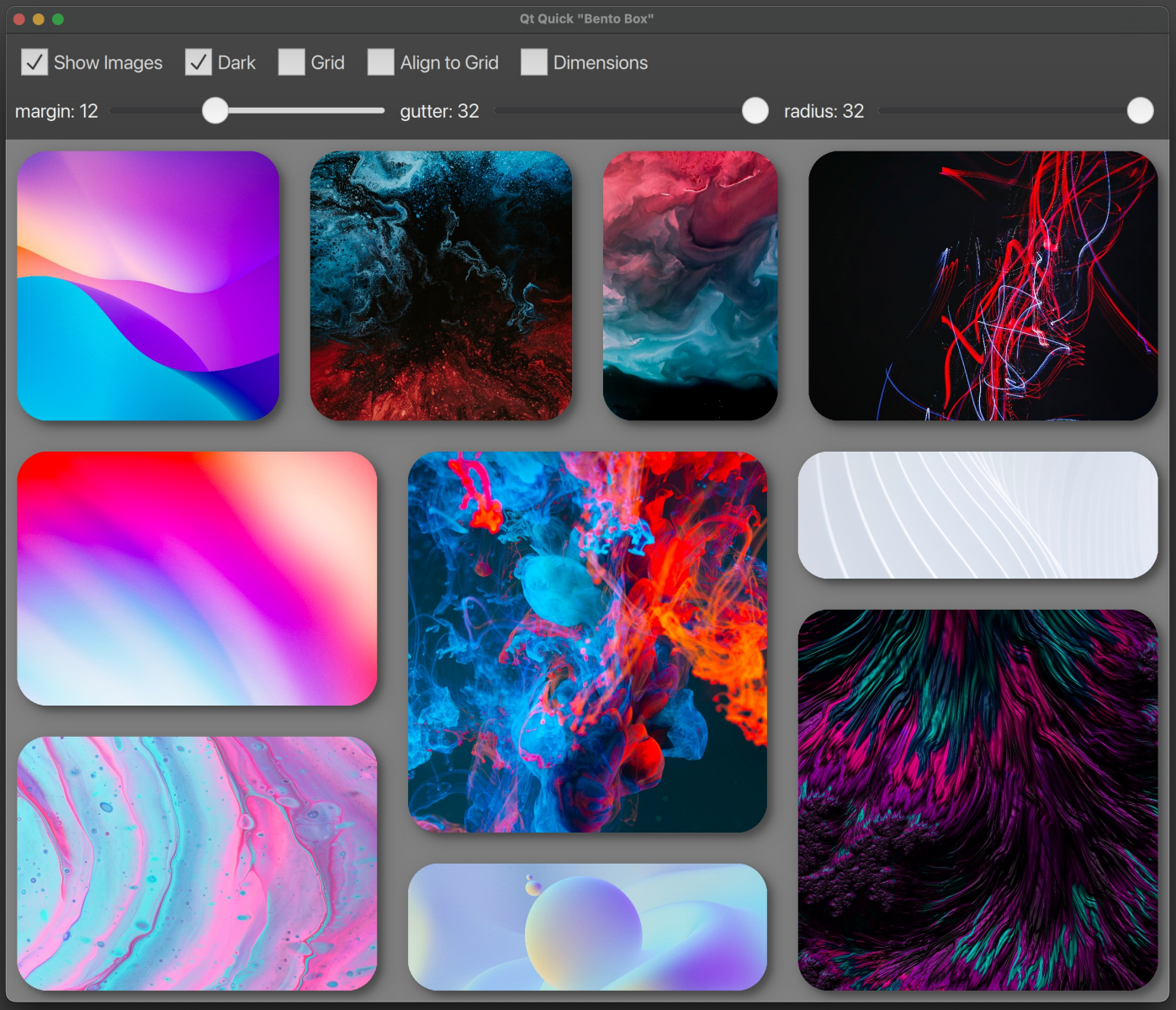
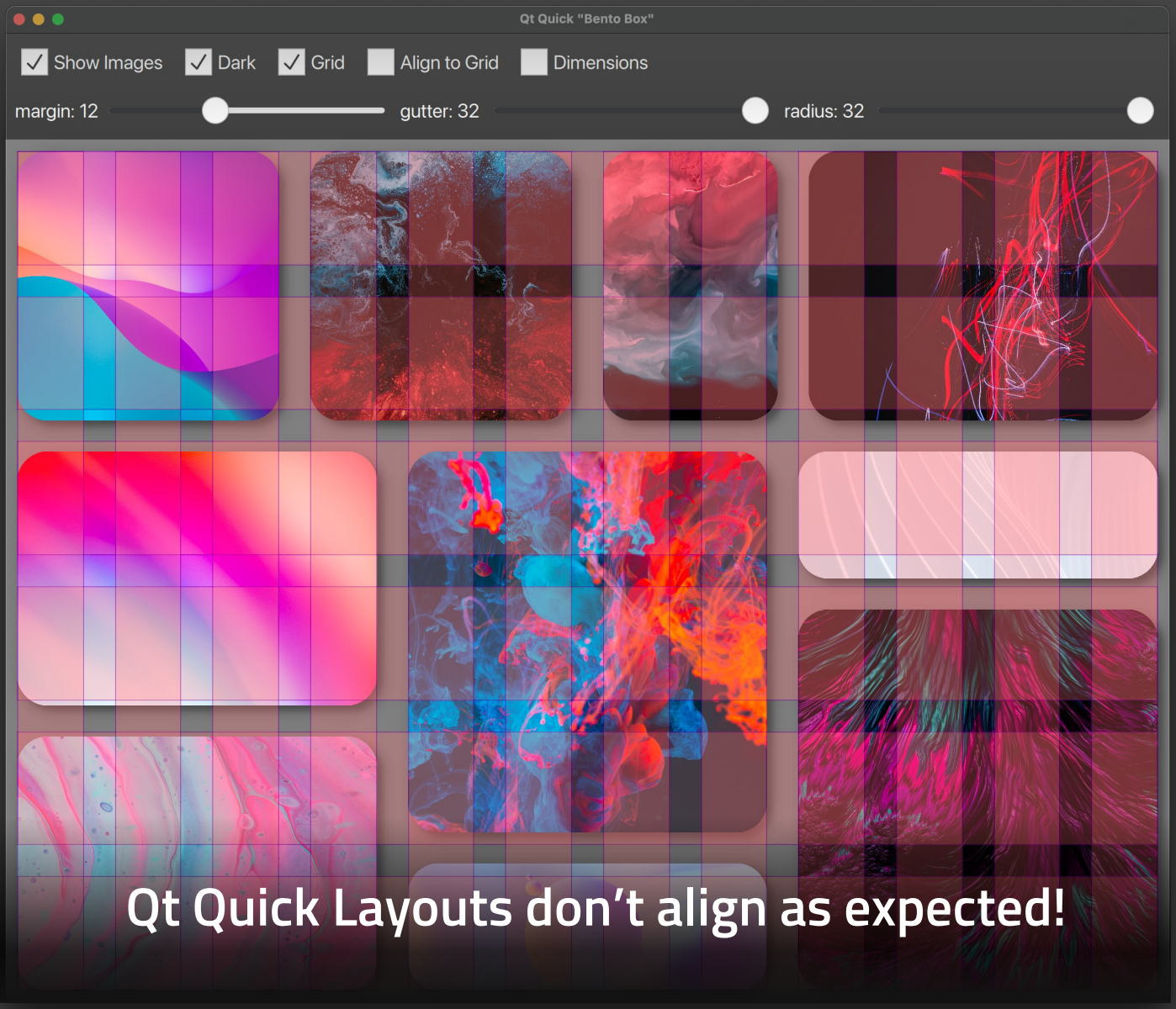
Bento Box

Looks nice... but is it the grid we want?



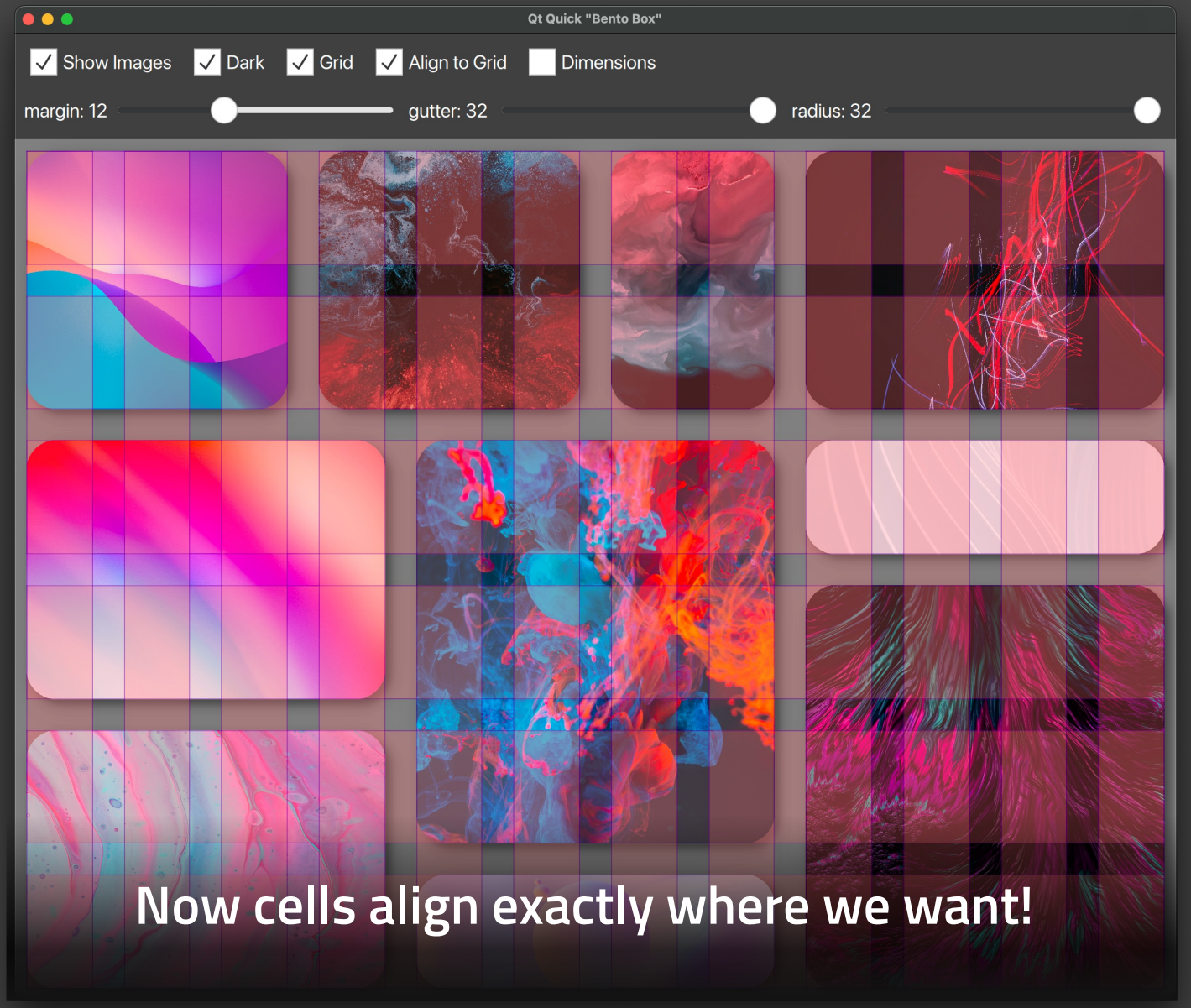
Bento Box

Let's make a 12x6 Qt Quick Layout:



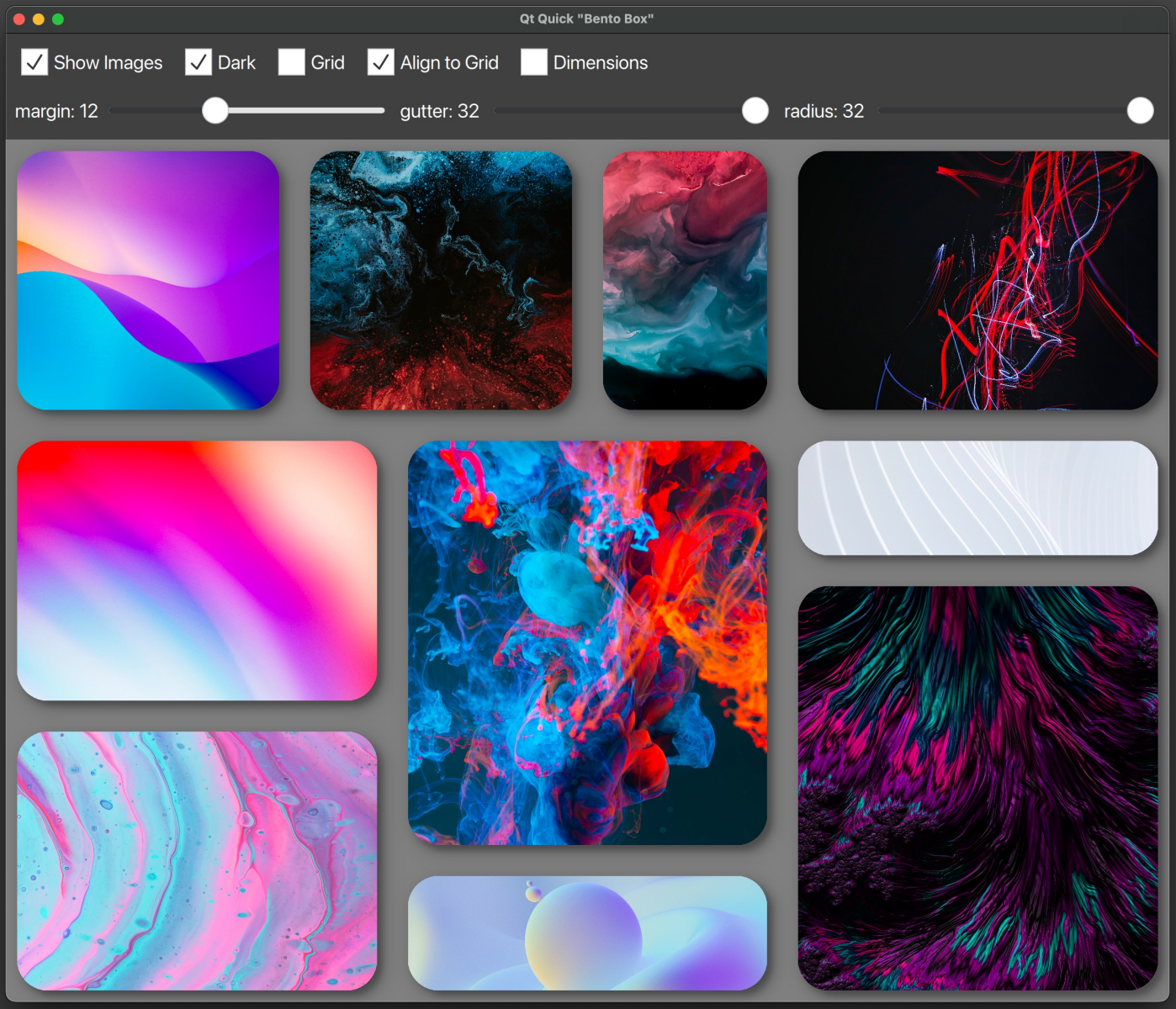
Bento Box

Now we align to our “real” 12x6 grid!



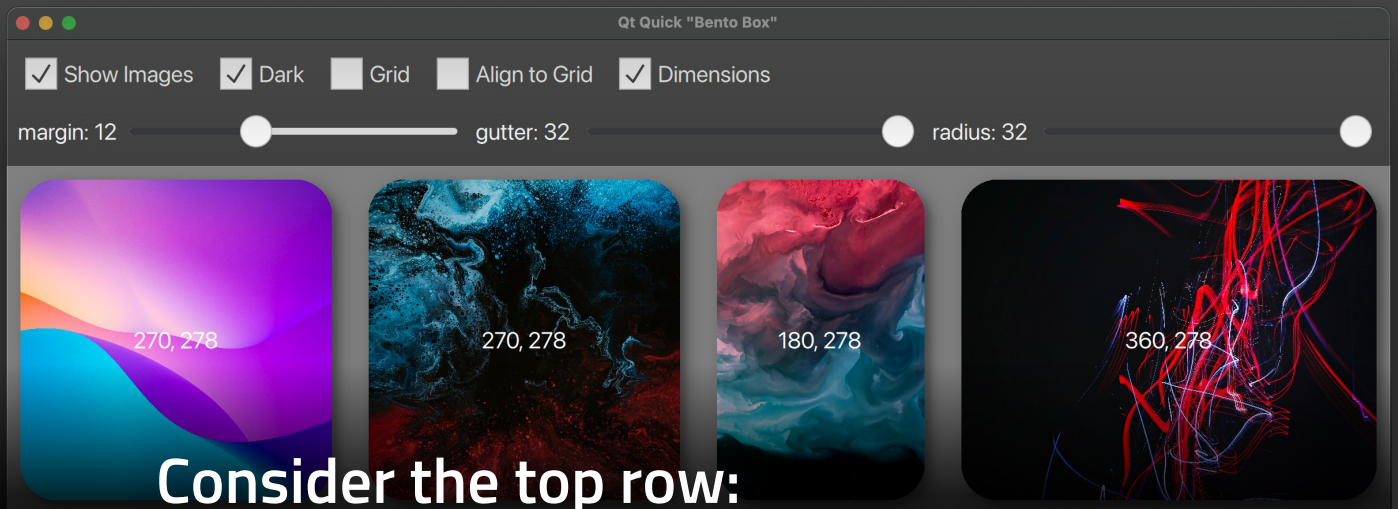
Bento Box

That's better!
So what's different?



Bento Box

Qt 12x6 Layouts: The default math...

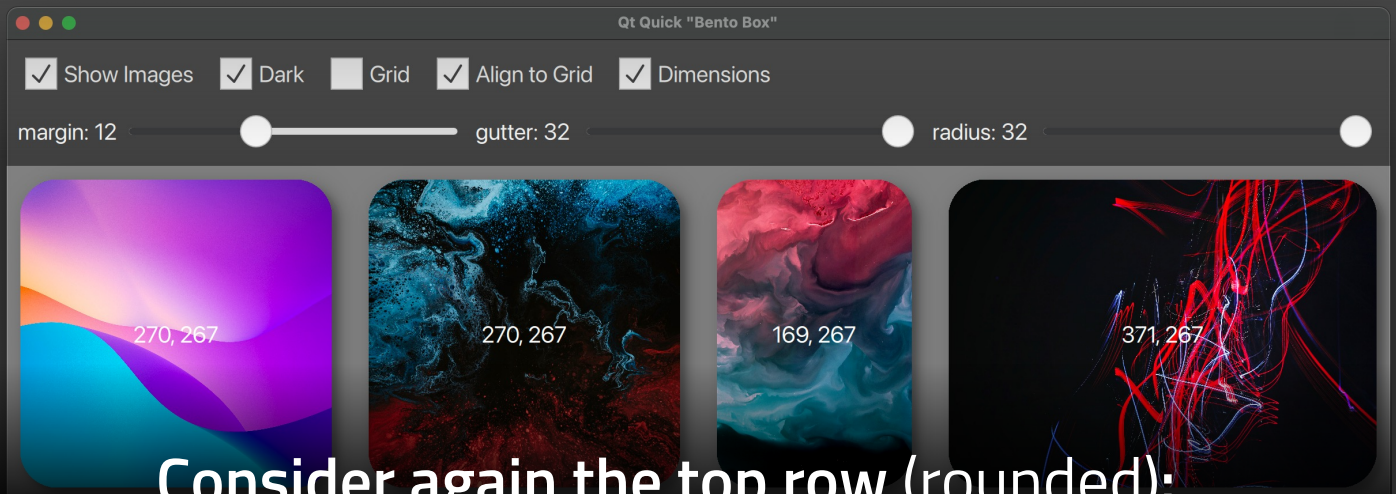


Consider the top row:

maxWidth	= 1200			
gutterCount	= cellCount (4)	- 1		= 3
innerWidth	= maxWidth	- 2 * margin		= 1176
gutterTotal	= gutterCount	* gutter		= 96
availWidth	= innerWidth	- gutterTotal		= 1080
cellWidth	= availWidth	/ columns		= 90
cell1Width	= 3 (columns)	* cellWidth		= 270
cell2Width	= 3 (columns)	* cellWidth		= 270
cell3Width	= 2 (columns)	* cellWidth		= 180
cell4Width	= 4 (columns)	* cellWidth		= 360

Bento Box

Our 12x6 Layouts: The *correct* math...

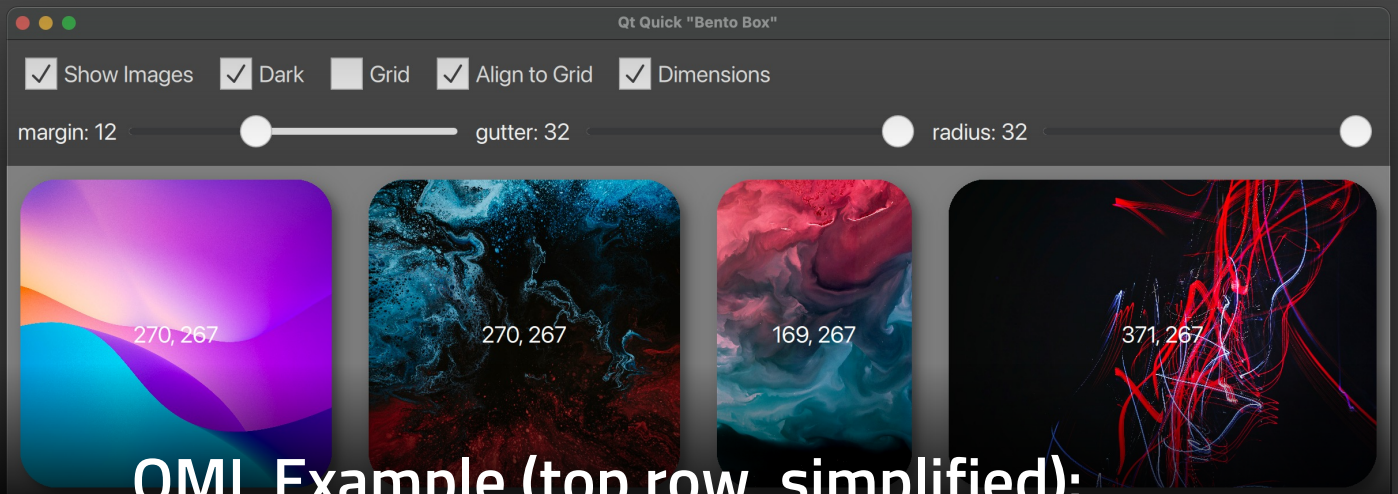


Consider again the top row (rounded):

maxWidth	= 1200			
gutterCount	= columns	- 1		= 11
innerWidth	= maxWidth	- 2 * margin		= 1176
gutterTotal	= gutterCount	*	gutter	= 352
availWidth	= innerWidth	-	gutterTotal	= 824
cellWidth	= availWidth	/	columns	= 69
cell1Width	= 3 (columns)	*	cellWidth	= 270
cell2Width	= 3 (columns)	*	cellWidth	= 270
cell3Width	= 2 (columns)	*	cellWidth	= 169
cell4Width	= 4 (columns)	*	cellWidth	= 371

Bento Box

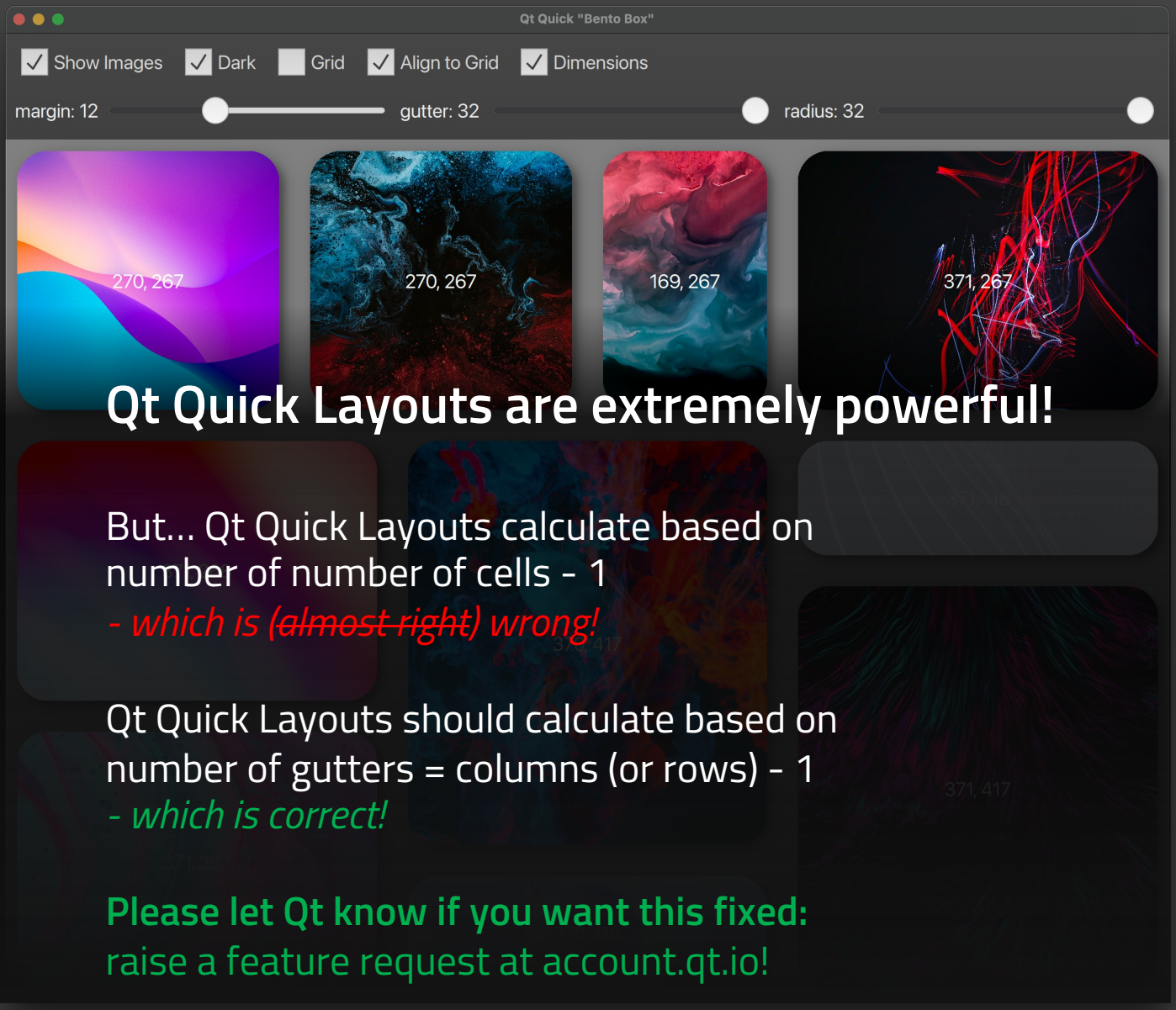
How to get your gutters cleaned?



QML Example (top row, simplified):

```
GridCalculator { id: gridCalculator;
    rows: 6; columns: 12; anchors.fill: parent
    // boxWidth(colSpan), boxHeight(rowSpan) return values update dynamically
}
RowLayout {
    LayoutItemProxy { target: box1
        Layout.preferredWidth: gridCalculator.boxWidth(3)
        Layout.preferredHeight: gridCalculator.boxHeight(2)
    }
    LayoutItemProxy { target: box2
         Layout.preferredWidth: gridCalculator.boxWidth(3)
          Layout.preferredHeight: gridCalculator.boxHeight(2)
    }
    LayoutItemProxy {. target: box3
        Layout.preferredWidth: gridCalculator.boxWidth(2)
        Layout.preferredHeight: gridCalculator.boxHeight(2)
    }
    LayoutItemProxy { target: box4
        Layout.preferredWidth: gridCalculator.boxWidth(4)
        Layout.preferredHeight: gridCalculator.boxHeight(2)
    }
}
```

*We must calculate each box size **manually** using a convenience item!*

Bento Box

Conclusion: consider all your gutters!