

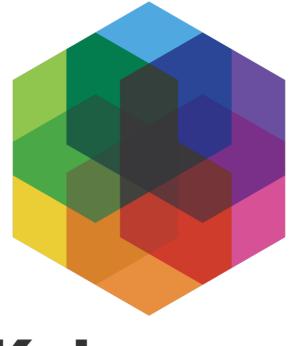
# Building Flexible & Dynamic Layouts in Drupal

# About Me Anna Mykhailova

Senior Drupal Architect at Kalamuna Drupal 7 and 8 certified Acquia Grand Master

## Kalamuna

#### annam@kalamuna.com | kalamuna.com



### Kalamuna

## What We will Cover?

- Layout Builder
- What modules you will need
- What is in core
- What is in contrib space
- Custom layouts
- Challenges

# What is Layout Builder

- Drupal core module
- Provides interface to:
  - create sections in the content region
  - place blocks and content types fields
  - customize structure of the node



#### THE THOMSON COLLECTION



Ken Thomson's gift of his art collection - the most significant private art collection in Canada - added 2,000 outstanding works to the Art Gallery of Ontari

The collection features signature works by Canadian artists from the 19th to mid-20th century, with some 300 works from the Group of Seven and Tom Thomson. The collection also includes a remarkable 145 paintings by the 19th century artist Cornelius Krieghoff and 100 works by the early 20th century luminary David Milne - as well as key paintings by Paul Kane, Paul-Emile Borduas and William Kurelek.

The Thomson Collection of European Art comprises more than 900 objects, including the legendary 12th-century Malmesbury chasse, an extraordinary selection of Medieval and Baroque lvories and a distinguished group of portrait miniatures dating from 1550 to 1850. The gift also includes a compelling collection of 130 mainly Britist ship models from the 17th century through the Napoleonic era to the 20th century.

The highlight of the Thomson Collection of European Art is the 17th-century masterpiece by Peter Paul Rubens The Massacre of the Innocents.

This donation represents the largest gift ever made to a Canadian cultural institution.

#### HIGHLIGHTS FROM THE COLLECTION







The Massacre of the Innocents Peter Paul Rubens c. 1610

Soldier and Girl at Station

Two-decker 50-54 Gun Warship, Navy Board Model British c. 1703

Model Lake Superior III Lawren S. Harri c. 1923-1924



Face Mask

c. 1820-c. 1840





Diptych: The Nativity and The Annunciation to the Shepherds; The Last Judgement French (Paris) c. 1300

BROWSE ALL

# Starting Your First Project

- Enable layout builder suite of modules
- Decide what content types will use it
  - Is layout customizable per page or set per content type
  - Decide what layouts you would like to use and if you want to use custom layouts that are not in core

## Core Modules You will Need

- Layout Builder main module
- Layout Discovery allows to define and discover layouts

### Contrib Modules you should be Using

- Layout Builder Restrictions allows control of which blocks and layouts can be used.
- Block Blacklist allows to blacklist unnecessary blocks from the list for better system performance.
- Layout Builder Modal
- Layout Builder Styles

# Site Building Techniques

Choose content type - settings are in manage

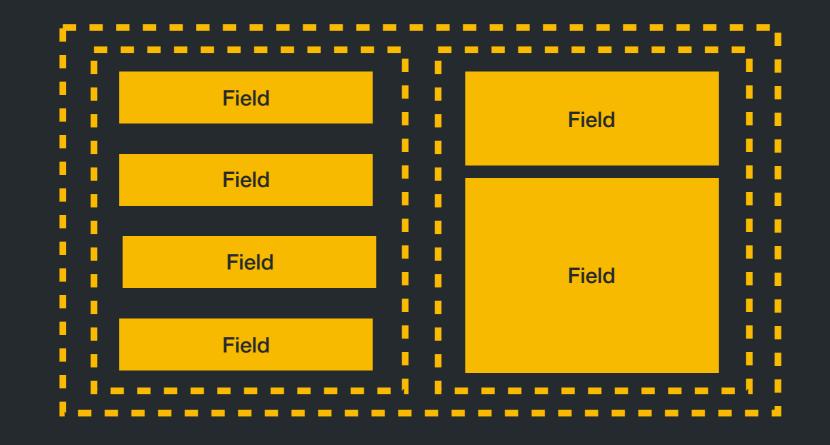
### display

Choose layout per content type or per node

Add group
Manage layout
► CUSTOM DISPLAY SETTINGS
▼ LAYOUT OPTIONS
Use Layout Builder
Allow each content item to have its layout customized.
► BLOCKS AVAILABLE FOR PLACEMENT
► LAYOUTS AVAILABLE FOR SECTIONS
► BLOCKS AVAILABLE FOR PLACEMENT

## Site Building Techniques - Fields

Place fields in layout builder sections

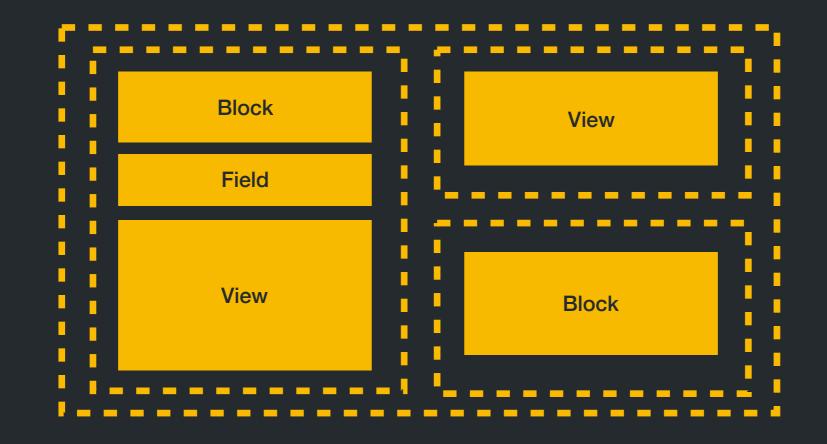


## Site Building Techniques - Fields

A You have unsaved changes.			
	Section		
× Configure section			
"Title" field	"Body" field		
+ Add Block			
+ Add Section			
×			
"Content type" field			
+ Add Block			

## Site Building Techniques - Blocks

Place custom blocks and views blocks



## Site Building Techniques - Blocks

You have unsaved changes.			
+ Add	Section		
x Configure section			
"Title" field	"Body" field		
+ Add Block	+ Add Block		
+ Add Section			
×			
"Content type" field			
+ Add Block			

## End Result

		1
THE THOMSON COLLEC	TION	
BROWSE THE COLLECTION Search the	Collection	SEARCH
en Thomson's gift of his art collection – the most sig	nificant private art collection in Canada - added 2,000 outst	tanding works to the Art Gallery of Ontario.
	rtists from the 19th to mid-20th century, with some 300 work y the 19th century artist Cornelius Krieghoff and 100 works b William Kurelek.	
	nore than 900 objects, including the legendary 12th-century A up of portrait miniatures dating from 1550 to 1850. The gift a sonic era to the 20th century.	
he highlight of the Thomson Collection of European	Art is the 17th-century masterpiece by Peter Paul Rubens The	a Massacre of the Innocents.
Interest of the Interest Provided in the Provi	Two-decker 50-54 Gun Warship, Navy Board Model British e. 1703	Eke Sperior III Lawren S. Harris 1: 1923-1934
Solder and Girl at Station Are: Colvite	Face Mak Triumban	Diptyck: The Kativity and The Annunciation to the Shepherde: The Last Judgement
Jes Conne 1953	isimanan c. 1820-c. 1840	oregunetus, inc Las duagement French (Pris) e. 1300
	BROWSE ALL	



#### CONSERVATION

#### What is Conservation?

Conservation is the care and protection of cultural objects. As the caretakers of collections, conservators examine, research, clean and repair artworks, while also taking action to prevent future deterioration. Here at the AGO, the Conservation Team works closely together with curators, the mount maker, the mat maker, framers, and the installation team. All these specialists collaborate to ensure each work will look its best not only for today, but also for generations to come.

#### What Happens in the Michael and Sonja Koerner Centre for Conservation?

Just beyond the galleries are the labs and workspaces of the Conservation Team. Here they examine artwork and conduct research to learn how artworks were made and the extent of any damages or changes. Conservators use microscopes and imaging technology to improve our understanding of artist techniques and materials. They decide if treatment, or "active conservation is needed, and what should be done. If a damaged artwork is treated, conservators ensure as much as possible that their work is reversible just in case changes are needed in the future.

The role of conservators at the AGO also goes beyond the research and treatment of art. Conservators work closely with other staff members to ensure artworks are stored, handled, transported and displayed safely. In addition to the research that is done within the Centre, the AGO's conservators actively engage with external specialists like conservation scientists and with living artists to achieve a better understanding of how a work of art was originally made, and how it might change over time.





Conservation Case Studies



What's New in Conservation Multimedia

Read about the restoration of key AGO artworks and Read some great stories about conservation in the Conservation Notes section of our Art Matters blog. tors' research and findings.

Behind the scenes with our conservators



Meet the Conservators

eas of specialty

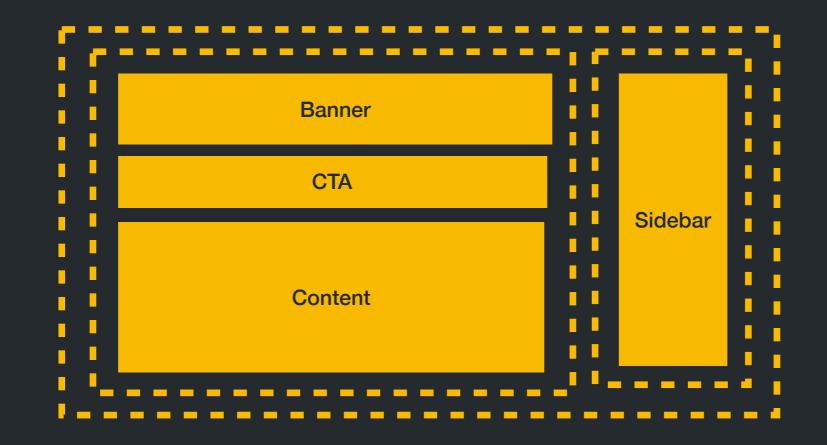


Meet the staff members of the AGO's Con



### Site Building Techniques - View Modes

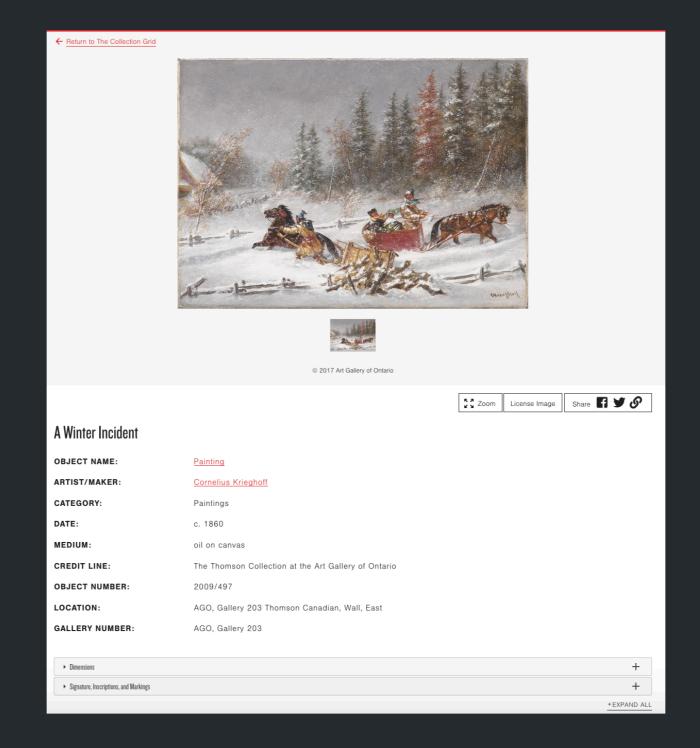
Place view content block in a certain view mode



### Site Building Techniques - View Modes

Manage display							
Edit	Manage fields	Manage form display	Manage display				
Default	Image Teaser	Object Card View	Object Gallery	Object Information	Referenced Entity	Search index	Teaser
	( <b>X</b> )		"Object	Gallery" block			
			"Zoom To	ol Block" block			
			"Webform I	_ink Block" block			
			+ Add Block		"AddToAny b	outtons" block	
			+	Add Section			
	×		"Object In	formation" block			
			+	Add Block			

## End Result



## Advantages

- Fully revisionable
- Translatable you just use Node translation mechanisms
- Easy to theme and re-use
- Predictable markup based on node template

# **Custom Layouts**

- Defined in custom module
- .layouts.yml
  - Define default template
  - Available regions
- Create template files

# Custom Layouts

	· · · ·
modules	<pre>echidnet_layouts.layouts.yml ×</pre>
contrib	1
custom	2 echidnet_layout_onecol:
de_blocks	<pre>3 label: 'One Column' 4 path: templates/layout</pre>
de_search	5 template: echidnet-layoutonecol
de_slider	6 category: 'Columns: 1'
echidnet_layouts	<pre>7 default_region: content 8 icon_map:</pre>
templates	9 – [content] 10 regions:
<pre>/* echidnet_layouts.info.yml</pre>	10 regions: 11 content:
<pre>/* echidnet_layouts.layouts.yml</pre>	12 label: Content 13
echidnet_layouts.module	14 echidnet_layout_twocol:
	15 label: 'Two Column 50/50'
	16 path: templates/layout
	<pre>17 template: echidnet-layouttwocol-50-50</pre>
	18 category: 'Columns: 2'
	19 default_region: first
	20 icon_map:
	21 – [first, second]
	22 regions:
	23 first:
	24 label: First
	25 second: 26 label: Second
	26 label: Second

## **Custom Layouts**

```
10
  set classes = [
    'layout',
    'layout--twocol-50-50',
%}
{% if content|render|trim %}
  <div{{ attributes.addClass(classes) }}>
    <div {{ region_attributes.first.addClass('layout__region', 'layout__region-_first', 'layout__region-main', '</pre>
    region_medium') }} {% if not region_attributes.first %} class="layout region layout region_-first
    layout__region-main region-medium" {% endif %}>
      {% if content.first %}
        {{ content.first }}
      {% endif %}
    </div>
    <div {{ region_attributes.second.addClass('layout__region', 'layout__region--second', 'layout__region-main', '</pre>
    region_medium') }} {% if not region_attributes.second %} class="layout__region layout__region_-second
    layout__region-main region-medium" {% endif %}>
      {% if content.second %}
        {{ content.second }}
      {% endif %}
    </div>
  </div>
{% endif %}
```

## **Custom Layouts - Use Cases**

- Full control over markup and classes
- Site specific layouts that meet your comps and come pre-built
- Complex layouts for one-off pages like front page

## But Wait... Disclaimer

- Layout Builder is in core but...
  - It is still its early days
  - Maintainers are working hard on bug fixes and new features
  - There is a collection of patches that currently is
    - a must-have

## Patches

- "Allow field blocks to display the configuration label when set in Layout Builder"
- "https://www.drupal.org/files/issues/2019-03-11/ allow\_field\_blocks\_to\_display\_configuration\_label-3039185-2.patch"
- "Allow end date to be optional"
- "https://www.drupal.org/files/issues/2018-05-14/2794481-60.patch"
- "Context-aware blocks will fatal if they are not found"
- "https://www.drupal.org/files/issues/2019-05-23/3056387-block-8.patch"
- "Form blocks rendered inside layout builder break save"
- "https://www.drupal.org/files/issues/2019-06-28/3045171-71.patch"
- "Creating a block that uses AJAX adds multiple blocks"
- "https://www.drupal.org/files/issues/2019-05-04/3042190-3.patch"
- "Cannot use relationship for rendered entity on Views"
- "https://www.drupal.org/files/issues/2019-05-04/2457999-194.patch"

Thank you! Q&A

@sunnyenotick | drupal.org/amykhailova