

# **Injecting React into Your Authoring Experience**

# **Who am I?**

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[https://github.com/pingevt/  
drupal-react-widgets](https://github.com/pingevt/drupal-react-widgets)

# Bluecadet



# **Who is this for?**

- Moderate to Advanced Coders
- Anyone interested in customizing Drupal

# **Let's get started**

# **Drupal's Admin Experience**

Is...

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**Is... NOT good**

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Is... **NOT** good

But Why?

# Drupal's Admin Experience

**Is NOT good**

- Is it because Drupal is inherently bad?
- The underlying architecture is bad? (Think Forms??)

# Drupal's Admin Experience

**Is NOT good**

- ~~Is it because Drupal is inherently bad?~~
- ~~The underlying architecture is bad? (Think Forms??)~~

**I would argue NO!!**

# Drupal's Admin Experience

**Is NOT good**

A good admin experience has to be **designed**, **opinionated** and **purposeful**. This is hard to do in a system that tries to be everything for everyone.

**Especially when you get into complex data structures!**

# Drupal's Admin Experience

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A good admin experience has to be **designed**, **opinionated** and **purposeful**. This is hard to do in a system that tries to be everything for everyone.

**Especially when you get into complex data structures!**

Can it be done? YES!

# Drupal's Admin Experience

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A good admin experience has to be **designed**, **opinionated** and **purposeful**. This is hard to do in a system that tries to be everything for everyone.

**Especially when you get into complex data structures!**

Can it be done? YES!

Should it be done? YES! Admin UI & JavaScript Modernization

# Drupal's Underlying Architecture

- Entities
- Fields
  - (plugin) Field => Defines Data Structure
  - (plugin) Field Widget => Defines Data Entry
  - (plugin) Field Formatter => Defines Data Display

# Field Widgets

Show row weights

"Field API widgets specify how fields are displayed in edit forms." - [drupal.org](https://drupal.org)

<a href="#">Add field group</a>		
Field	Widget	
CMS Name	Textfield	Textfield size: 60
Authored by	Autocomplete	Autocomplete matching: Contains Autocomplete suggestion list size: 10 Textfield size: 60 No placeholder
Authored on	Datetime Timestamp	
Promoted to front page	Single on/off checkbox	Use field label: Yes
Sticky at top of lists	Single on/off checkbox	Use field label: Yes
URL alias	URL alias	
URL redirects		
Plain Name	Text field Simple Formatter	Textfield size: 60 Italic button Remove Formatting button Toggle Source Code button Format: plain_text
Display Name	Text field Simple Formatter	Textfield size: 60 Italic button Remove Formatting button Toggle Source Code button
Sort Term	Textfield	Textfield size: 60
Tier	Select list	
Format Type	Check boxes/radio buttons	
Illustration	Inline entity form - Complex	Form mode: Inline Entity Form Overridden labels are used: Illustration and Illustrations Collapsible New Illustrations can be added. Existing Illustrations can be referenced and are matched with the Contains operator. Illustrations can not be duplicated. Entity browser: Illustration Browser.
Winner Type	Select list	
Award Year	Select list	
Category	Select list	
Topic	Simple hierarchical select	Do not allow creation of new items Force selection of deepest level
Tagline	Text field Simple Formatter	Textfield size: 60 Bold button Italic button Remove Formatting button Toggle Source Code button
Top Level Bio	Text area (multiple rows)	Number of rows: 5
Content Segments	Paragraphs EXPERIMENTAL	Title: Paragraph Plural title: Paragraphs Edit mode: Closed Closed mode: Preview Autocollapse: None Add mode: Modal form Form display mode: default Features: Duplicate, Collapse / Edit all, Add above

# Field Widgets

On the node edit form, Drupal inherently does not care about HOW the data gets in, it just needs the data... using a **widget**.

This opens up a world of possibilities to us.

# **Field Widgets**

**What are we going to look at today**

1. Single Field React Widget
2. Complex Data React Widget

# Single Field Widget

Example =>

The screenshot shows the Drupal admin interface with a node edit form. The page title is "Edit Test React test numbers". The node has the title "test numbers". It contains three fields: "Drupal Number" (a currency input set to \$25.00), "Test Float" (a slider input set to \$4), and "Test Integer" (a slider input set to 14). There is also a "Published" checkbox which is unchecked. On the right side, there is a sidebar with sections for "Published" (last saved: 04/25/2020 - 12:51, author: admin, create new revision), "Revision log message" (a large text area for describing changes), and links to "MENU SETTINGS", "URL ALIAS", "AUTHORING INFORMATION", and "PROMOTION OPTIONS".

# Single Field Widget

1. Field Widget plugin
  - Added custom theme to element
  - Added library
2. .module file
  - Define the new form element input theme
  - Pre-process input element
3. React component
  - include <input />

# **Single Field Widget**

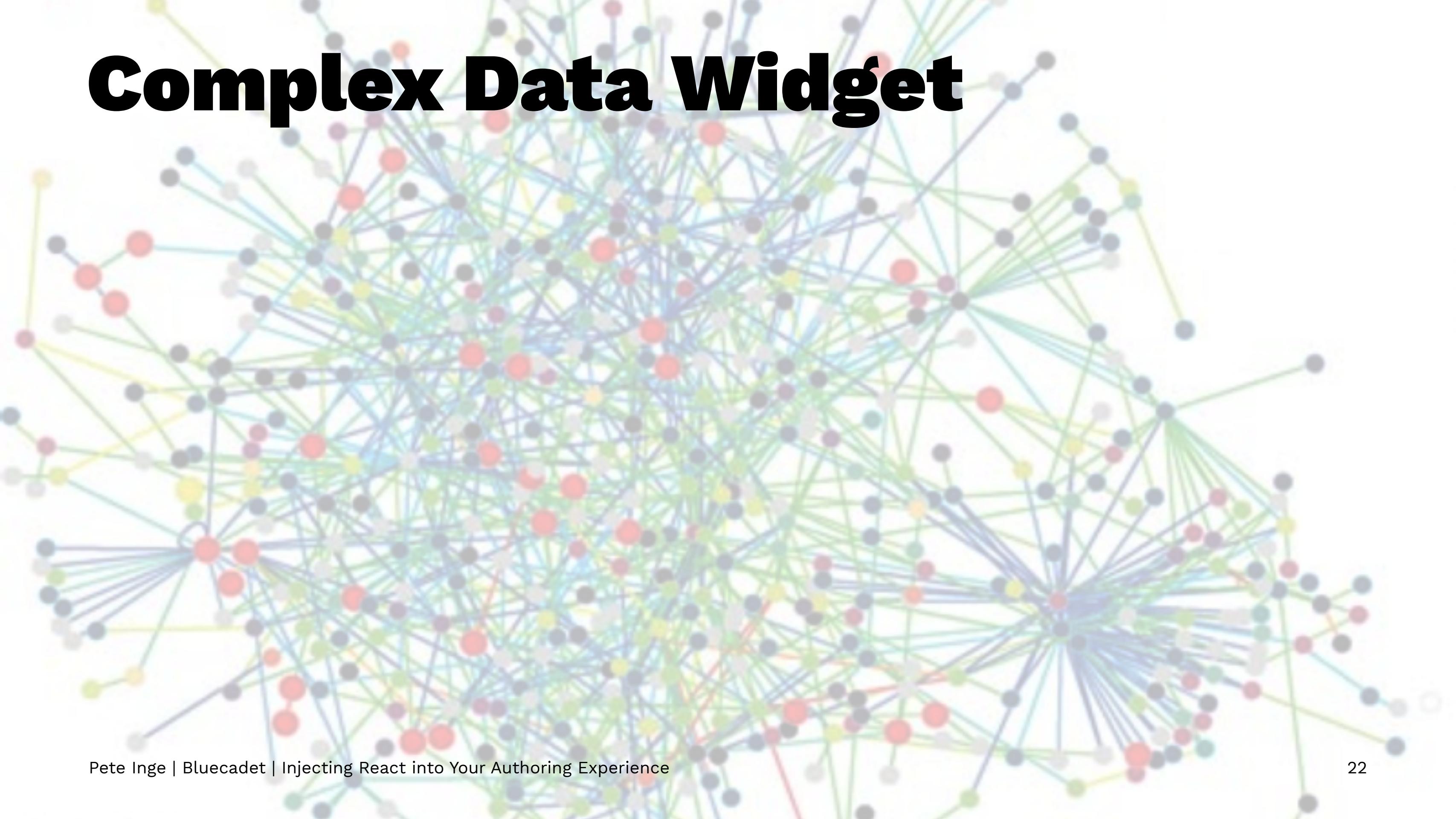
Let's switch to the code!

# Single Field Widget

## Recap

1. Field Widget plugin
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# Complex Data Widget





# **Complex Data Widget**

to the website!!

# **Complex Data Widget**

- React State
- hook\_node\_presave()

# Complex Data Widget

## Notes

- hook\_preprocess\_node() to render data (optional)
- For this specific example we used an API endpoint for data.

# Complex Data Widget

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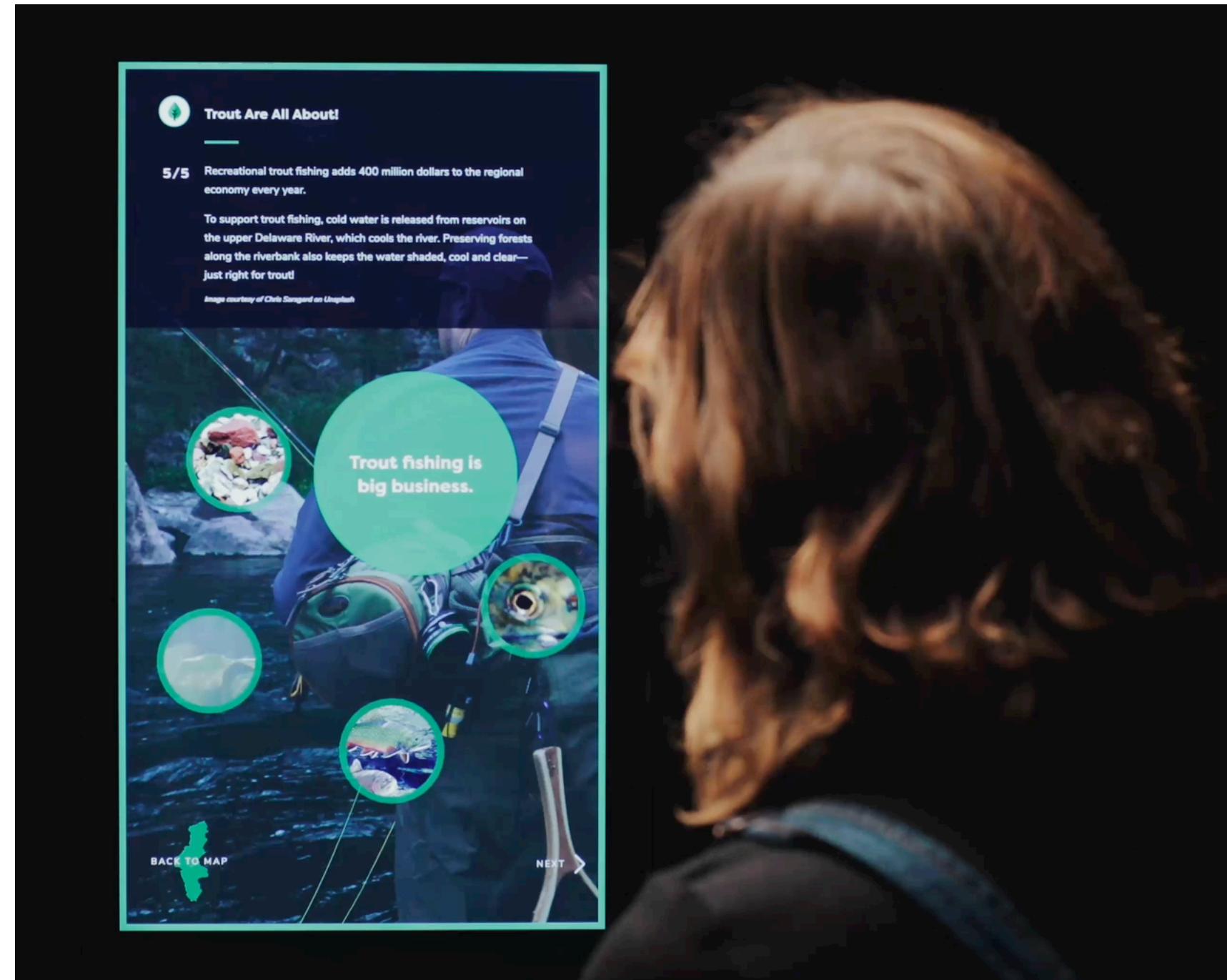
# Where to go from here?

- Devs should dev
- Better Entity Browser (Media)
- Better Paragraphs interface
- Recurring Dates



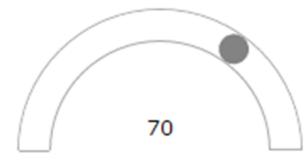
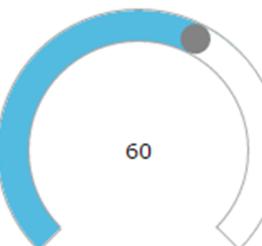
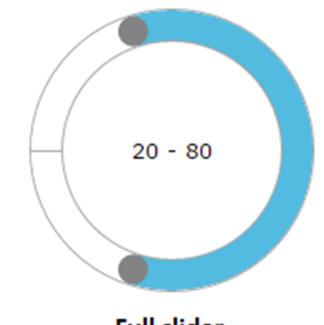
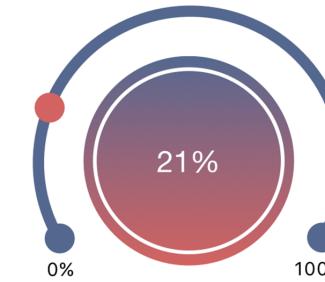
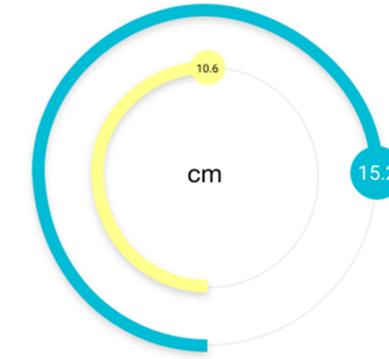
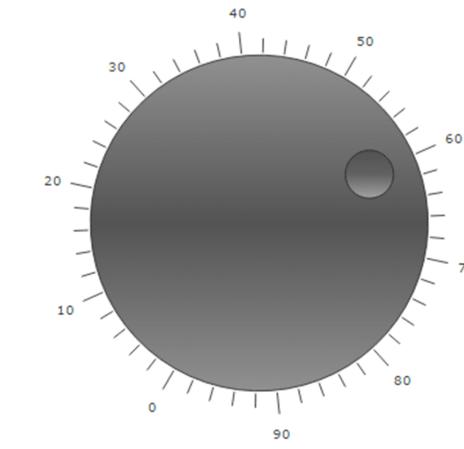
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- "Hot spot" picker



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- Devs should dev
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- Recurring Dates
- "Hot spot" picker
- Anything customized to your project or client



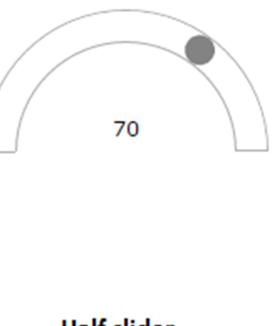
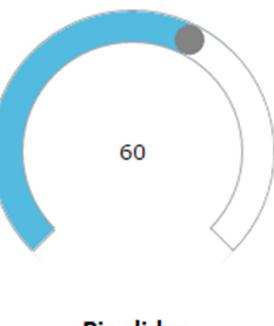
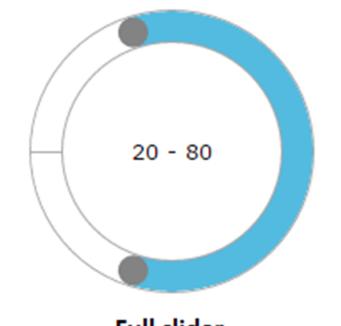
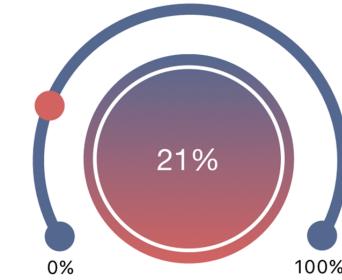
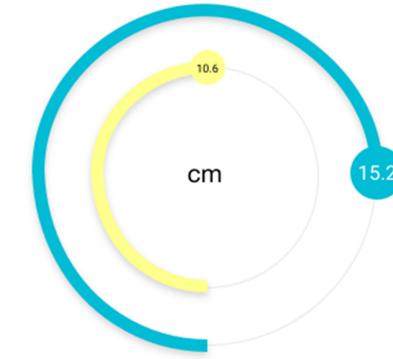
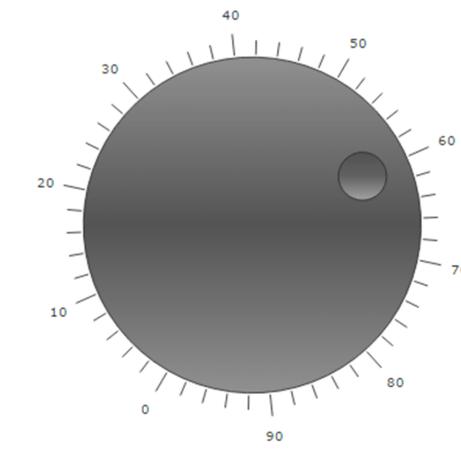
Full slider

Pie slider

Half slider

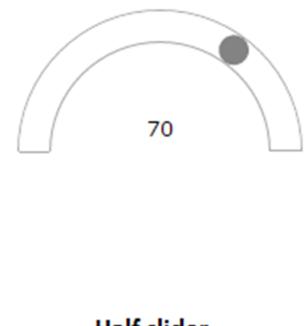
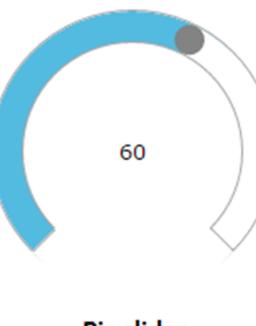
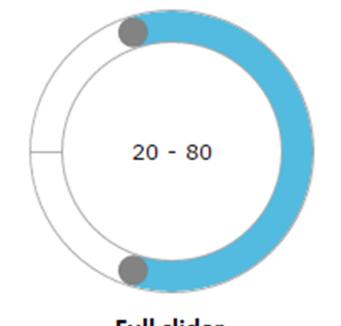
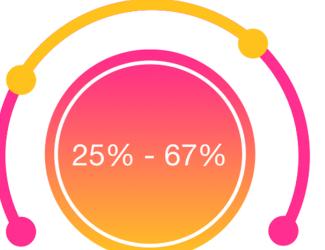
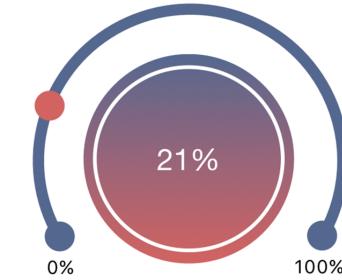
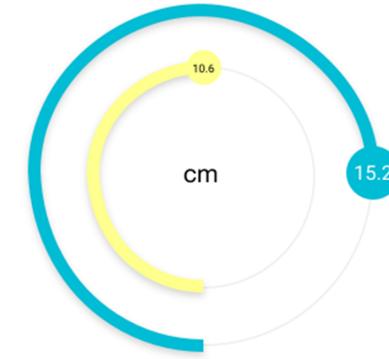
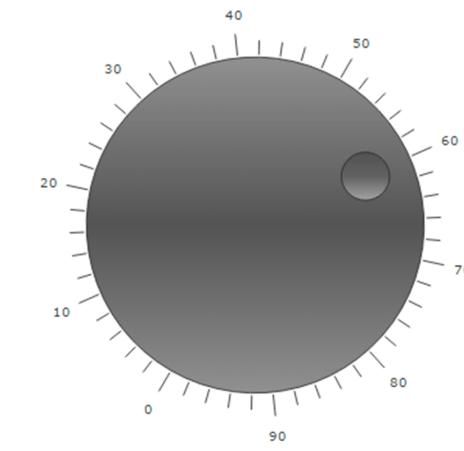
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- Better Paragraphs interface
- Recurring Dates
- "Hot spot" picker
- Anything customized to your project or client
- Sky is the limit!



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- Devs should dev
- Better Entity Browser (Media)
- Better Paragraphs interface
- Recurring Dates
- "Hot spot" picker
- Anything customized to your project or client
- Sky is the limit!
  - Not locked into React



# **Thanks!**

**Questions?**

**Comments?**

**Discussion?**

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