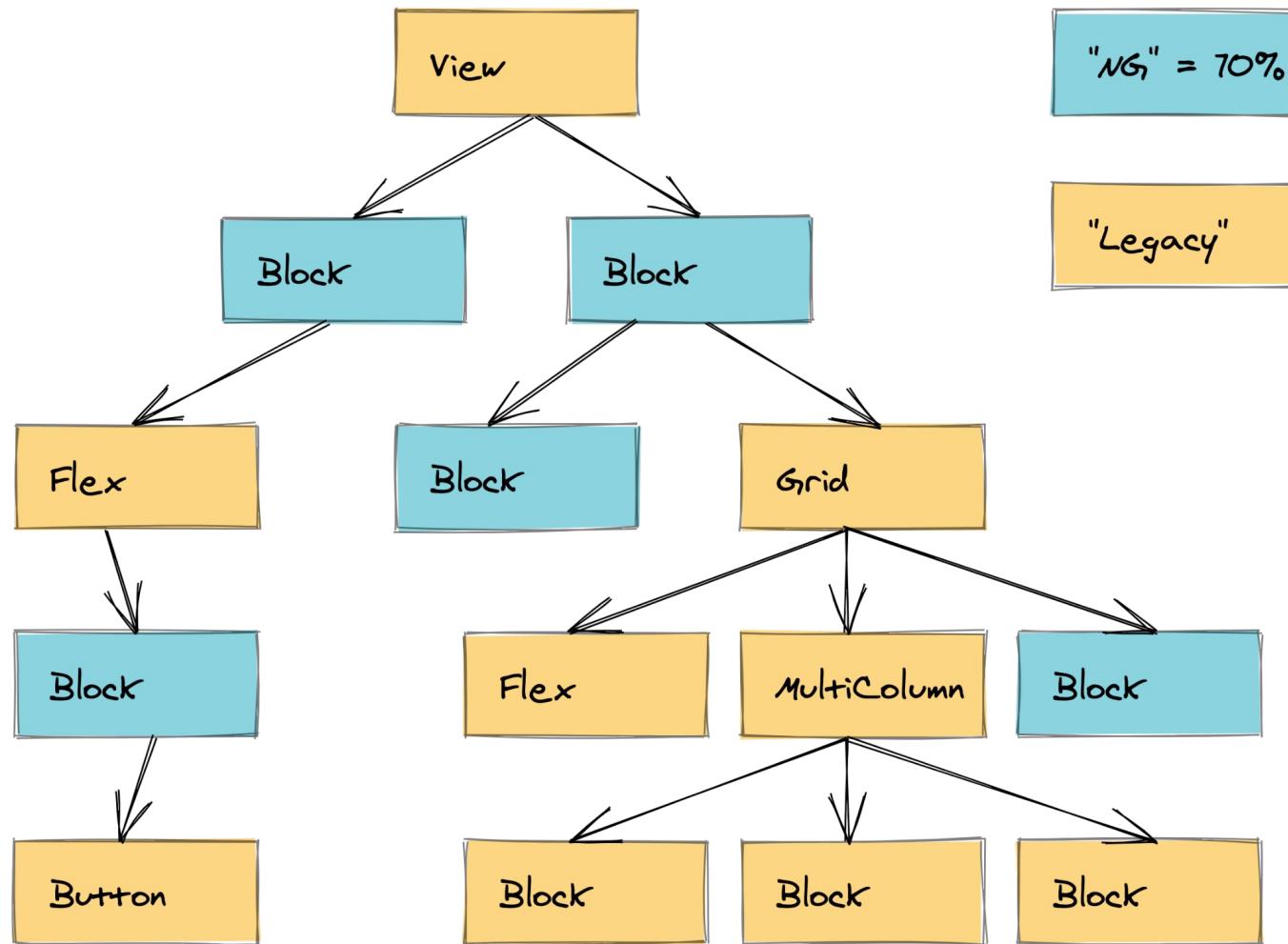


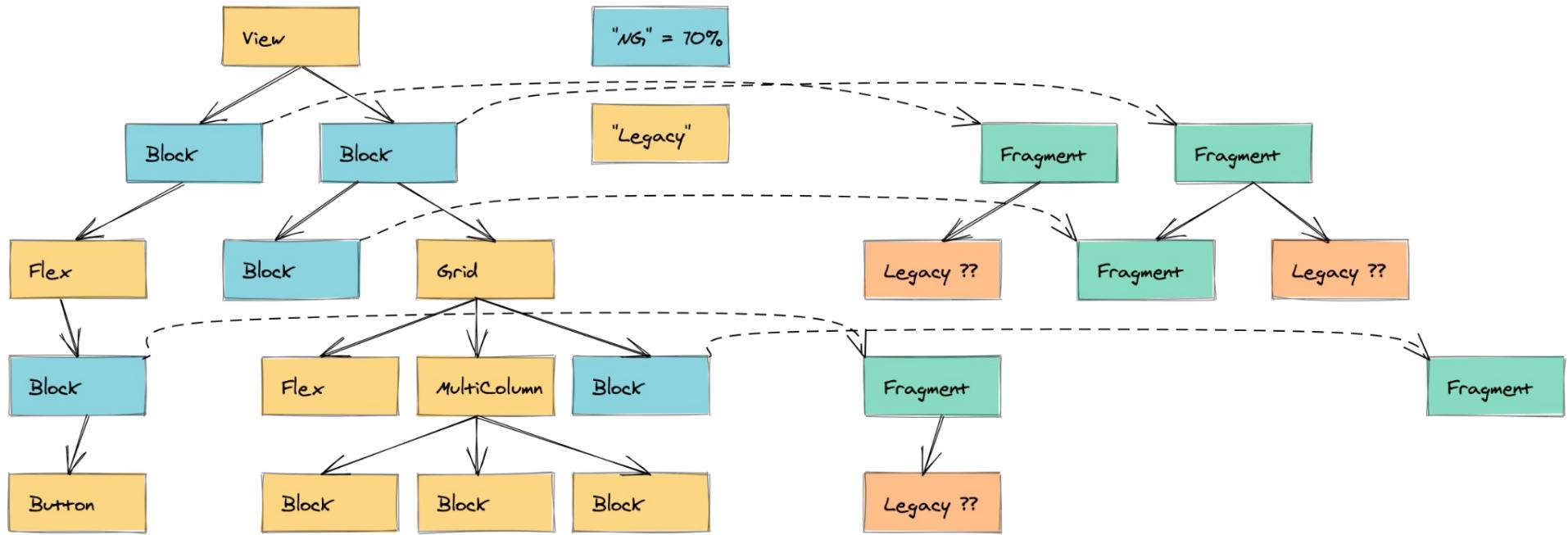
Layout Architecture Progress

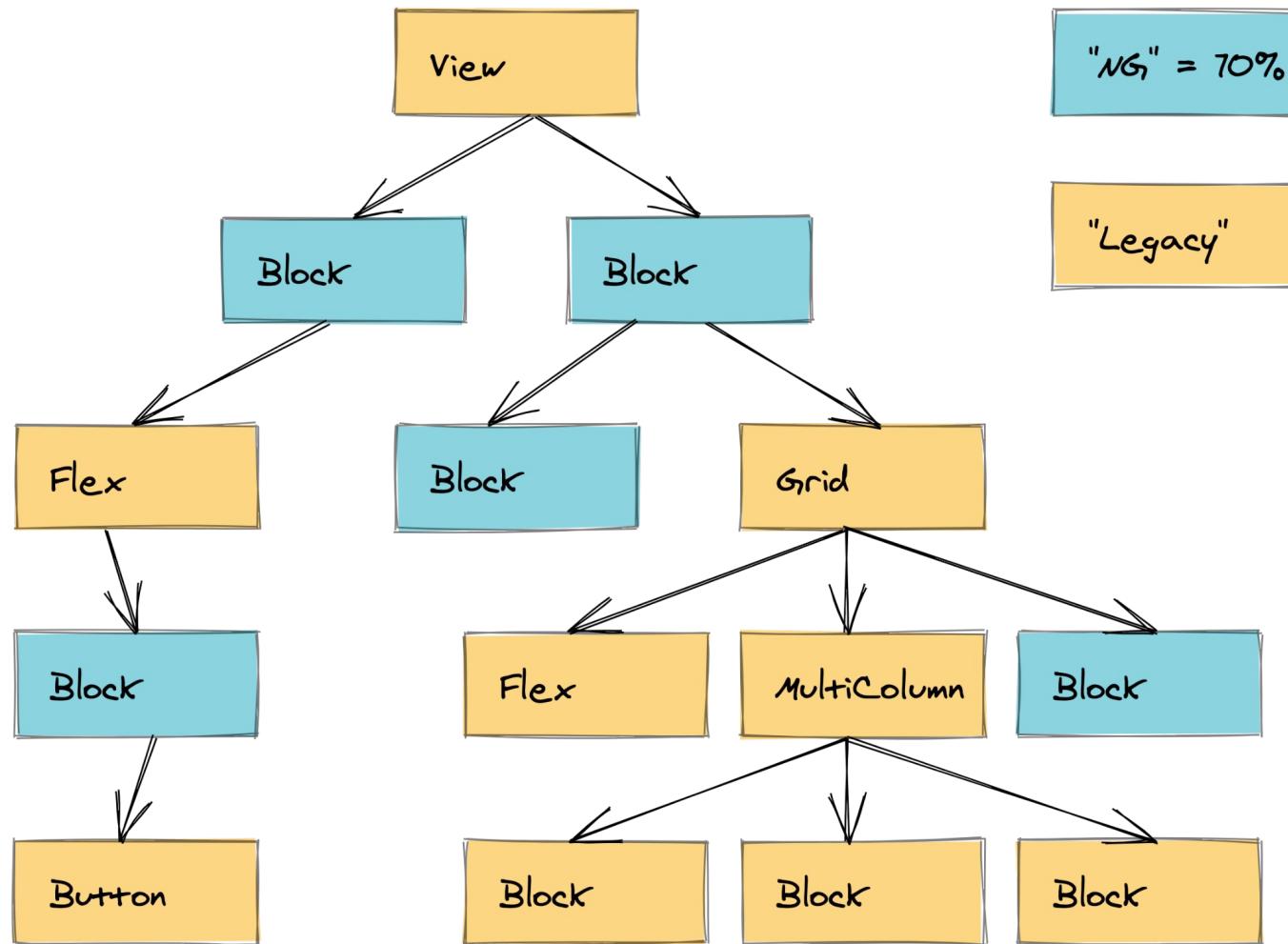
ikilpatrick@ BlinkOn 14



"NG_i" = 70%

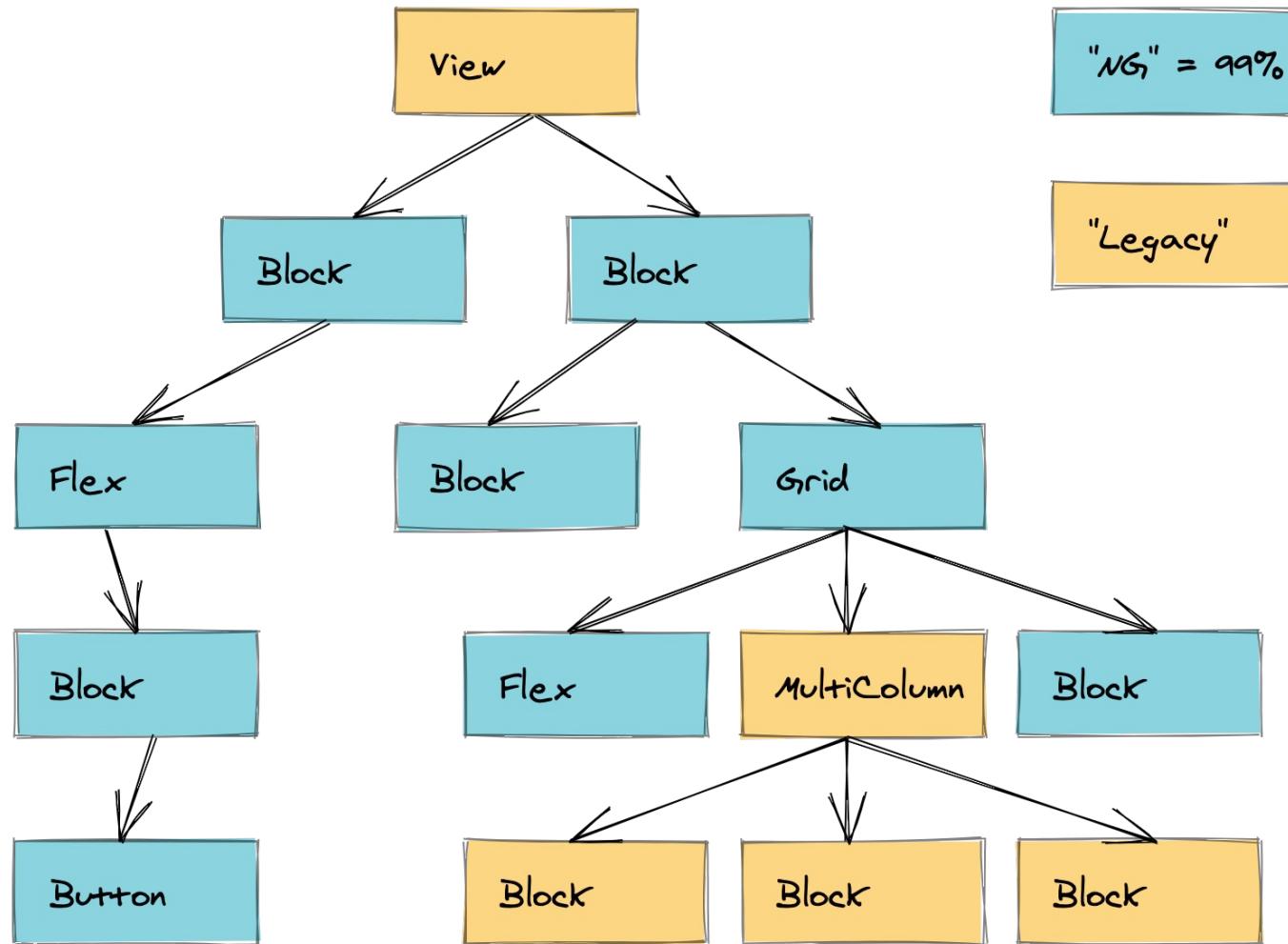
"Legacy"





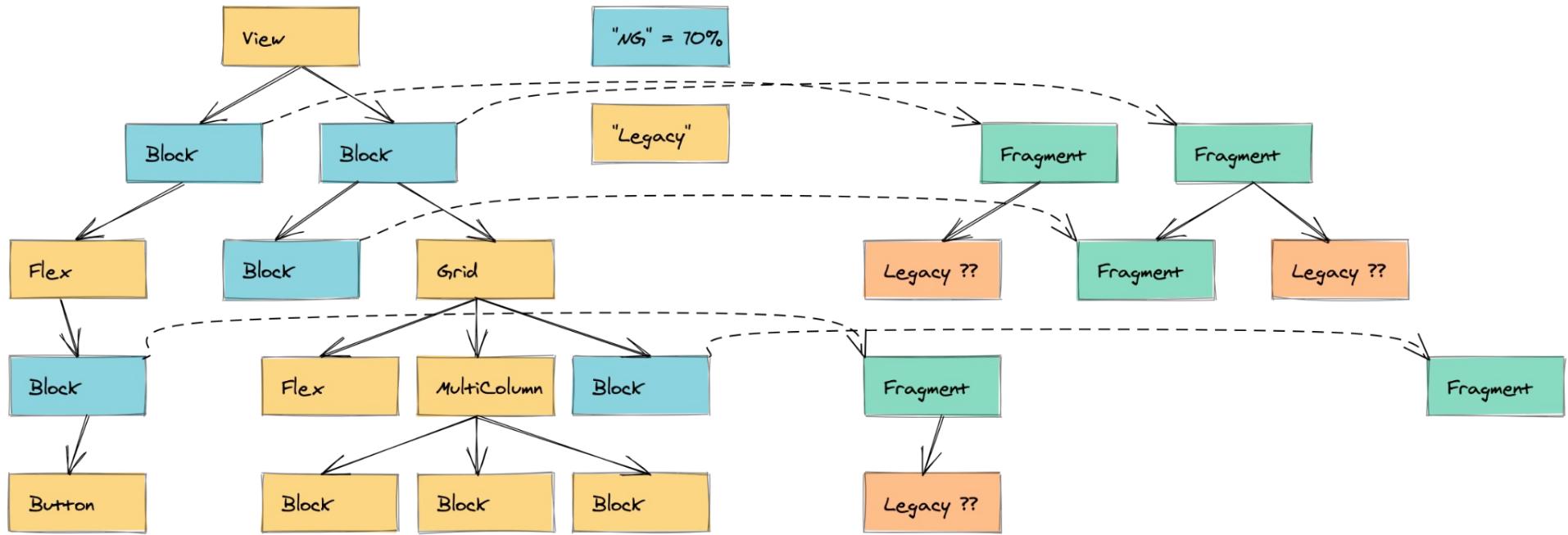
"NG_i" = 70%

"Legacy"



"NG_i" = 99%

"Legacy"



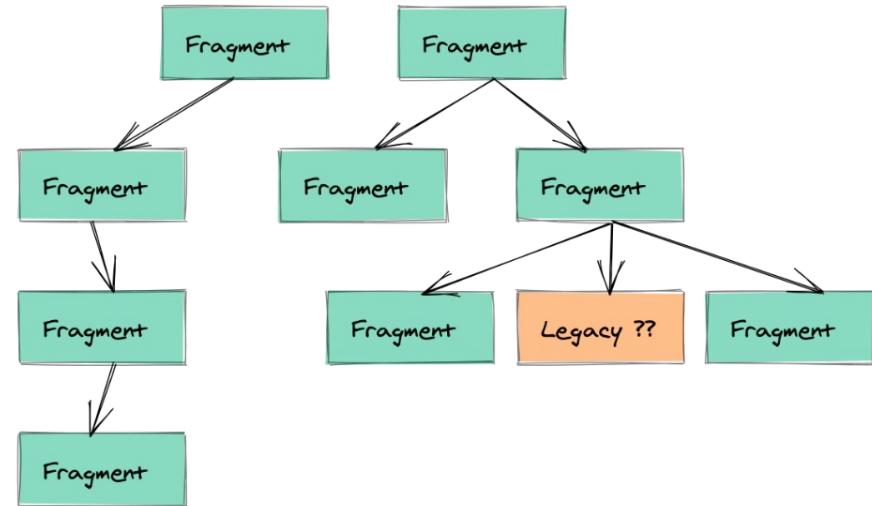
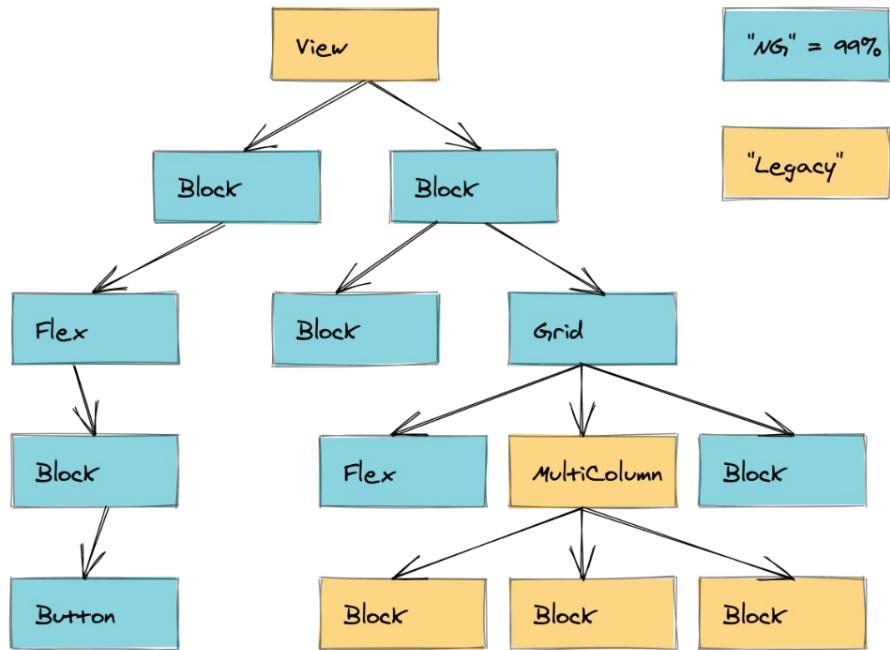


Table Bugs

Stars	Component	Summary + Labels
118	Blink>Layout>Table	[meta] Add subpixel support for tables
94	Blink>Layout>Table	visibility:collapse does not work correctly for table columns or rows
91	Blink>Input, Blink>Layout>Table	position: sticky does not work on <thead> or <tr>
76	Blink>Layout>Table	Border collapsing is wrong with colspans / rowspan cells
39	Blink>Layout>Table	Implement relative positioning for table rows
21	Blink>Layout Blink>Layout>WritingMode, Blink>Layout>Table	[TablesNG] TD/TH orthogonal writing mode support
16	Blink>Layout>Table	zoom resizes table cells and blocks inconsistently
15	Blink>Layout>Subpixel, Blink>Layout>Table	Uneven height of td element when using fractional heights on children
10	Blink>Layout>Table	Width for table-cells is wrong with windows zoom set to medium - 125% 61
9	Blink>Layout>Table	Floating-Point CSS height/width percentages not calculated correctly by Chrome
7	Blink>Layout	subpixel borders with inner 100% content broken LayoutNG
7	Blink>Layout>Table	Imported WPT test quirks-mode/table-cell nowrap minimum width calculation.html is failing
7	Blink>Layout>WritingMode, Blink>Layout>Table	changing writing-mode property for table layout does not work correctly
6	Blink>Layout>Table	DevRel-SAP: padding in colspans table cells affects width of cells in following colspans rows
6	Blink>Layout>Table	thead & tbody relative position ignored by absolute-positioned-children
6	Blink>Layout>Table	Table border will be broken after deleting one table row.
6	Blink>Layout>Table	A table cell has incorrect width when specific paddings are assigned
6	Blink>Layout>Table	wrong rendering of cell border (which has colspan) when table has border-collapse
6	Blink>Layout>Table	Horizontal margins on captions don't affect the table wrapper box size correctly
6	Blink>Layout>Table	In Blink, table with "width:100%" doesn't get full width of parent, when parent has fractional size (sometimes leaving behind seams/fringes)
6	Blink>Layout>Table	A table cell's content does not occupy the whole cell width if the colspan attribute is set to 2 or more
6	Blink>Layout>Table	Incorrect tbody border rendering
6	Blink>Layout>Table	column width distribution incorrect when td colspan=2 width:100% inserted into table with 100% width
6	Blink>Layout>Table	In fixed layout tables, Blink distributes column width differently than FF/Edge
6	Blink>Layout>Table	Weird spacing between borders of a table with border-collapse appears when toggling border-width with JS
6	Blink>Layout>Table	Content inside table cells with colspan=2 can stretch colspan=1 cells on other rows
5	Blink>Layout>Flexbox, Blink>Layout>Table	table's specified widths shouldn't count as min main sizes when the table is a flex item
5	Blink>Layout>Table	Colgroup Col with width:0px when having one row with colspan
5	Blink>Layout>Table	100 percent table width works incorrectly with parent fraction width
5	Blink>Paint, Blink>Layout>Table	<tbody> background renders in wrong place when <tr> is transformed
5	Blink>Layout>Table	Table width does not render correctly with set col width
5	Blink>Layout>Table	Rendering CSS table child elements with ::after content: " " (blank space)
5	Blink>Layout>Table	Size of table element having 100% size, box-sizing = content-box and padding is computed wrongly
5	Blink>Layout>Table	Cannot get rid of table border
5	Blink>Layout>Table	Logical width calculation for table cells handles percentage width padding incorrectly
5	Blink>Layout>Table	Bottom border of 'td' in 1 pixel below than others with paddings in 'em'

"NG" = 99%

Grid
Flexbox
Tables
Editing
Ruby
Form Controls
Button
TextArea
Fieldset
Replaced Sizing

"Legacy"

(and text-combine, SVG, text+)

Printing

MultiColumn

(FRAGMENTATION)

WE HAVE SO MANY FRAGMENTATION BUGS

Fragmentation Bugs

Stars	Status	Opened
571	Available	Jun 10, 2016
272	Assigned	Jan 17, 2009
130	Available	Apr 28, 2014
118	Assigned	May 27, 2014
115	Started	Nov 5, 2020
94	Available	Feb 4, 2013
93	Available	May 7, 2015
91	Available	Mar 18, 2017
76	Available	Sep 28, 2008
62	Available	Nov 16, 2013
59	Started	Mar 1, 2016
58	Available	Jul 6, 2015
47	Available	Aug 28, 2017
43	Available	May 7, 2018
42	Available	Feb 3, 2017
39	Available	Apr 20, 2018
39	Available	Sep 24, 2014
36	Started	Oct 3, 2018
36	Available	Mar 22, 2013
31	Available	Nov 25, 2018
30	ExternalDependency	Nov 14, 2019
30	Available	Apr 3, 2013
29	Assigned	Apr 4, 2018
28	Available	May 24, 2017
27	Available	Oct 4, 2016
24	Available	May 25, 2016
24	ExternalDependency	Oct 8, 2013
23	Available	Jul 10, 2017
23	Available	Aug 23, 2016
23	Available	Aug 6, 2013
21	Available	Aug 29, 2014
20	Available	Oct 28, 2016
19	Available	Apr 25, 2016
19	Available	Mar 4, 2015
19	ExternalDependency	Aug 1, 2013

CSS Columns with Flexbox

When elements with CSS columns applied have flexbox children, some rendering engines seem to split descendant elements across columns.

- **Webkit** (*Tested in Safari 10.0.1 r208047 & Safari Tech Preview Release 16*)
Cuts the text and input and renders some of both in both columns.
- **Blink** (*Tested in Chrome 54 & Opera 41*)
Renders some of the input in both columns.
 - First example: the bottom border from the last input in the left column gets drawn at the top of the right column.
 - Second example: The top few pixels of the input are drawn on the left column and the rest of the input is on the right.

Label

Label

Label

Label

Label

Label

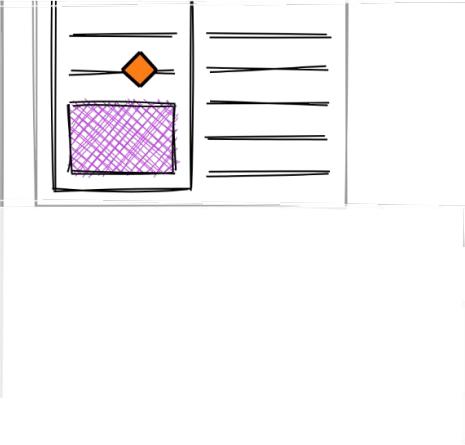
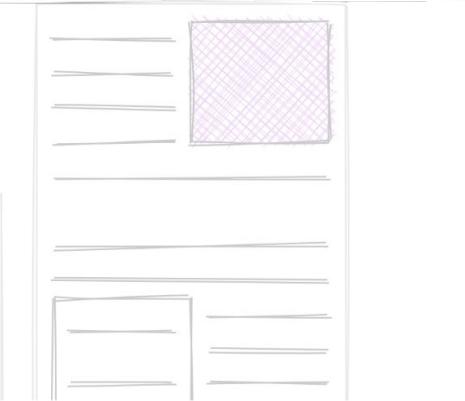
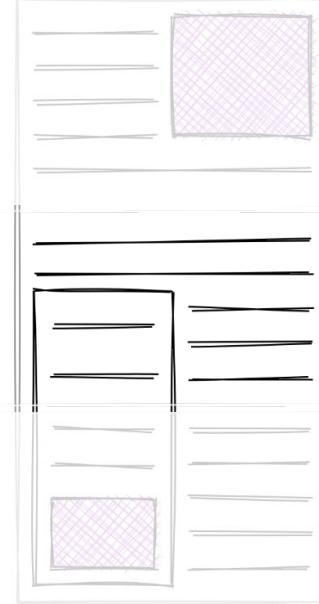
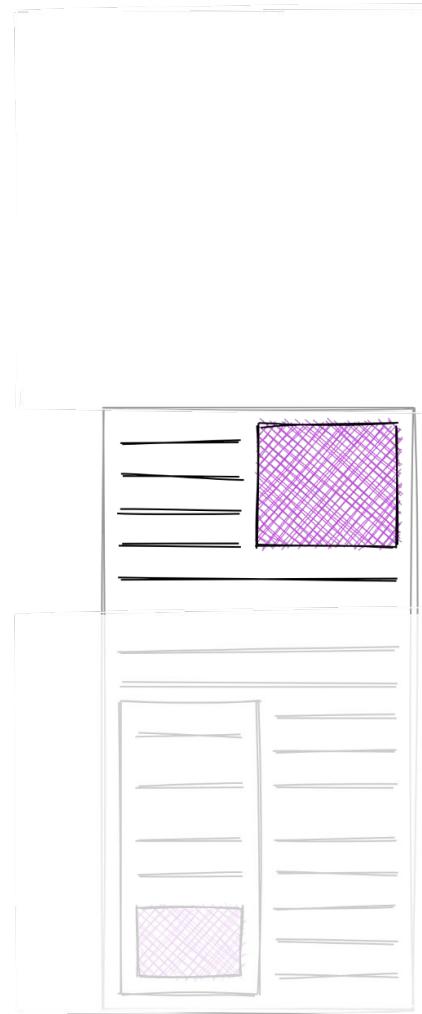
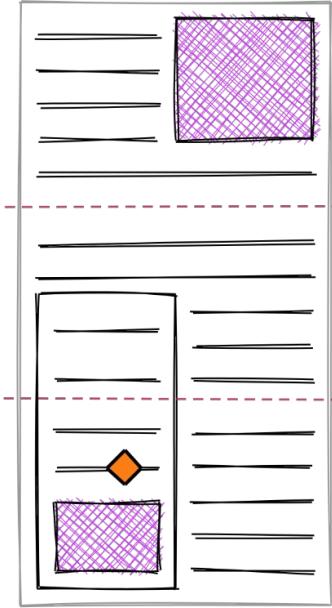
Label

Label

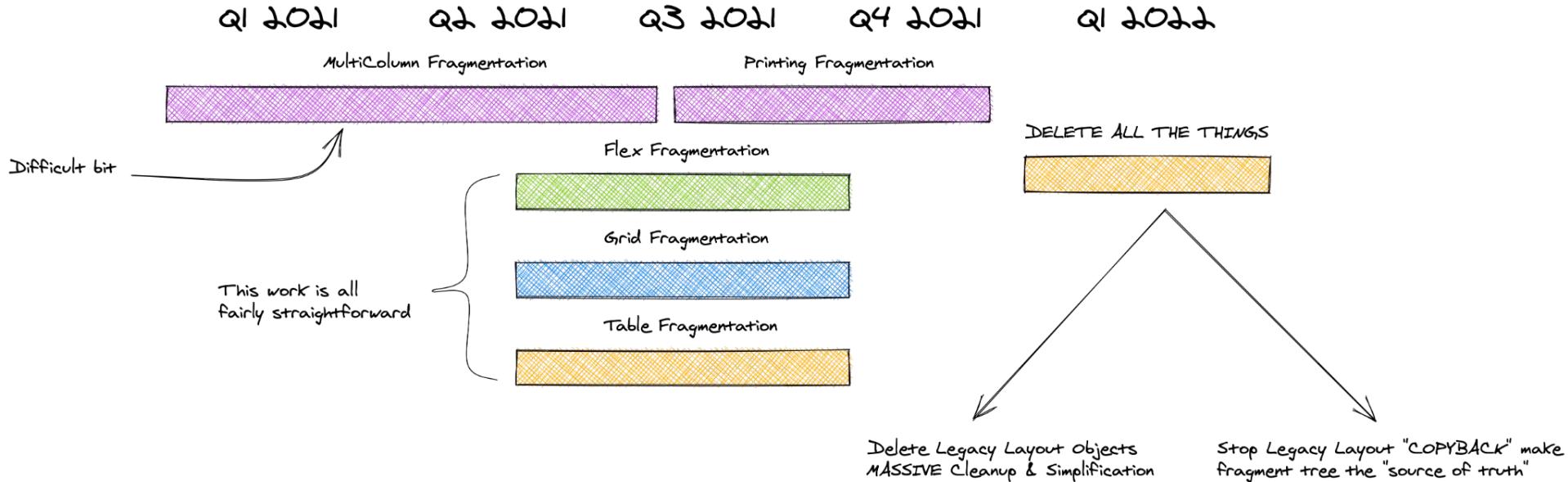
Label

Label

Label



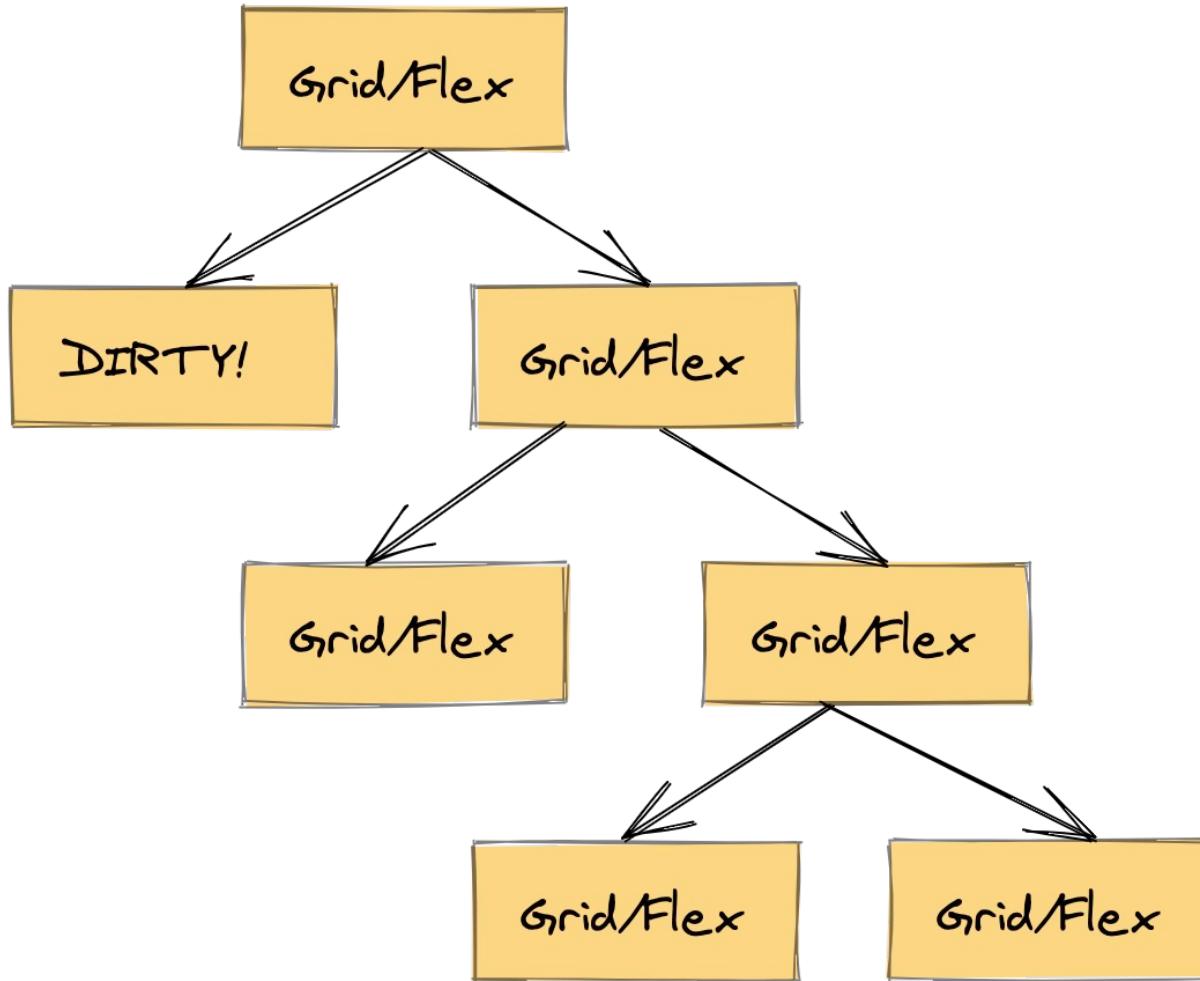
A Very Rough Timeline

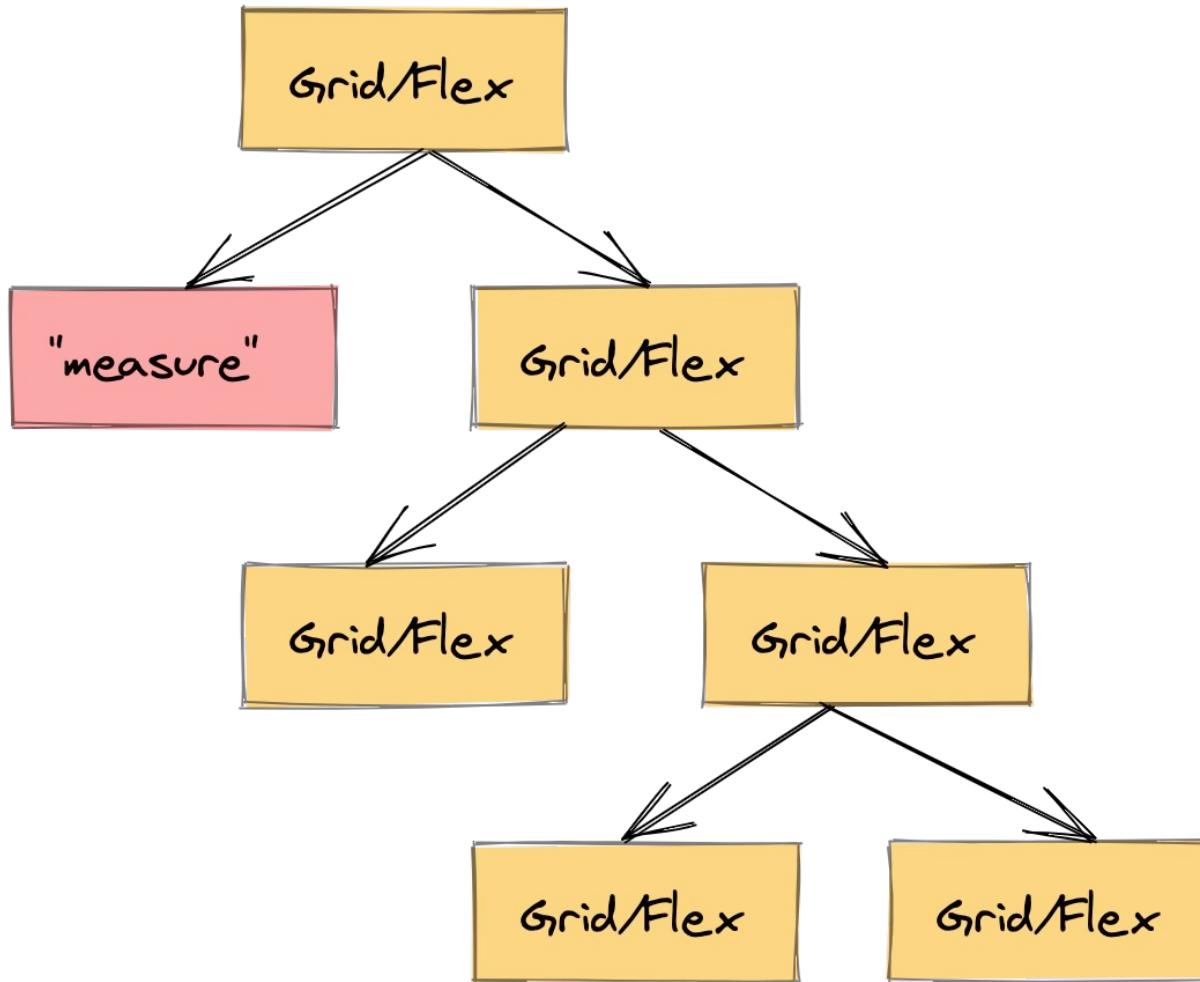


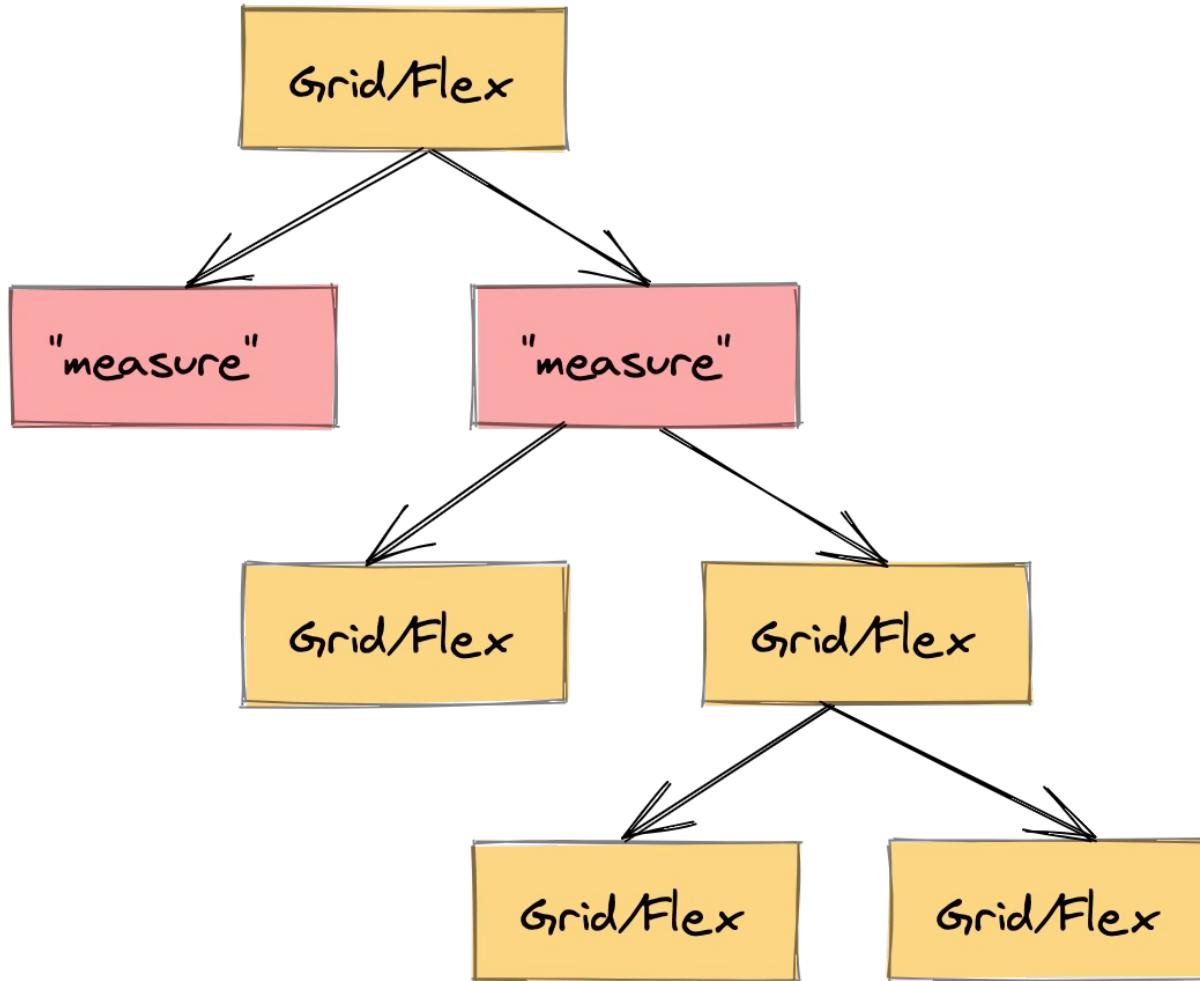
Fin!

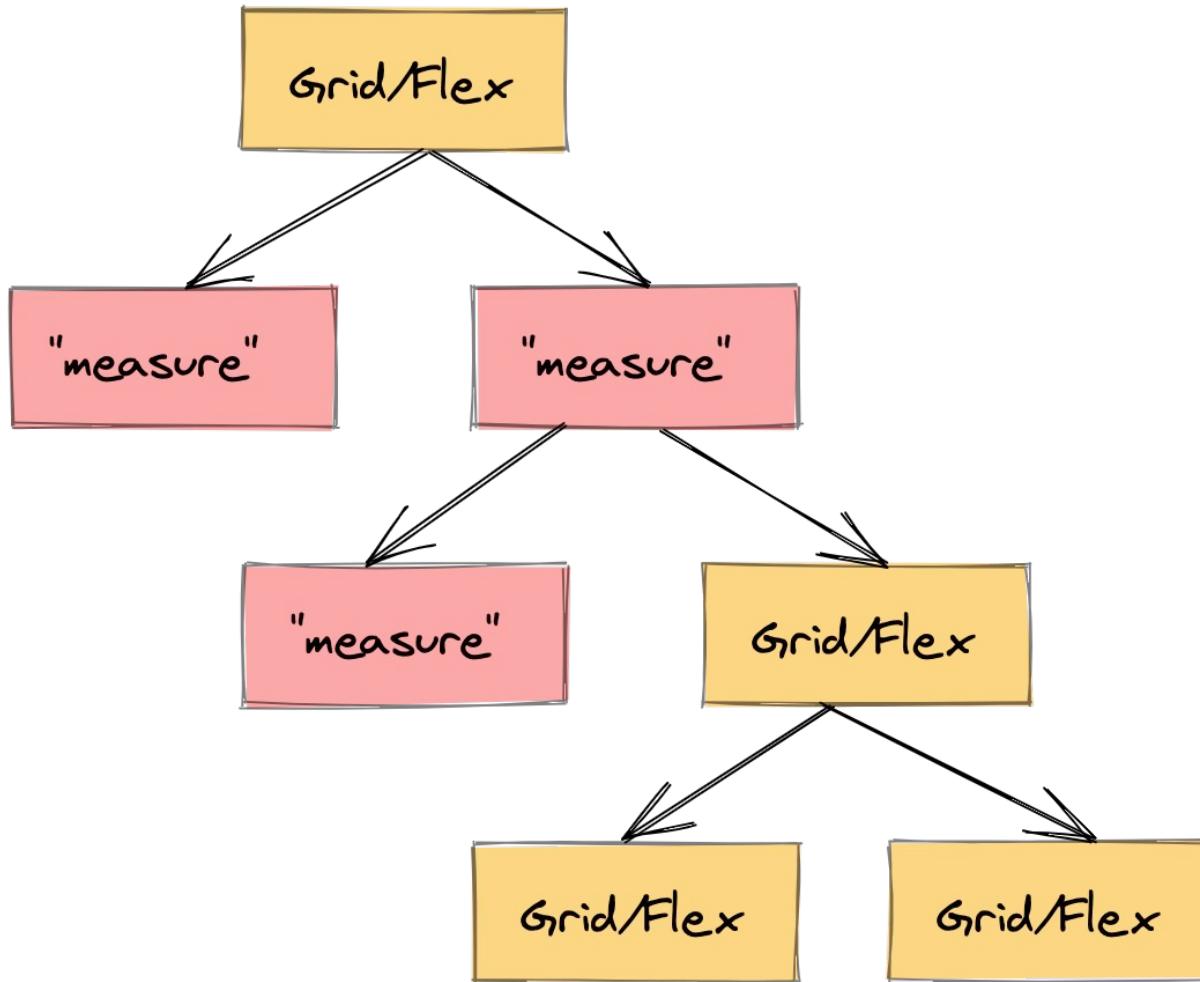
(Unless you want to learn about how
2-slot layout caching works)

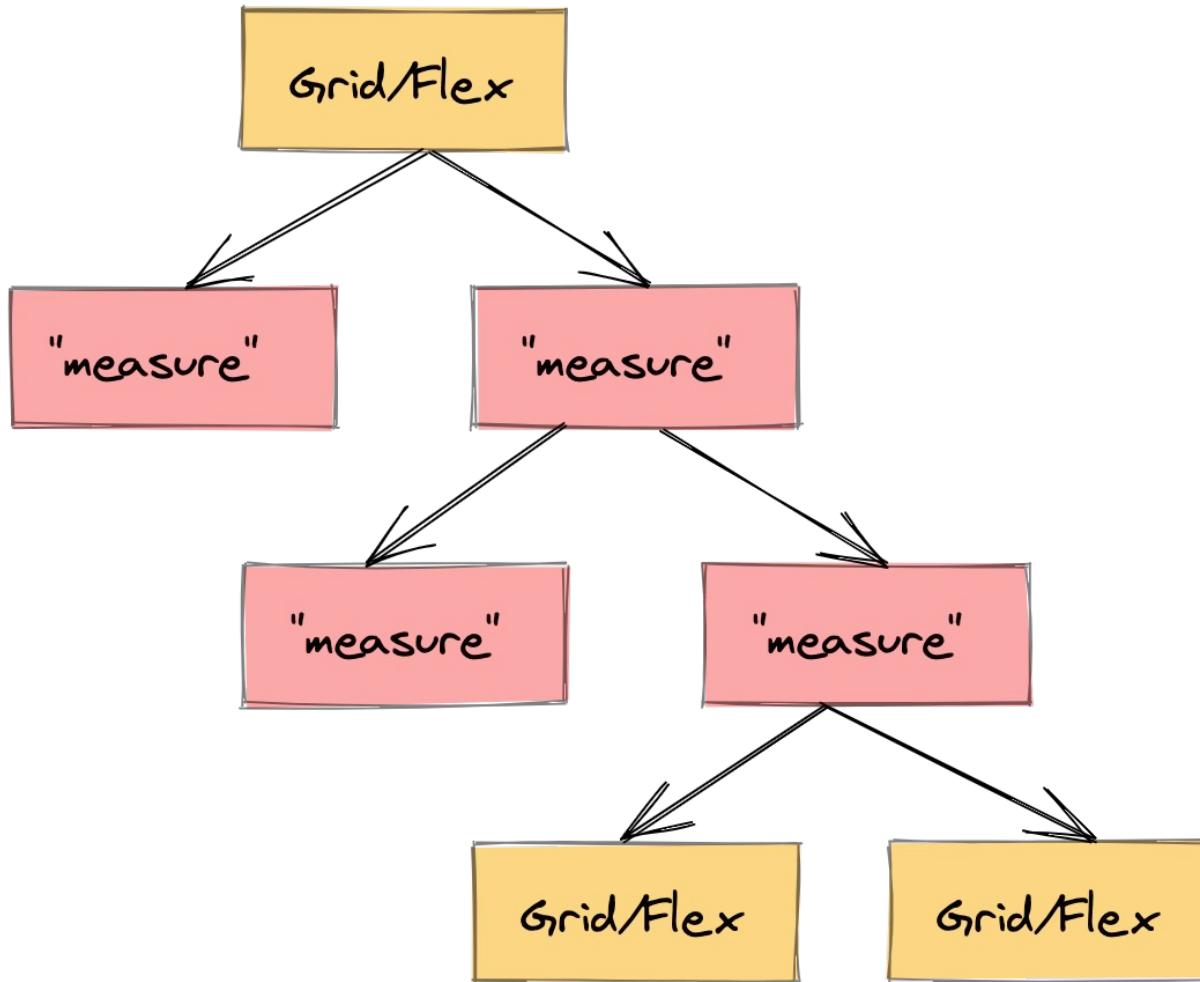
There are 30 more slides,
are you sure?

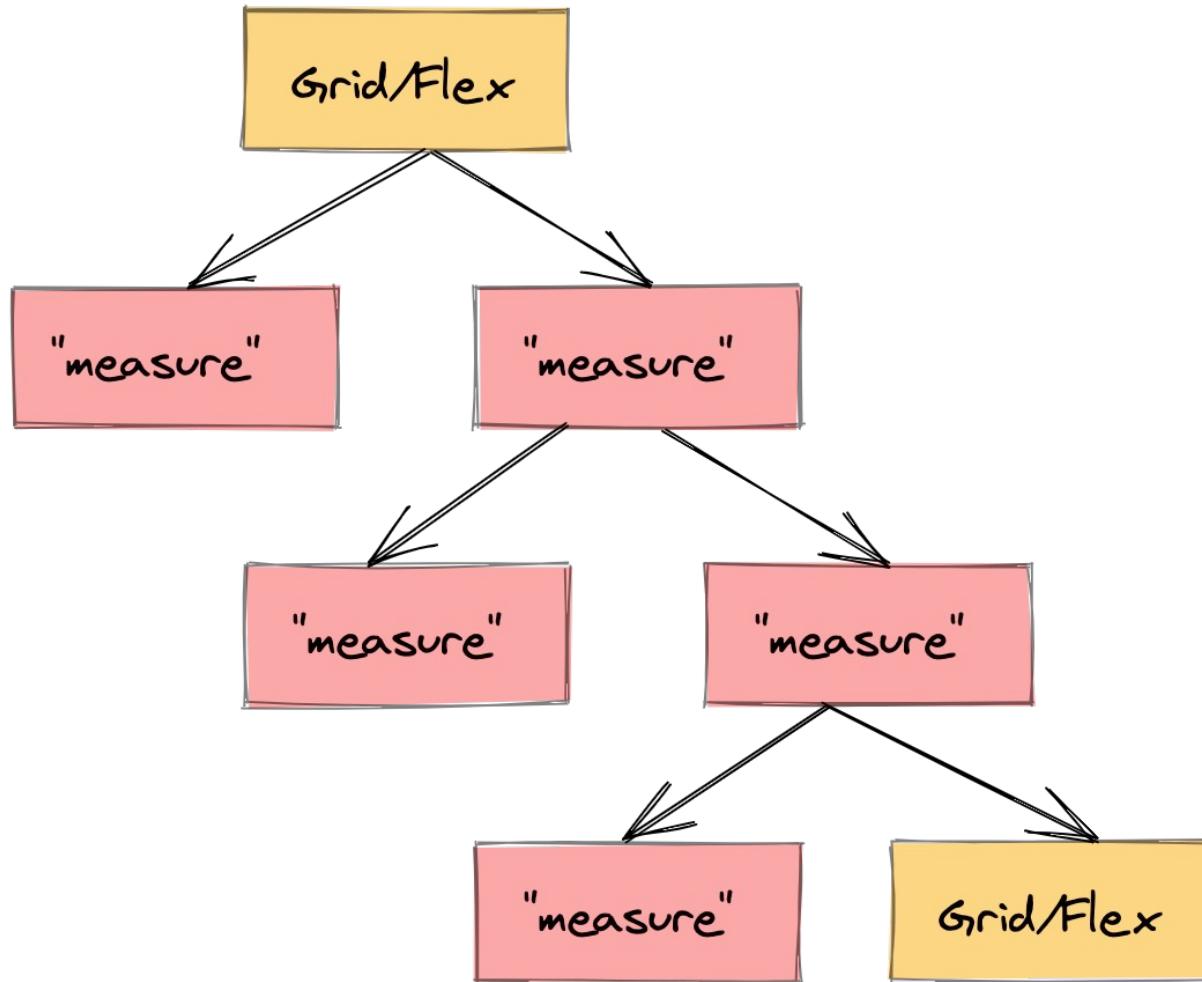


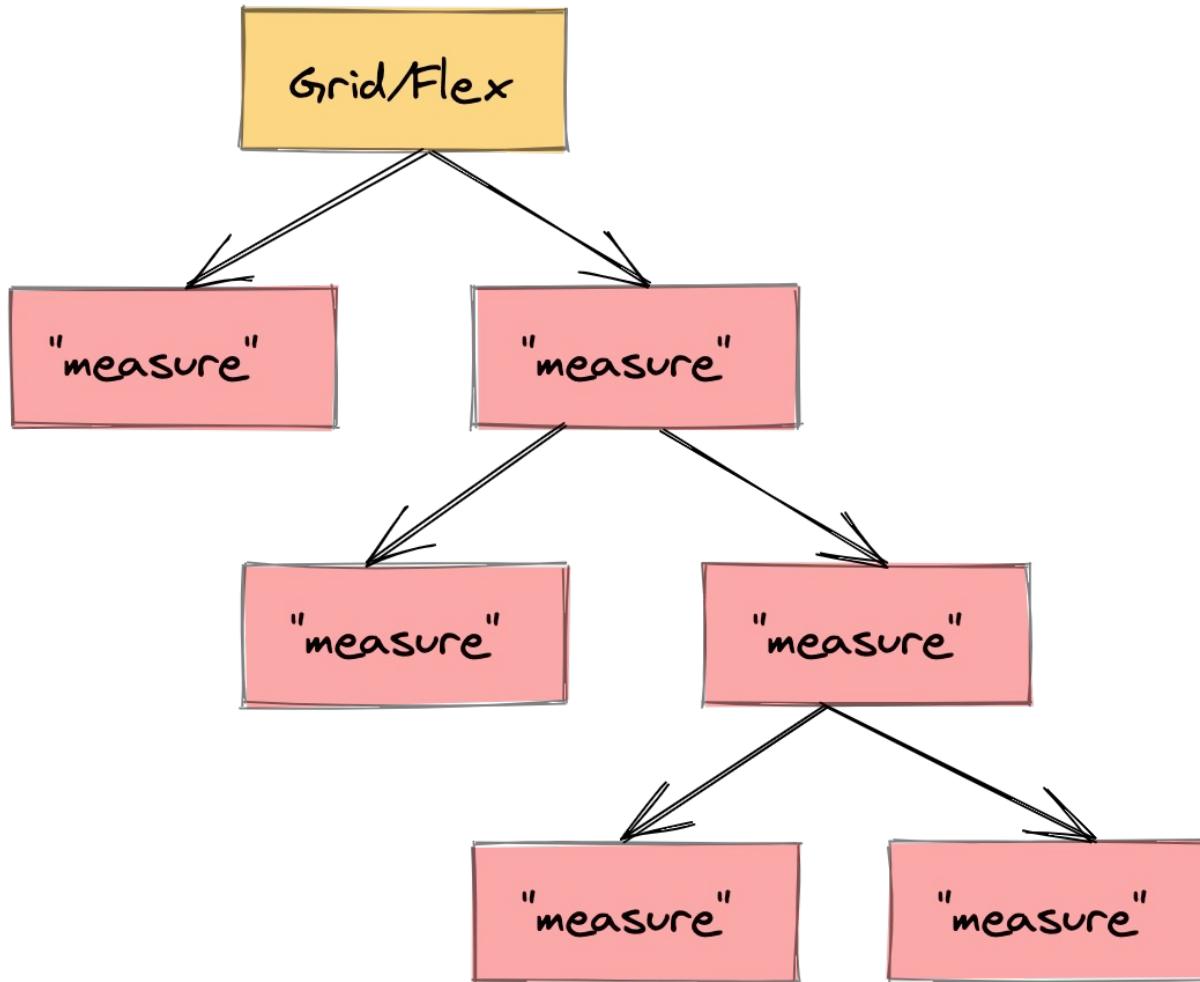


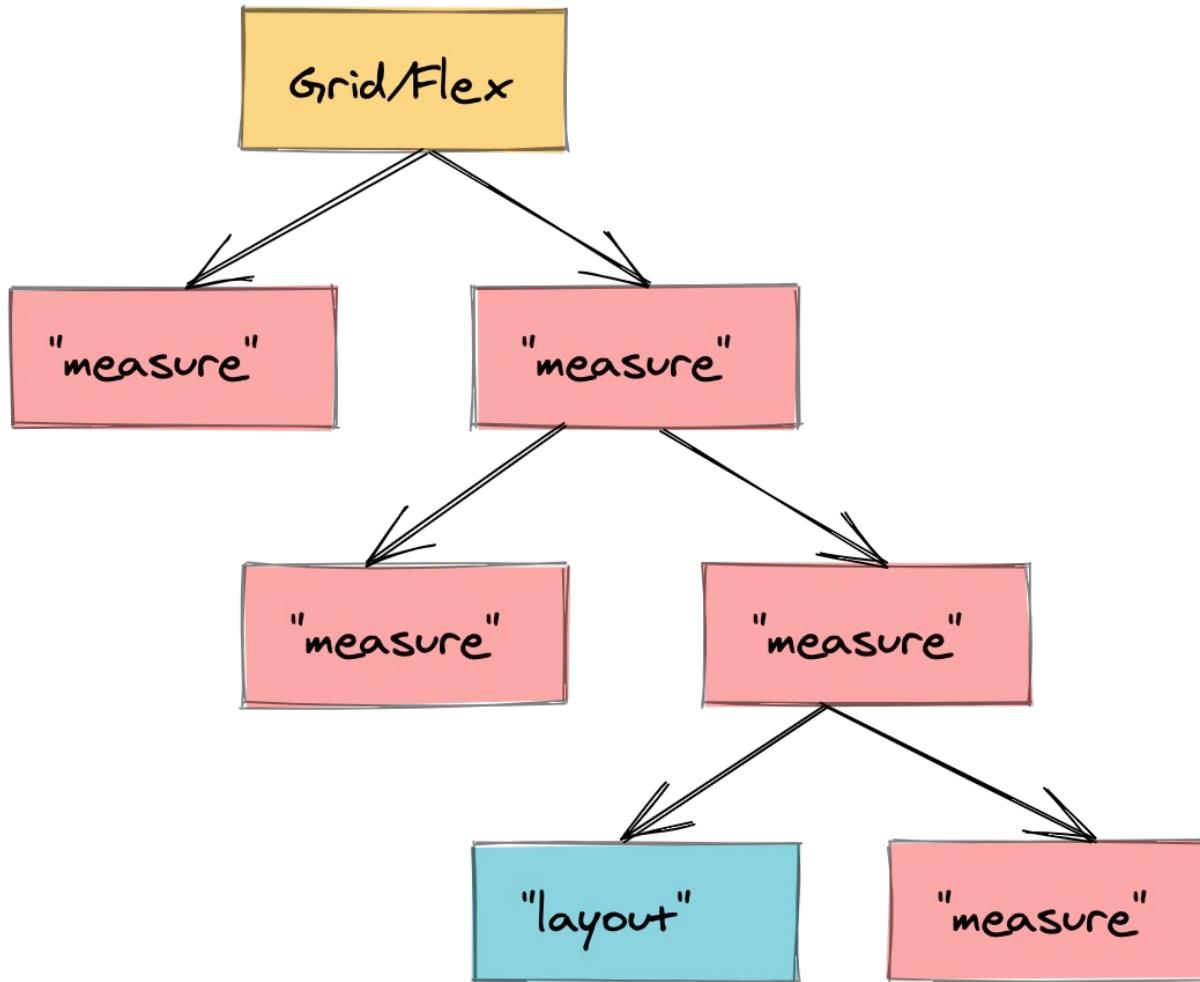


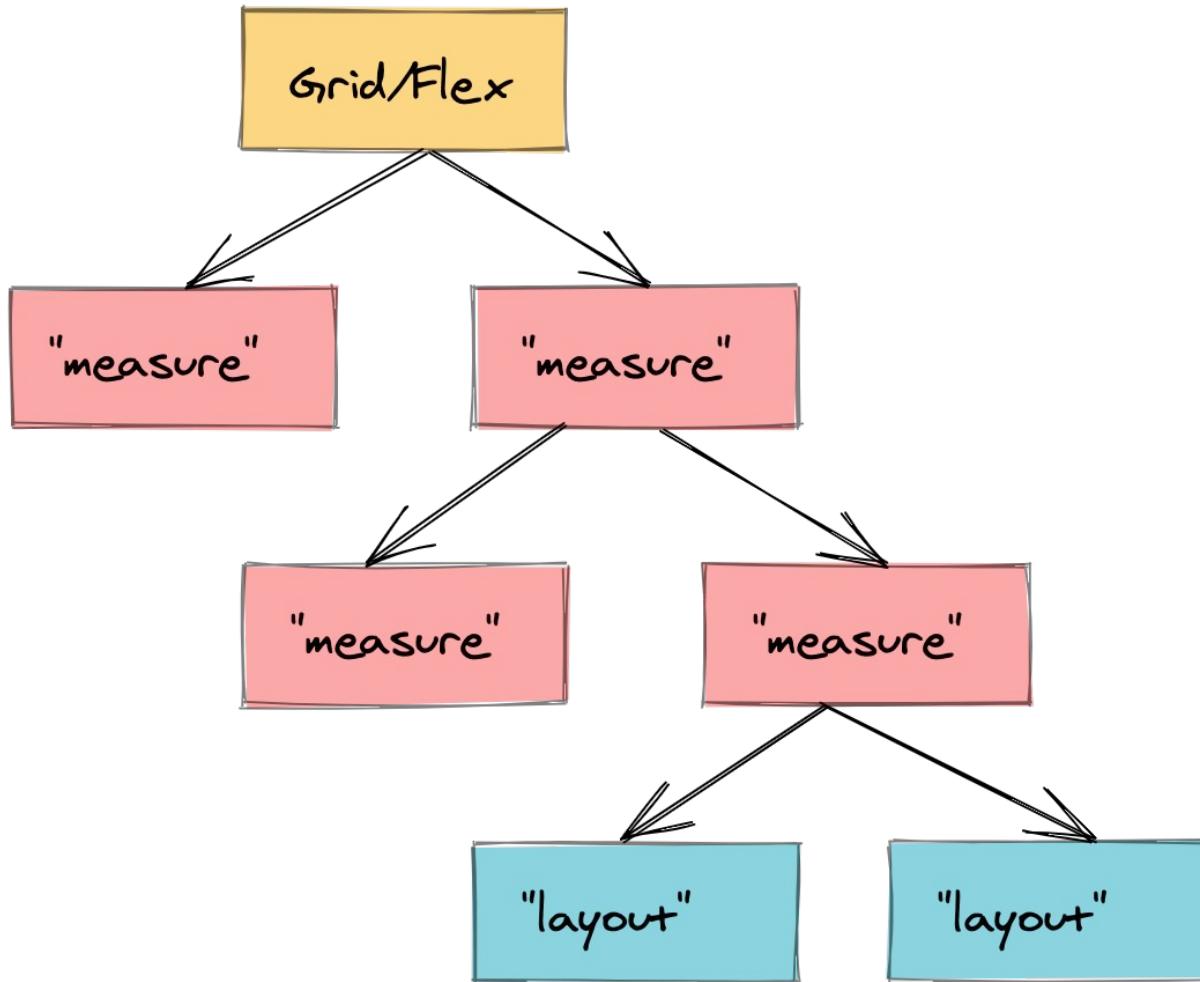


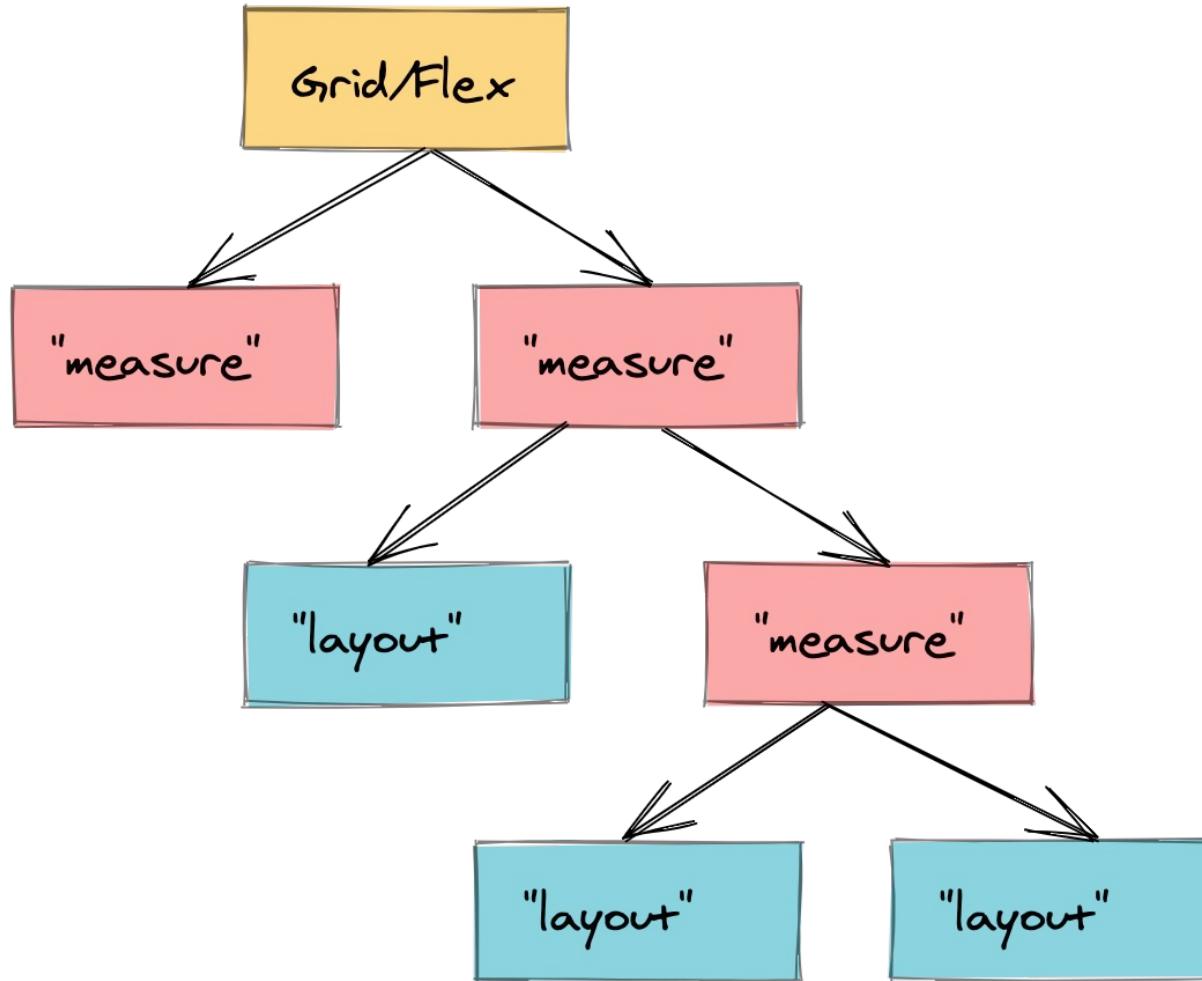


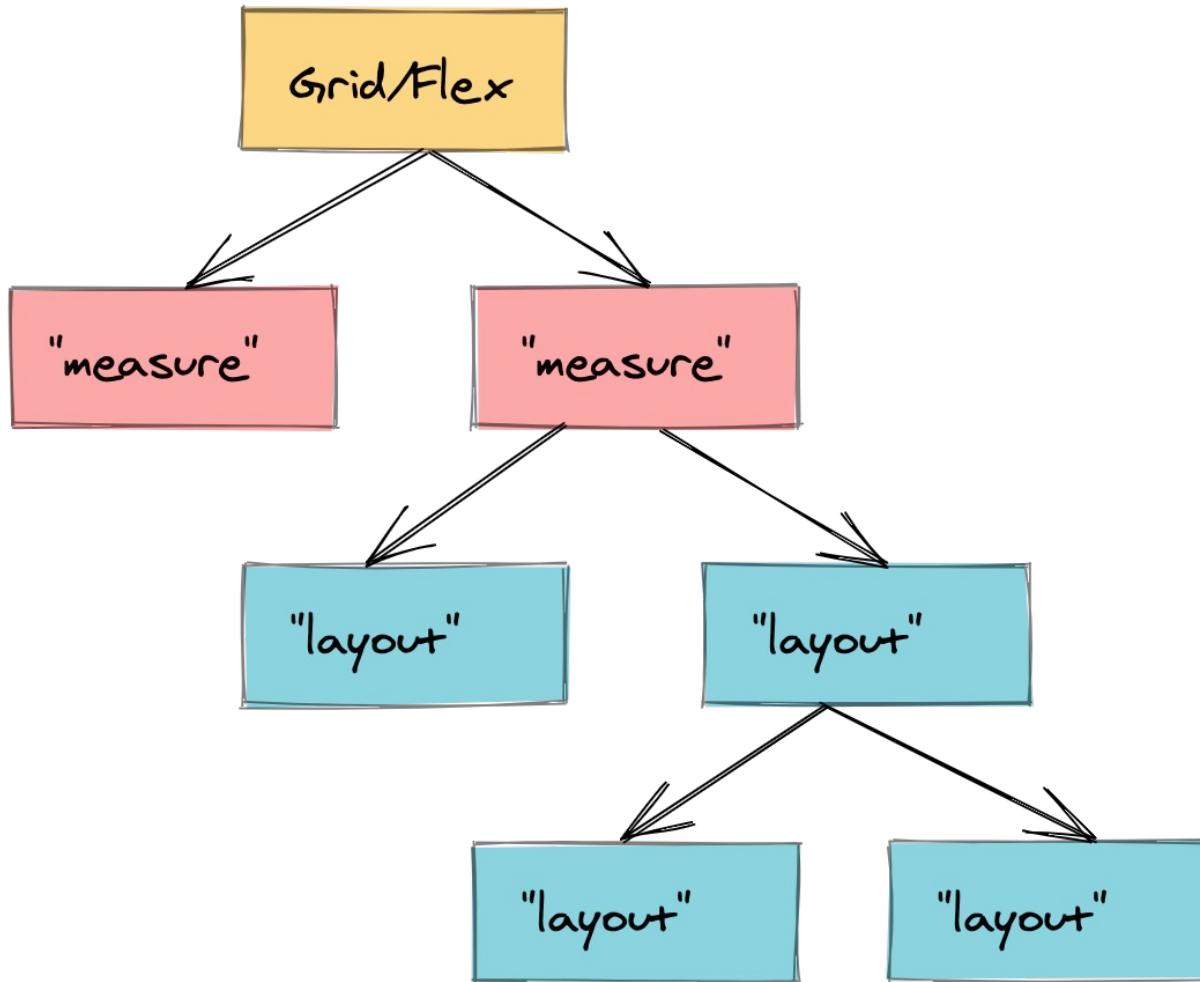


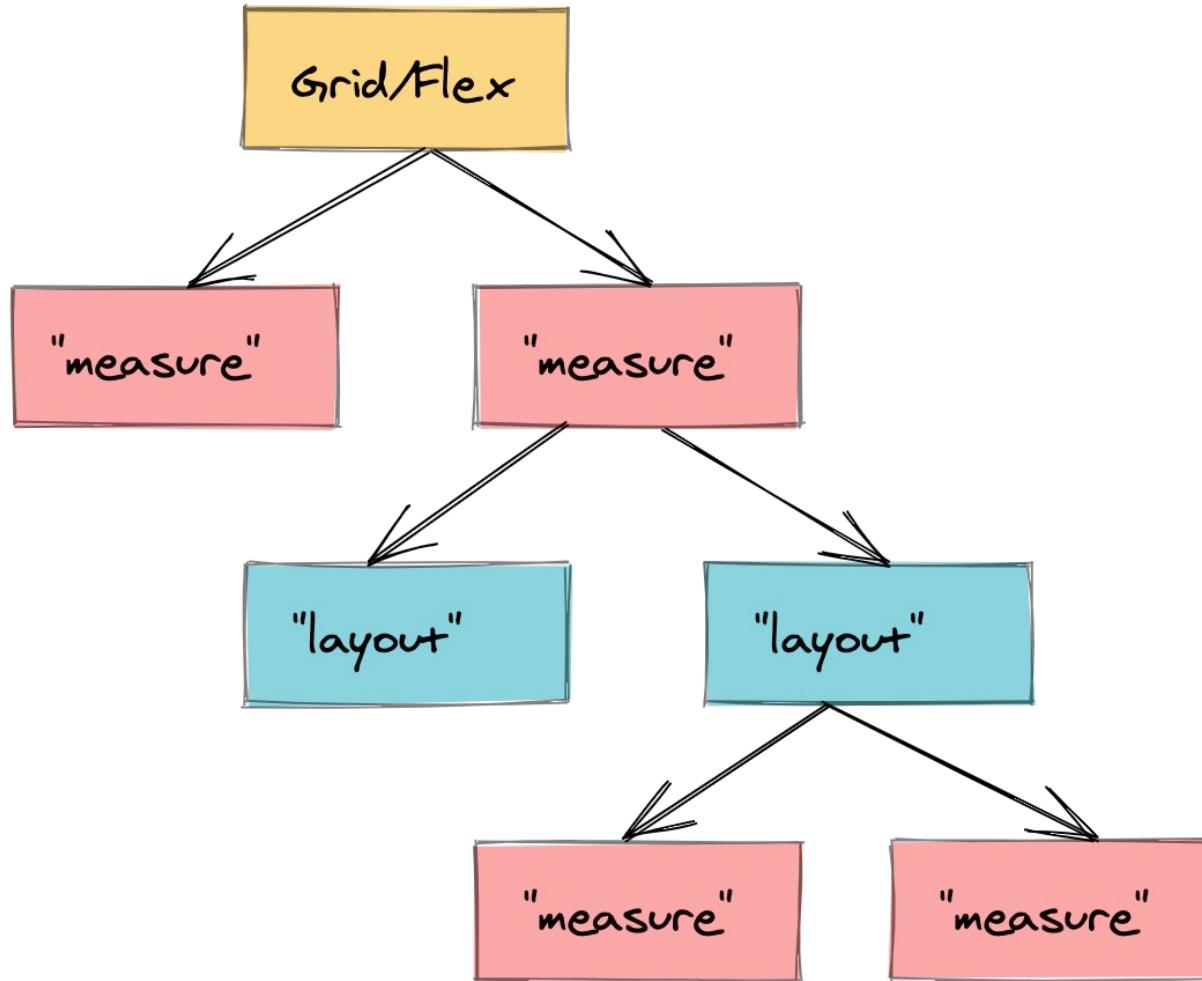


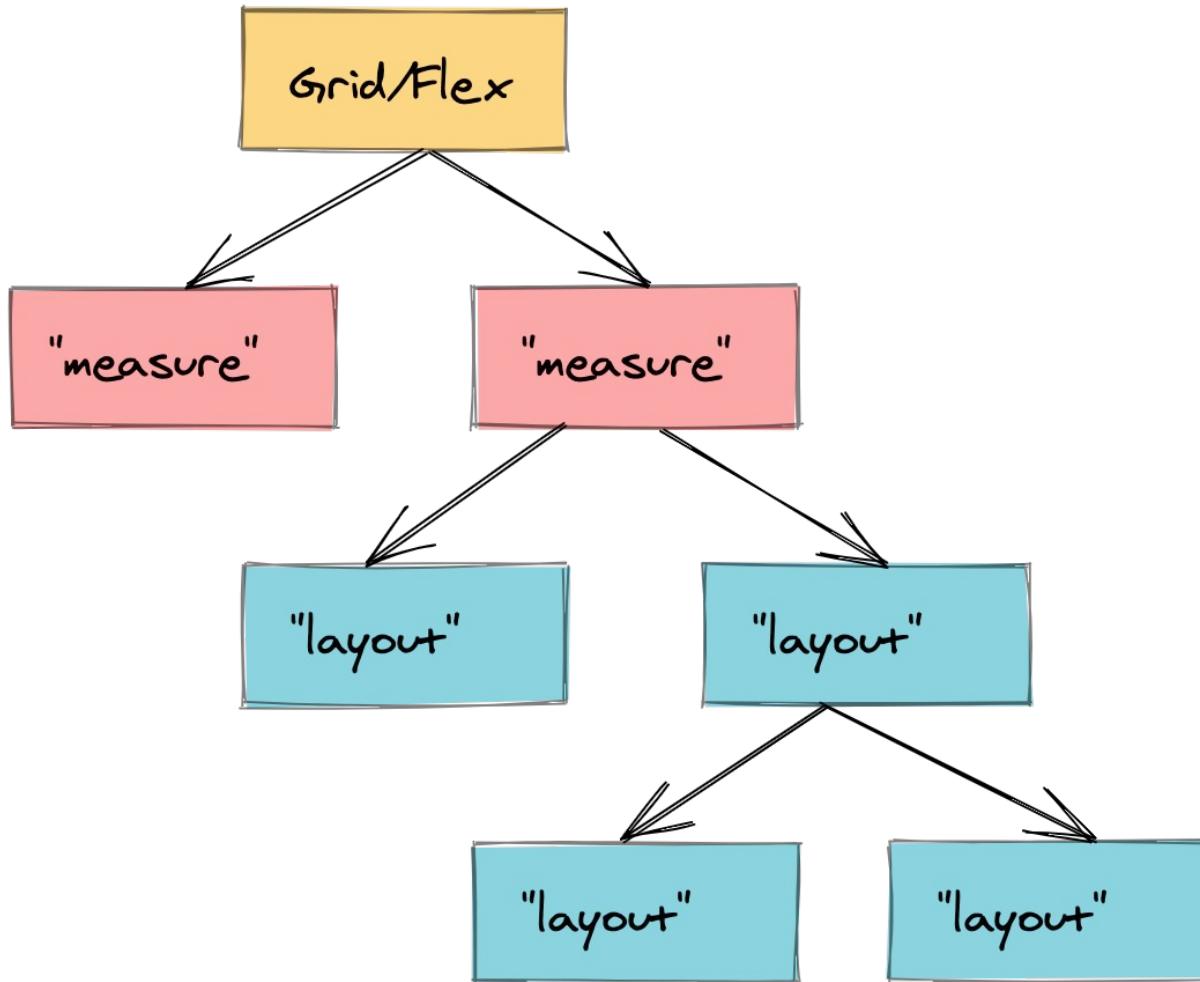


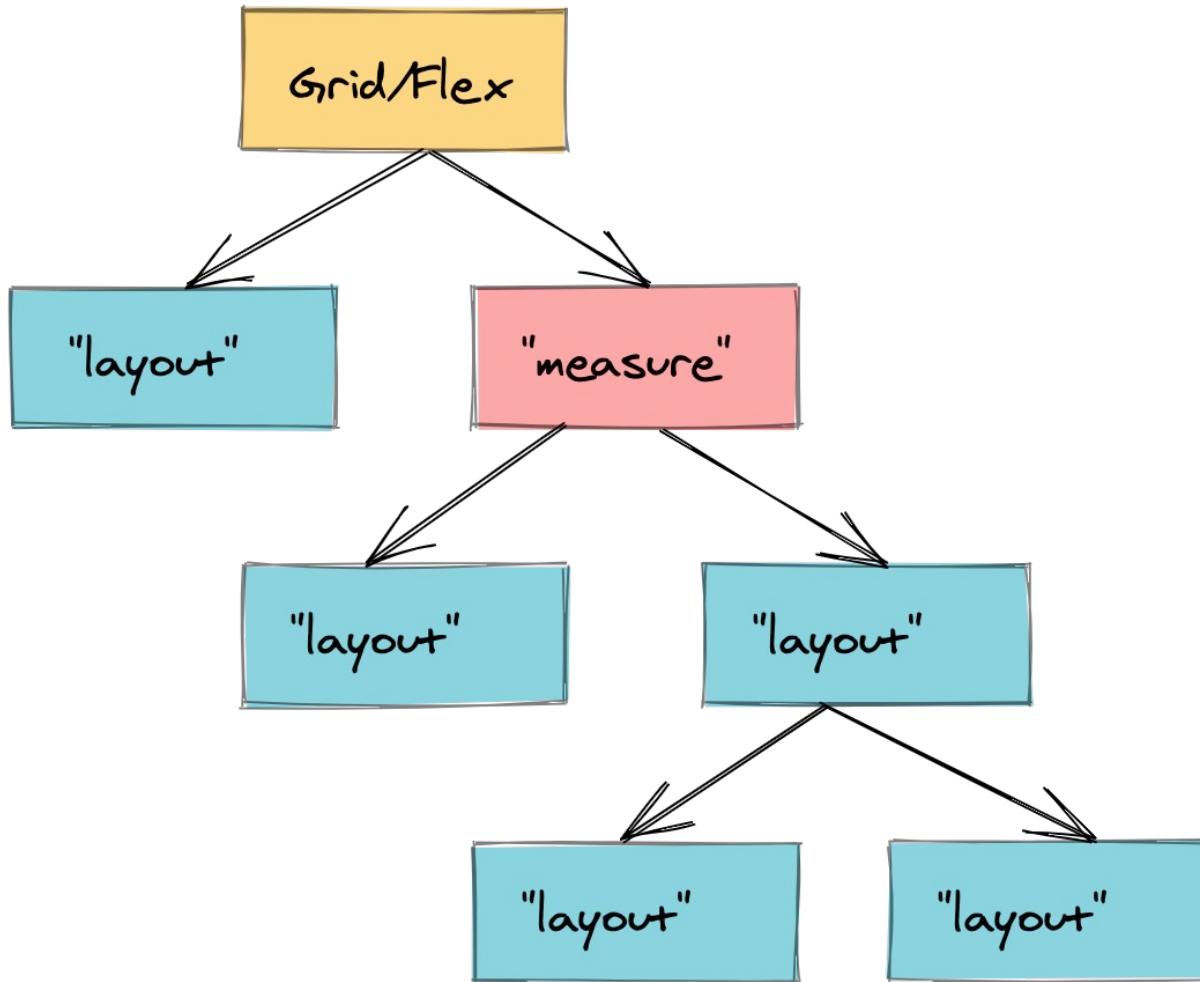


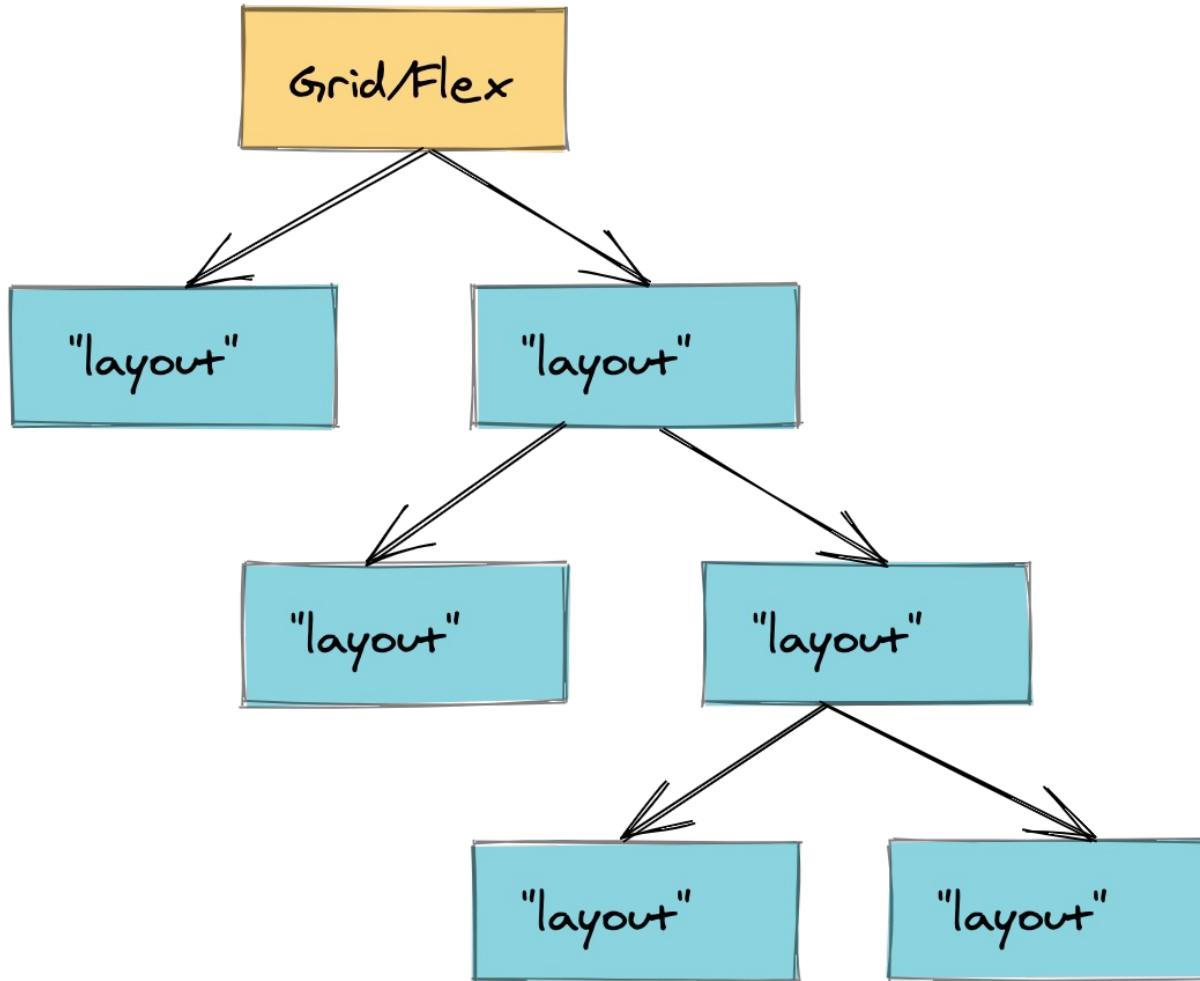


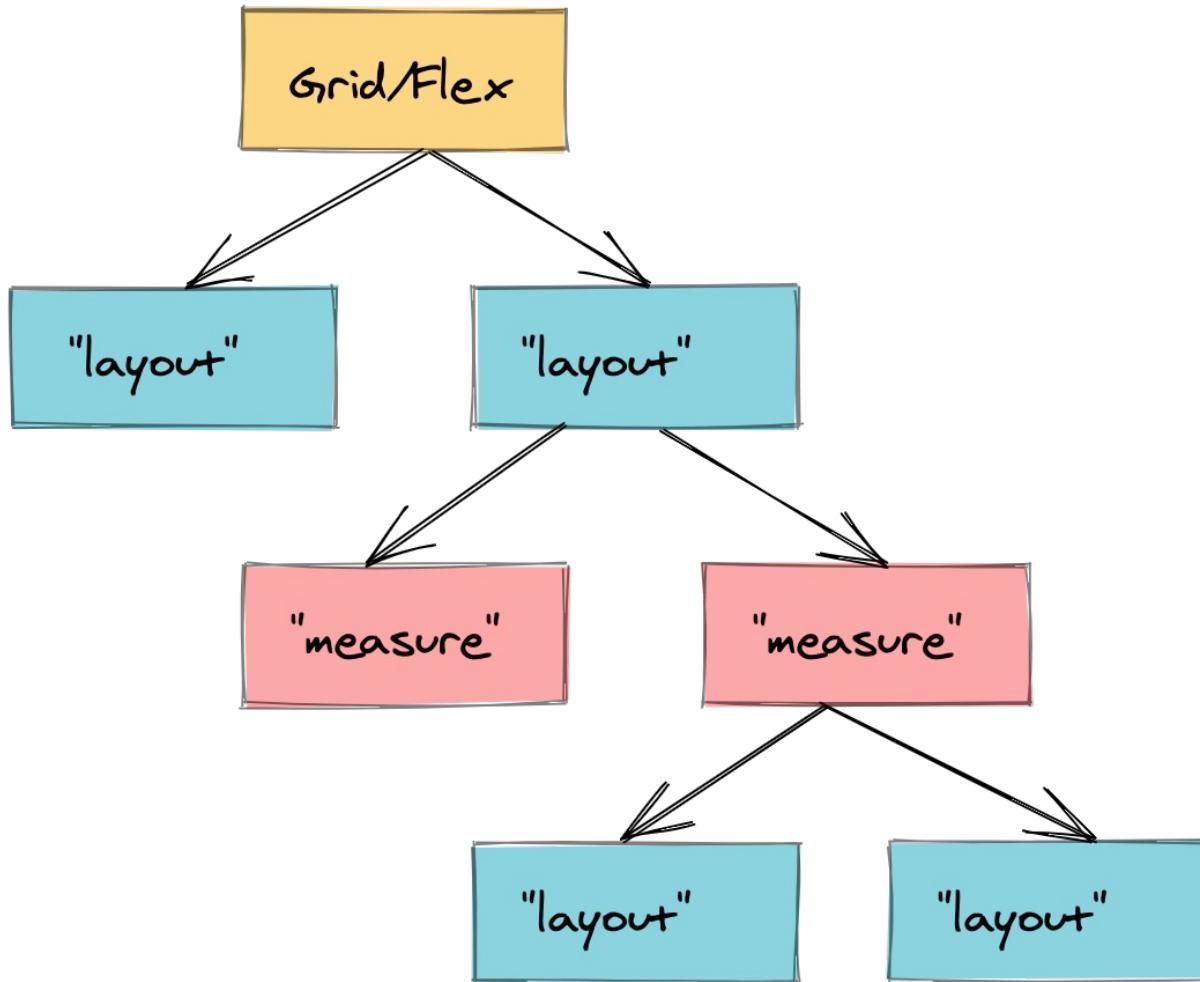


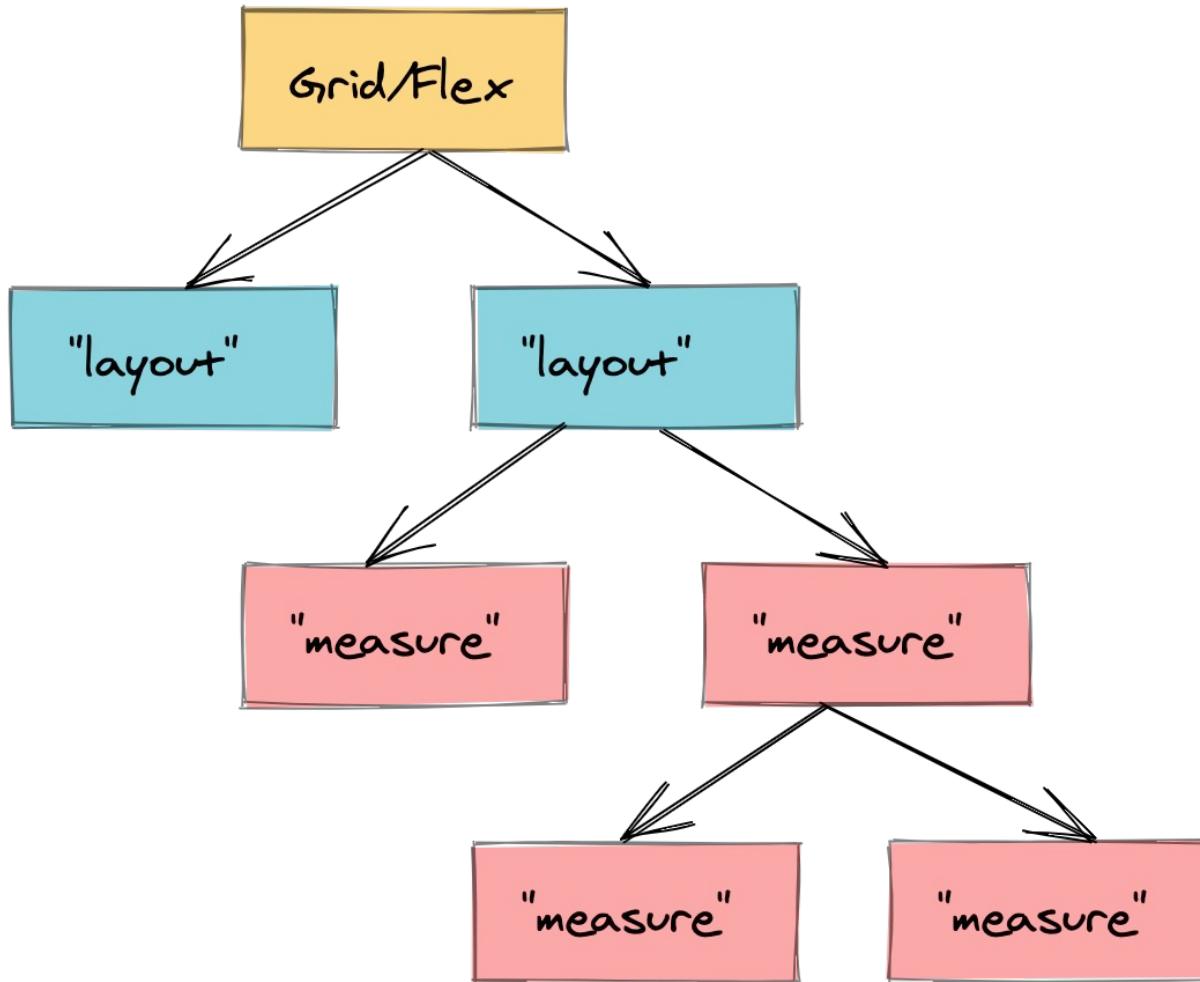


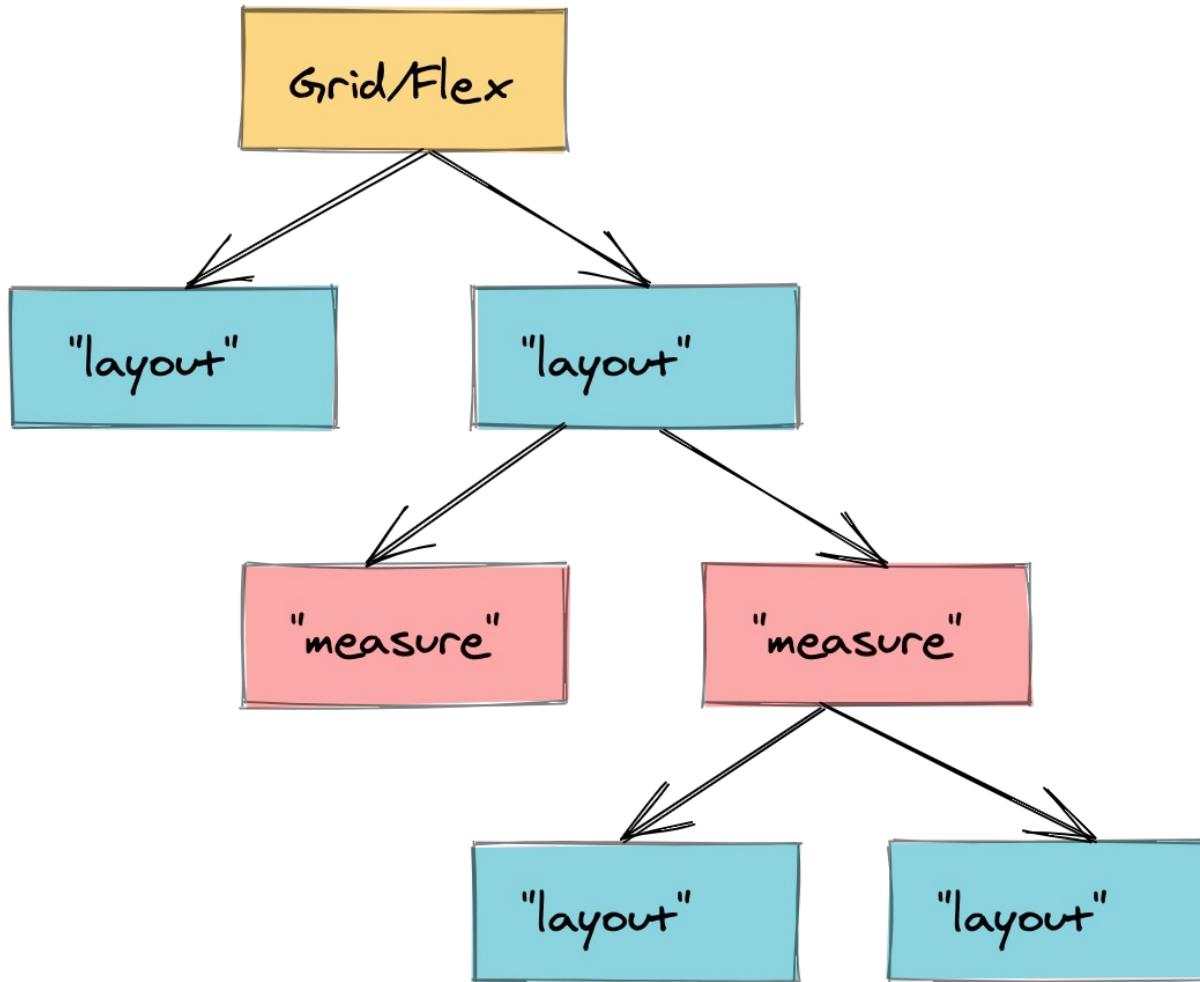


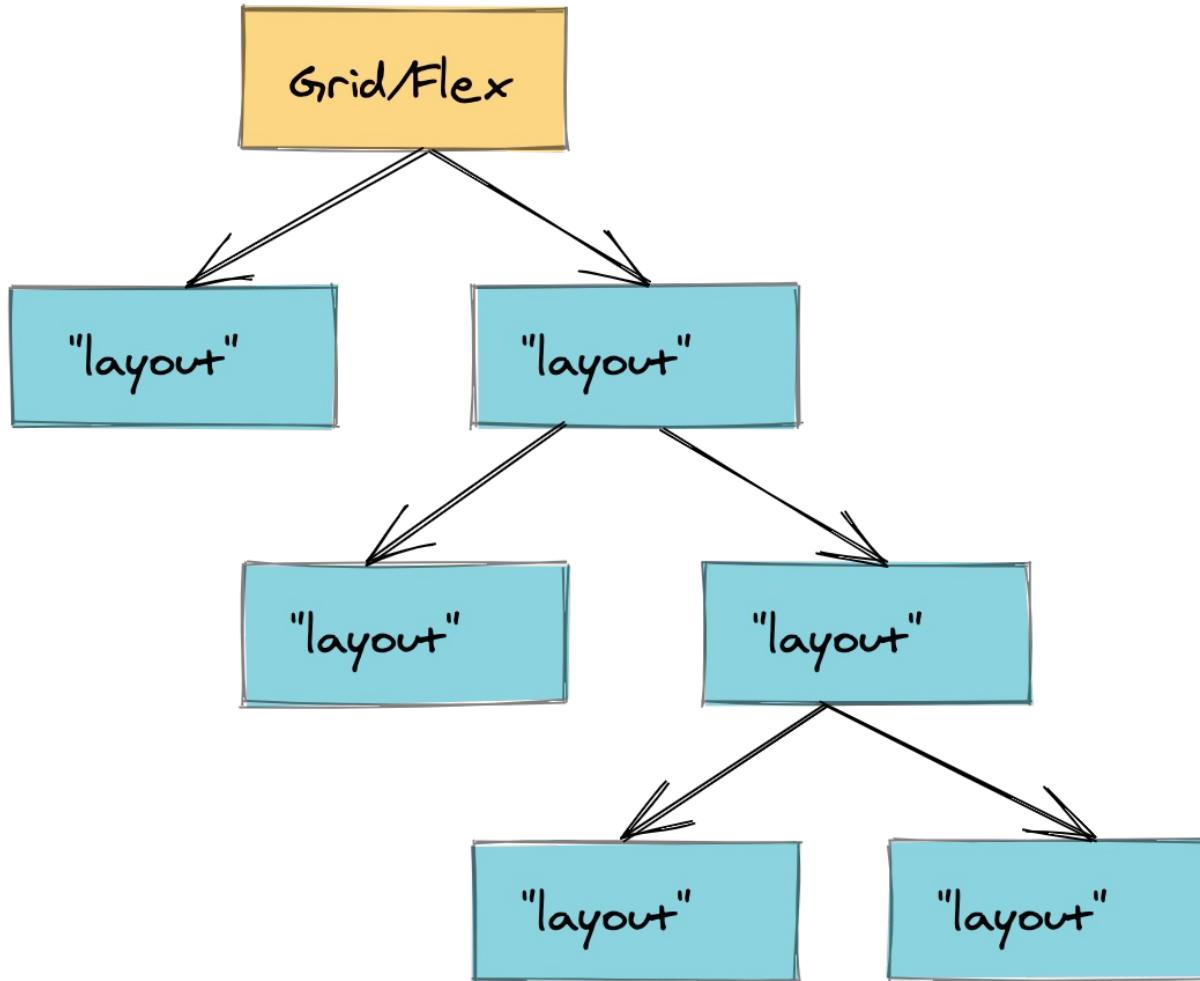


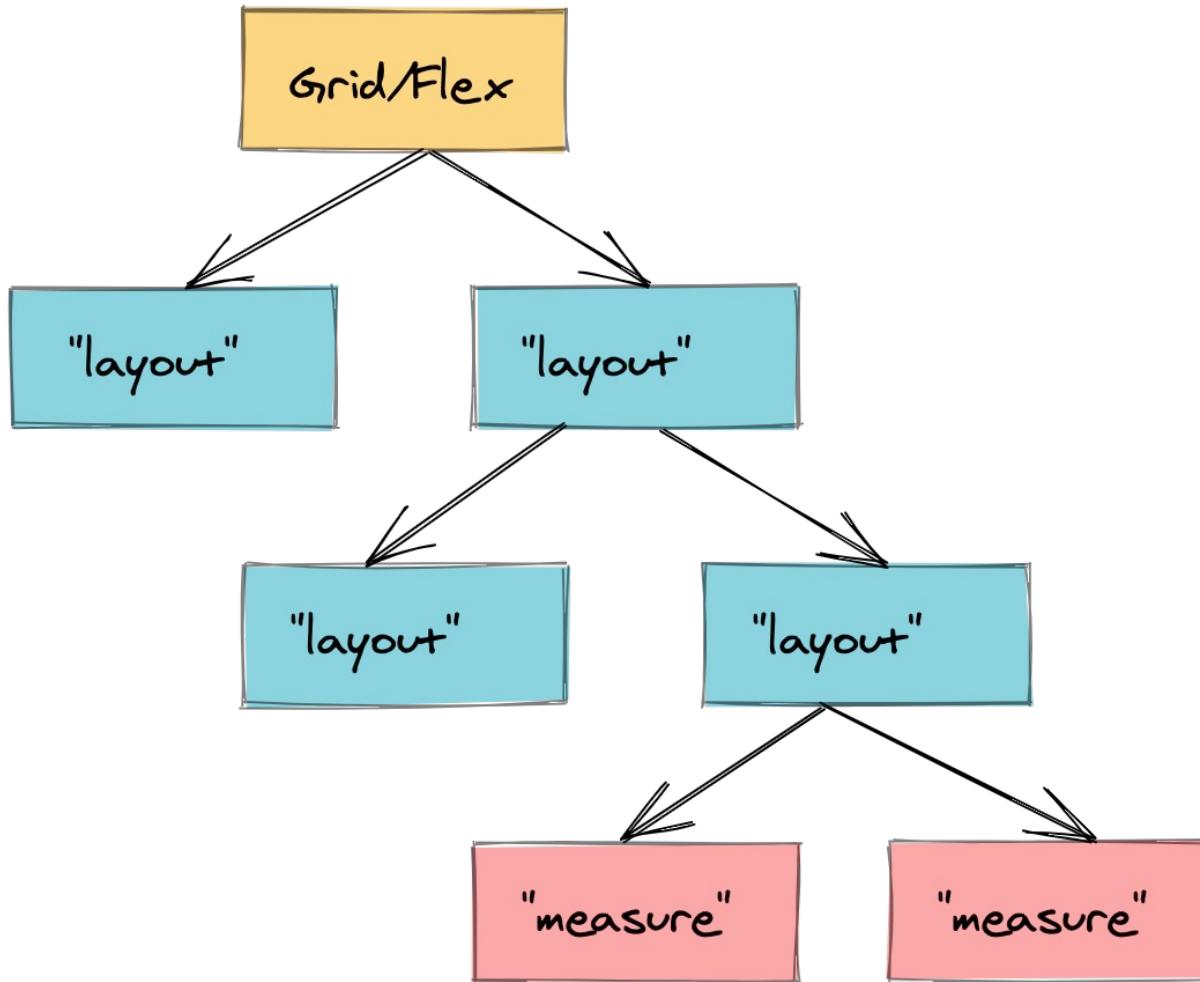


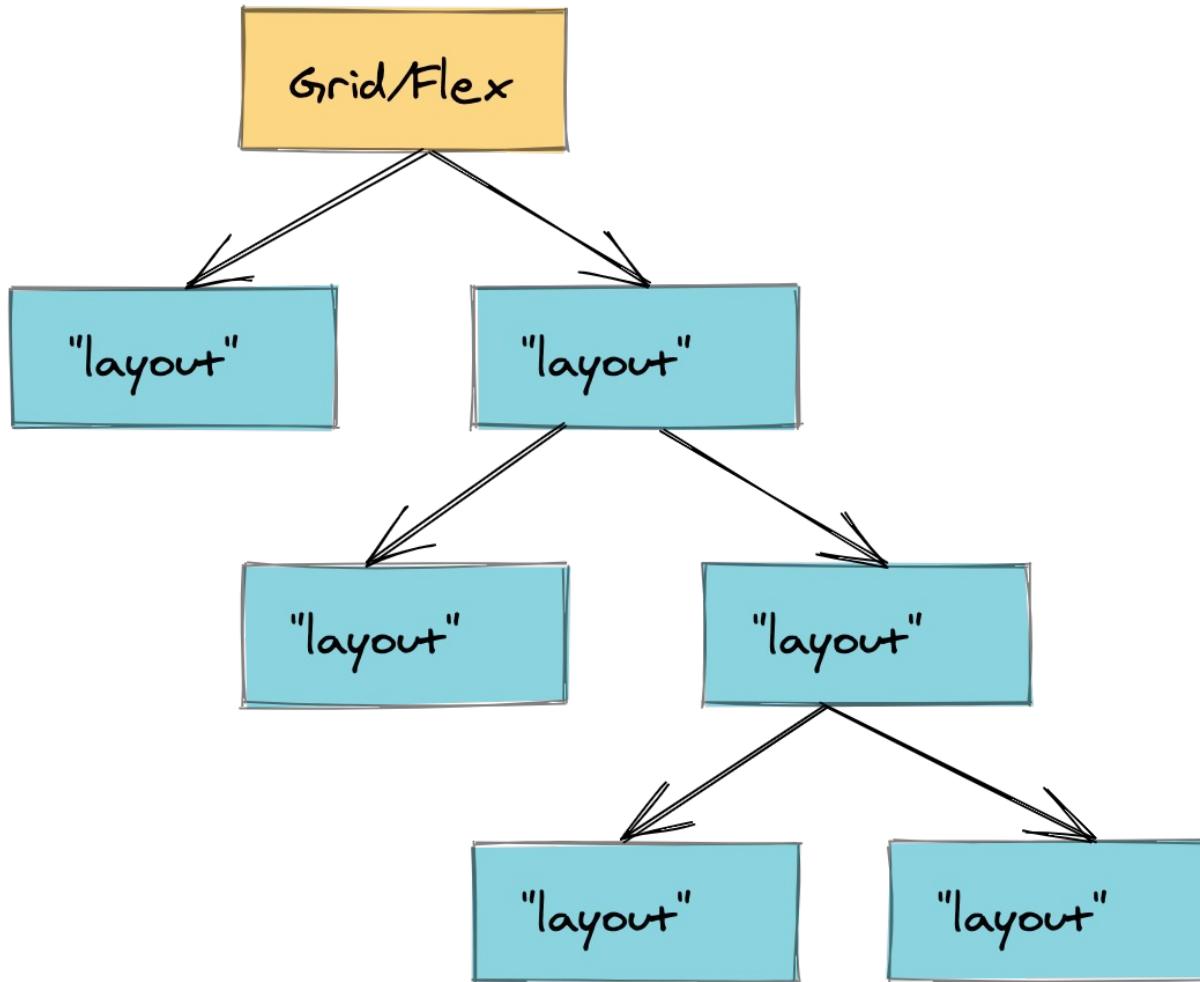












Complexity $O(n^m)$

:'-(

