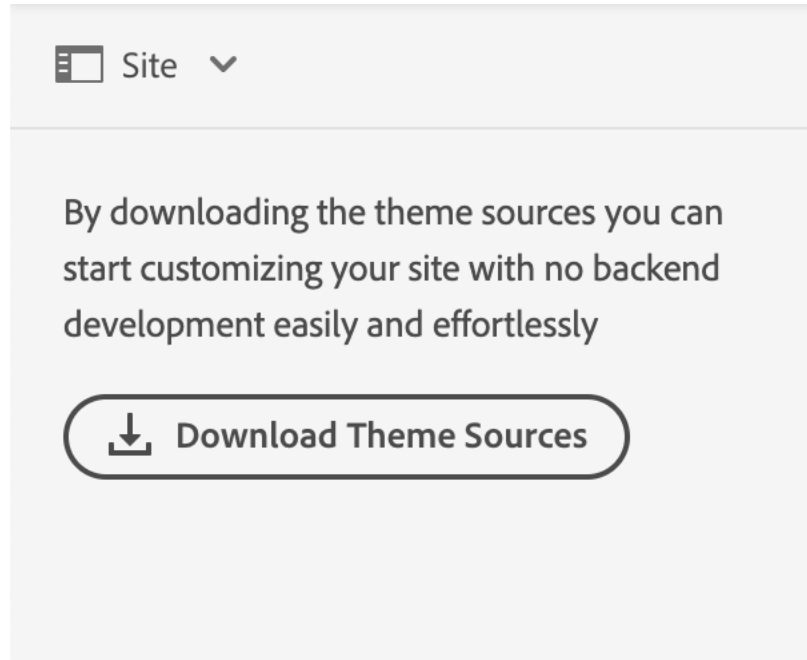
/

i Default location is root folder

Cancel

Save

AEM Front-End Pipeline





Fireside Q&A

A large, solid orange circle is positioned on the left side of the slide, partially cut off by the edge.

Thank You!

A yellow dashed line is located in the bottom right corner of the slide, consisting of several short, curved segments.

Appendix

- <https://experienceleague.adobe.com/docs/experience-manager-core-components/using/introduction.html?lang=en>
- <https://experienceleague.adobe.com/docs/experience-manager-core-components/using/success.html?lang=en>
- <https://www.aemcomponents.dev/content/core-components-examples/library/core-structure/language-navigation/language-structure/us/en/language-navigation.html>