



50 nuances de grilles

photo CC Vladimir Kudinov <https://unsplash.com/@madbyte>

je suis alsacien



raphaël goetter
alsacréations



échauffement

rapide mise en bouche

TODO!

`<div>`
1/3

`<div>`
2/3

**l'une de ces deux
méthodes utilise
Bootstrap**

sauras-tu la retrouver ? 🤔

```
<div class="container">
  <div class="row no-gutters">
    <div class="col-4">div</div>
    <div class="col-8">div</div>
  </div>
</div>
```

```
.col-4 {
  flex: 0 0 33.333333%;
  max-width: 33.333333%;
}
.col-8 {
  flex: 0 0 66.666667%;
  max-width: 66.666667%;
}
```



```
.row {
  display: flex;
  flex-wrap: wrap;
  margin-right: -15px;
  margin-left: -15px;
}
.no-gutters {
  margin-right: 0;
  margin-left: 0;
}
> .col,
> [class*="col-"] {
  padding-right: 0;
  padding-left: 0;
}
}
```

```
<div class="container">
  <div>div</div>
  <div>div</div>
</div>
```



```
.container {
  display: grid;
  grid-template-columns: 1fr 2fr;
}
```

bootstrap 4

```
<div class="container">
  <div class="row no-gutters">
    <div class="col-4">div</div>
    <div class="col-8">div</div>
  </div>
</div>
```

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.row {
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}

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  max-width: 66.666667%;
}

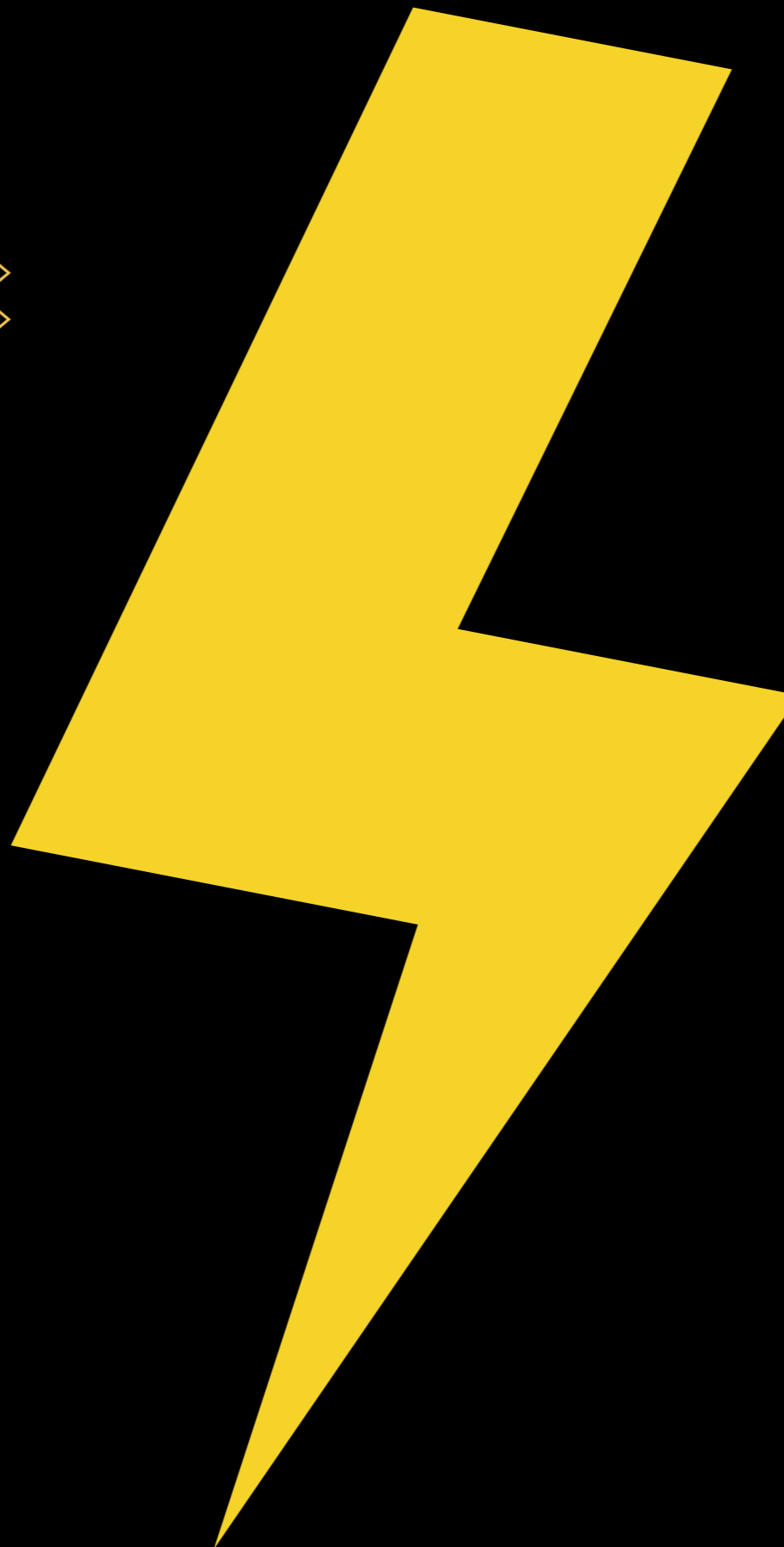
.no-gutters {
  margin-right: 0;
  margin-left: 0;
}

> .col,
> [class*="col-"] {
  padding-right: 0;
  padding-left: 0;
}
}
```

grid layout

```
<div class="container">
  <div>div</div>
  <div>div</div>
</div>

.container {
  display: grid;
  grid-template-columns: 1fr 2fr;
}
```



TODO!

<div>

<div>

>

<div>



```
<div class="container">
  <div class="row no-gutters">
    <div class="col-4">div</div>
    <div class="col-8">div</div>
  </div>
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    <div class="col-4">div</div>
    <div class="col-8">div</div>
  </div>
</div>
```

```
.col-4 {
  flex: 0 0 33.333333%;
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  flex: 0 0 66.666667%;
  max-width: 66.666667%;
}
```



```
.row {
  display: flex;
  flex-wrap: wrap;
  margin-right: -15px;
  margin-left: -15px;
}

.no-gutters {
  margin-right: 0;
  margin-left: 0;
}

> .col,
> [class*="col-"] {
  padding-right: 0;
  padding-left: 0;
}
}
```

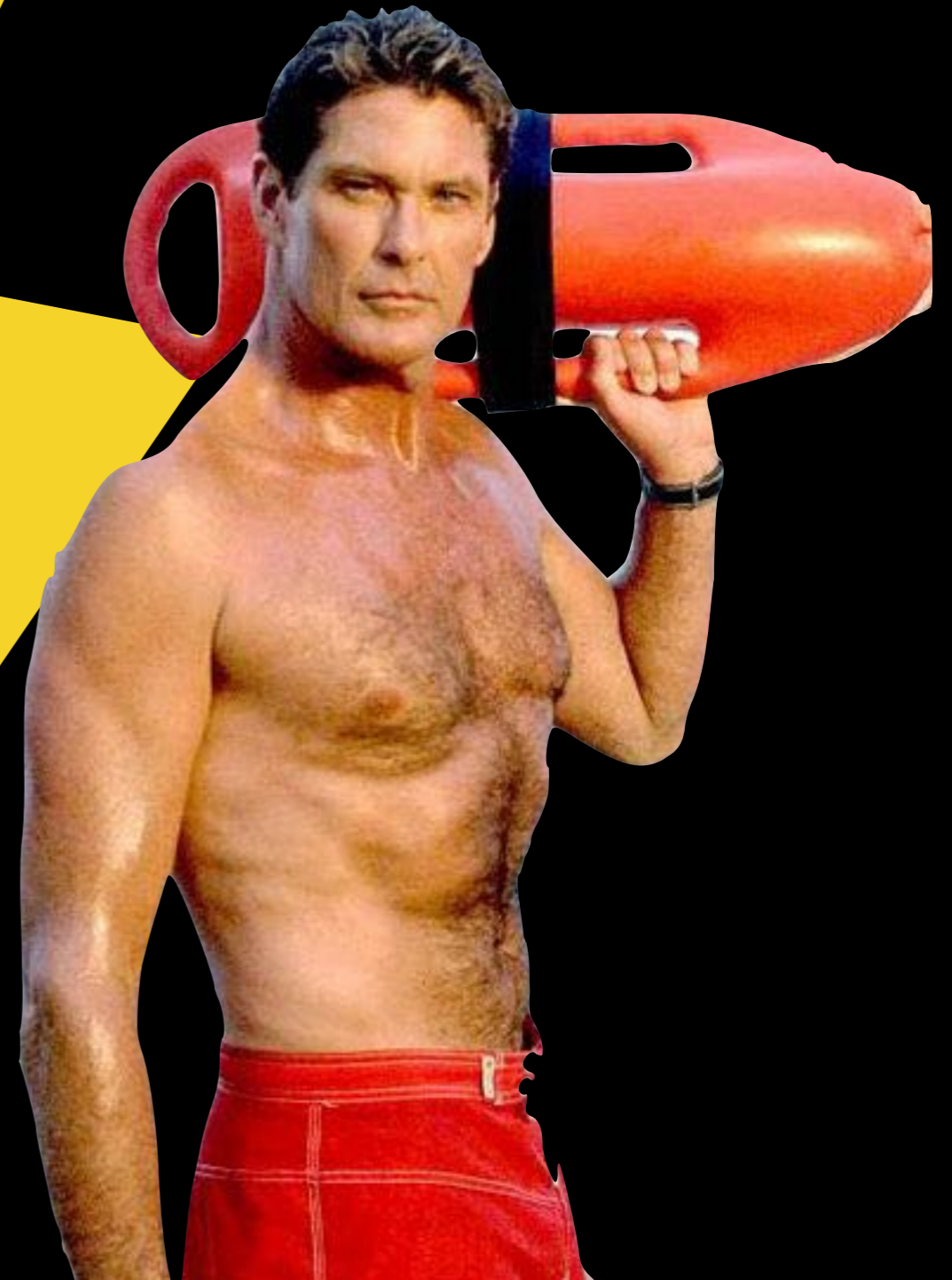
```
<div class="container">  
  <div>div</div>  
  <div>div</div>  
  <div>div</div>  
  <div>div</div>  
</div>
```



```
.container {  
  display: grid;  
  grid-template-columns: 1fr 2fr;  
}
```

bootstrap

grid layout



TODO!

<div>

<div>

<div>



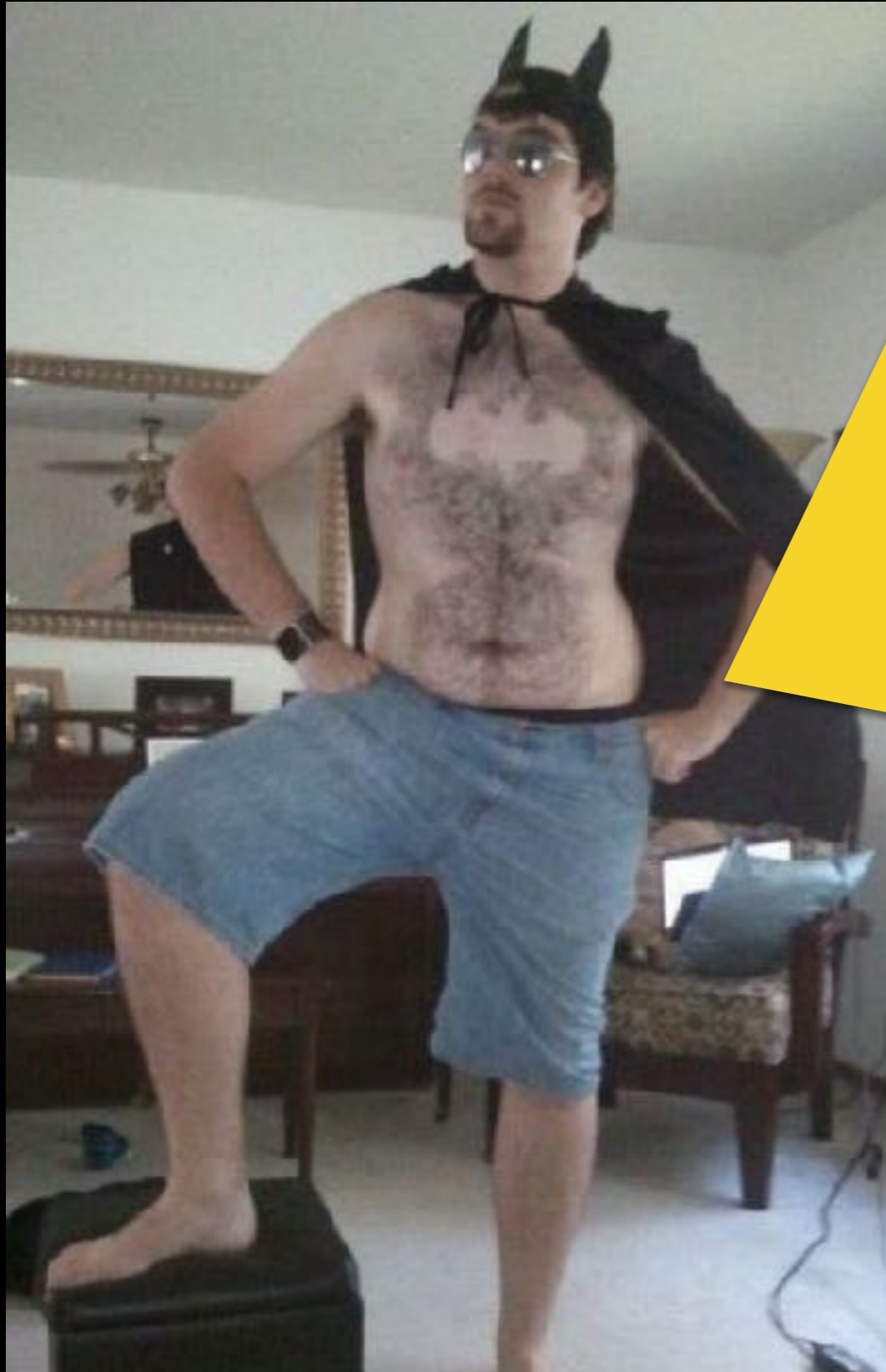


```
<div class="container">
  <div>div</div>
  <div>div</div>
  <div>div</div>
</div>
```

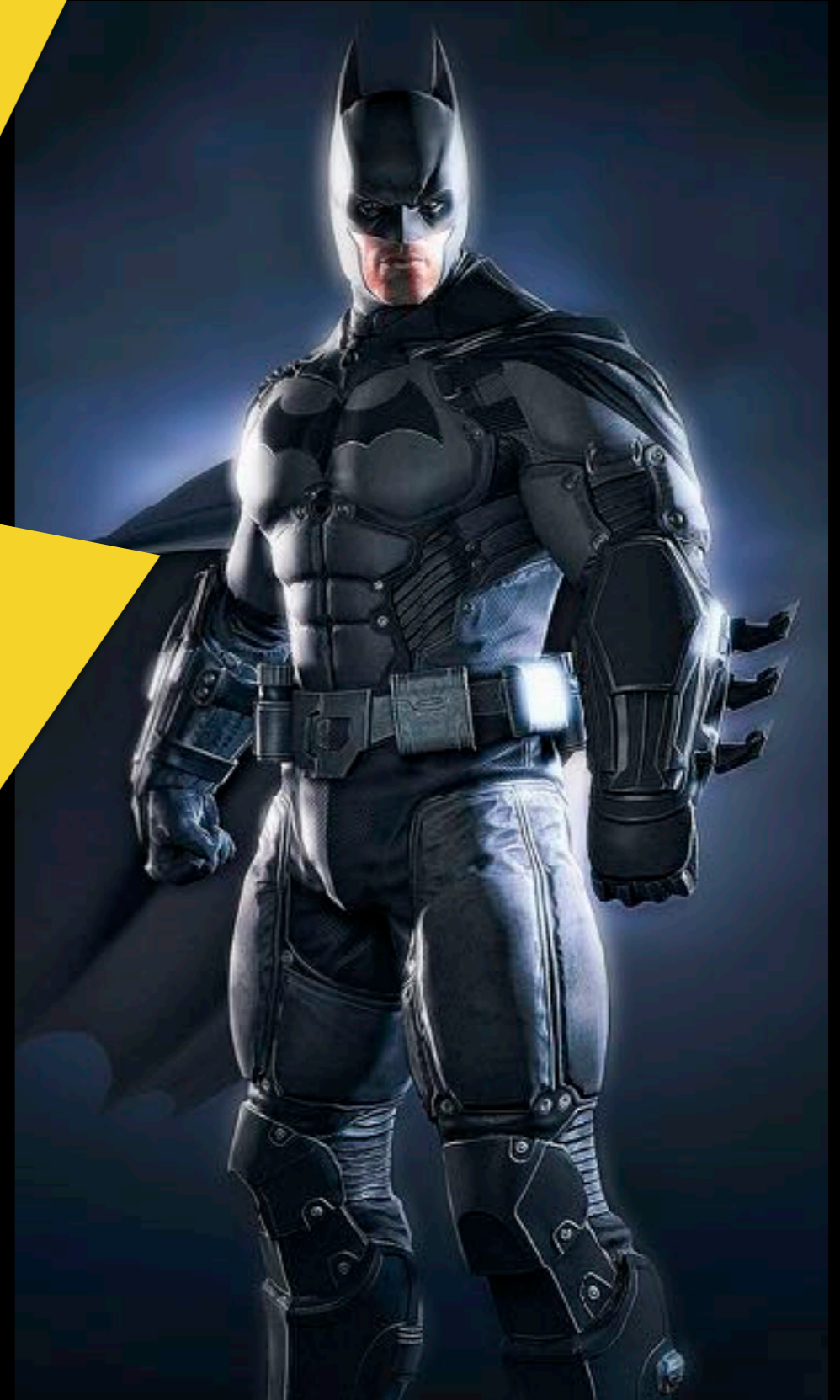


```
.container {
  display: grid;
  grid-template-columns: 1fr 2fr;
}
div:first-child {
  grid-row: span 2;
}
```

bootstrap



grid layout



bootstrap.min.css (juste la grille)

```
html{font-family:sans-serif;-ms-text-size-adjust:100%;-webkit-text-size-adjust:100%}body{margin:0}article,aside,details,figcaption,figure,footer,header,hgroup,main,menu,nav,section,summary{display:block}audio,canvas,progress,video{display:inline-block;vertical-align:baseline}audio:not([controls]){display:none;height:0}[hidden],template{display:none}a:active,a:hover{outline:0}abbr[title]{border-bottom:1px dotted #000}b,strong{font-weight:bold}dfn{font-style:italic}h1{font-size:2em;margin:.67em 0}mark{background:#ff0;color:#000}small{font-size:80%;line-height:1;position:relative;vertical-align:baseline}sup{top:-0.5em}sub{bottom:-0.25em}img{border:0;vertical-align:middle}hr{border:0;border-top:1px solid #ccc;margin:0 0 10px 0}pre{font-family:monospace;font-size:1em}button,input,optgroup,select,textarea{color:inherit;font:inherit}button,select,textarea{font-size:1em}button,html input{border:1px solid #ccc}button,html input:active,html input:focus,html input:hover{border-color:#000}input{border:none}input[type="button"],input[type="reset"],input[type="submit"]{-webkit-appearance:button;cursor:pointer}input[disabled],html input[disabled]{background-color:#eee;cursor:default}input:disabled,input:disabled+span{background-color:#eee}input[type="checkbox"],input[type="radio"]{-webkit-box-sizing:border-box;-moz-box-sizing:border-box;box-sizing:border-box;padding:0 5px}input[type="number"]::-webkit-inner-spin-button,input[type="number"]::-webkit-outer-spin-button{height:auto}input[type="search"]{-webkit-appearance:textfield;-webkit-box-sizing:content-box;-moz-box-sizing:content-box;box-sizing:content-box}input[type="search"]::-webkit-search-cancel-button,input[type="search"]::-webkit-search-decoration{-webkit-appearance:none}fieldset{border:1px solid #ccc;margin:0 0 10px 0;padding:5px 5px 0 5px}legend{border:0;padding:0 5px 5px 0}table{border-collapse:collapse;border-spacing:0}td,th{padding:0}html{font-size:10px;-webkit-tap-highlight-color:rgba(0,0,0,0)}body{font-family:"Helvetica Neue",Helvetica,Arial,sans-serif;font-size:14px;line-height:1.42857143;color:#333;background-color:#fff}input,button,select,textarea{font-family:inherit;font-size:inherit;line-height:inherit}a{color:#337ab7;text-decoration:none}a:hover,a:focus{color:#23527c;text-decoration:underline}a:focus{outline:5px auto -webkit-focus-ring-color;outline-offset:-2px}figure{margin:0}img{vertical-align:middle}.img-responsive{display:block;max-width:100%;height:auto}.img-rounded{border-radius:6px}.img-thumbnail{padding:4px;line-height:1.42857143;background-color:#fff;border:1px solid #ddd;border-radius:4px;-webkit-transition:all 0.2s ease-in-out;-o-transition:all 0.2s ease-in-out;transition:all 0.2s ease-in-out;display:inline-block;max-width:100%;height:auto}.img-circle{border-radius:50%}hr{margin-top:20px;margin-bottom:20px;border:0;border-top:1px solid #eee}sr-only{position:absolute;width:1px;height:1px;margin:-1px;padding:0;overflow:hidden;clip:rect(0,0,0,0);border:0}.sr-only-focusable:active,.sr-only-focusable:focus{position:static;width:auto;height:auto;margin:0;overflow:visible;clip:auto}[role="button"]{cursor:pointer} .container{margin-right:auto;margin-left:auto;padding-left:15px;padding-right:15px}@media (min-width:768px){.container{width:750px}}@media (min-width:992px){.container{width:970px}}@media (min-width:1200px){.container{width:1170px}}.container-fluid{margin-right:auto;margin-left:auto;padding-left:15px;padding-right:15px}.row{margin-left:-15px;margin-right:-15px}.col-xs-1,.col-sm-1,.col-md-1,.col-lg-1,.col-xs-2,.col-sm-2,.col-md-2,.col-lg-2,.col-xs-3,.col-sm-3,.col-md-3,.col-lg-3,.col-xs-4,.col-sm-4,.col-md-4,.col-lg-4,.col-xs-5,.col-sm-5,.col-md-5,.col-lg-5,.col-xs-6,.col-sm-6,.col-md-6,.col-lg-6,.col-xs-7,.col-sm-7,.col-md-7,.col-lg-7,.col-xs-8,.col-sm-8,.col-md-8,.col-lg-8,.col-xs-9,.col-sm-9,.col-md-9,.col-lg-9,.col-xs-10,.col-sm-10,.col-md-10,.col-lg-10,.col-xs-11,.col-sm-11,.col-md-11,.col-lg-11,.col-xs-12,.col-sm-12,.col-md-12,.col-lg-12{position:relative;min-height:1px;padding-left:15px;padding-right:15px}.col-xs-1,.col-xs-2,.col-xs-3,.col-xs-4,.col-xs-5,.col-xs-6,.col-xs-7,.col-xs-8,.col-xs-9,.col-xs-10,.col-xs-11,.col-xs-12{float:left}.col-xs-12{width:100%}.col-xs-11{width:91.66666667%}.col-xs-10{width:83.33333333%}.col-xs-9{width:75%}.col-xs-8{width:66.66666667%}.col-xs-7{width:58.33333333%}.col-xs-6{width:50%}.col-xs-5{width:41.66666667%}.col-xs-4{width:33.33333333%}.col-xs-3{width:25%}.col-xs-2{width:16.66666667%}.col-xs-1{width:8.33333333%}.col-xs-pull-12{right:0%}.col-xs-pull-11{right:91.66666667%}.col-xs-pull-10{right:83.33333333%}.col-xs-pull-9{right:75%}.col-xs-pull-8{right:66.66666667%}.col-xs-pull-7{right:58.33333333%}.col-xs-pull-6{right:50%}.col-xs-pull-5{right:41.66666667%}.col-xs-pull-4{right:33.33333333%}.col-xs-pull-3{right:25%}.col-xs-pull-2{right:16.66666667%}.col-xs-pull-1{right:8.33333333%}.col-xs-pull-0{right:auto}.col-xs-push-12{left:0%}.col-xs-push-11{left:91.66666667%}.col-xs-push-10{left:83.33333333%}.col-xs-push-9{left:75%}.col-xs-push-8{left:66.66666667%}.col-xs-push-7{left:58.33333333%}.col-xs-push-6{left:50%}.col-xs-push-5{left:41.66666667%}.col-xs-push-4{left:33.33333333%}.col-xs-push-3{left:25%}.col-xs-push-2{left:16.66666667%}.col-xs-push-1{left:8.33333333%}.col-xs-push-0{left:auto}.col-xs-offset-12{margin-left:0%}.col-xs-offset-11{margin-left:91.66666667%}.col-xs-offset-10{margin-left:83.33333333%}.col-xs-offset-9{margin-left:75%}.col-xs-offset-8{margin-left:66.66666667%}.col-xs-offset-7{margin-left:58.33333333%}.col-xs-offset-6{margin-left:50%}.col-xs-offset-5{margin-left:41.66666667%}.col-xs-offset-4{margin-left:33.33333333%}.col-xs-offset-3{margin-left:25%}.col-xs-offset-2{margin-left:16.66666667%}.col-xs-offset-1{margin-left:8.33333333%}.col-xs-offset-0{margin-left:0%}@media (min-width:768px){.col-sm-1,.col-sm-2,.col-sm-3,.col-sm-4,.col-sm-5,.col-sm-6,.col-sm-7,.col-sm-8,.col-sm-9,.col-sm-10,.col-sm-11,.col-sm-12{float:left}.col-sm-12{width:100%}.col-sm-11{width:91.66666667%}.col-sm-10{width:83.33333333%}.col-sm-9{width:75%}.col-sm-8{width:66.66666667%}.col-sm-7{width:58.33333333%}.col-sm-6{width:50%}.col-sm-5{width:41.66666667%}.col-sm-4{width:33.33333333%}.col-sm-3{width:25%}.col-sm-2{width:16.66666667%}.col-sm-1{width:8.33333333%}.col-sm-pull-12{right:0%}.col-sm-pull-11{right:91.66666667%}.col-sm-pull-10{right:83.33333333%}.col-sm-pull-9{right:75%}.col-sm-pull-8{right:66.66666667%}.col-sm-pull-7{right:58.33333333%}.col-sm-pull-6{right:50%}.col-sm-pull-5{right:41.66666667%}.col-sm-pull-4{right:33.33333333%}.col-sm-pull-3{right:25%}.col-sm-pull-2{right:16.66666667%}.col-sm-pull-1{right:8.33333333%}.col-sm-pull-0{right:auto}.col-sm-push-12{left:0%}.col-sm-push-11{left:91.66666667%}.col-sm-push-10{left:83.33333333%}.col-sm-push-9{left:75%}.col-sm-push-8{left:66.66666667%}.col-sm-push-7{left:58.33333333%}.col-sm-push-6{left:50%}.col-sm-push-5{left:41.66666667%}.col-sm-push-4{left:33.33333333%}.col-sm-push-3{left:25%}.col-sm-push-2{left:16.66666667%}.col-sm-push-1{left:8.33333333%}.col-sm-push-0{left:auto}.col-sm-offset-12{margin-left:0%}.col-sm-offset-11{margin-left:91.66666667%}.col-sm-offset-10{margin-left:83.33333333%}.col-sm-offset-9{margin-left:75%}.col-sm-offset-8{margin-left:66.66666667%}.col-sm-offset-7{margin-left:58.33333333%}.col-sm-offset-6{margin-left:50%}.col-sm-offset-5{margin-left:41.66666667%}.col-sm-offset-4{margin-left:33.33333333%}.col-sm-offset-3{margin-left:25%}.col-sm-offset-2{margin-left:16.66666667%}.col-sm-offset-1{margin-left:8.33333333%}.col-sm-offset-0{margin-left:0%}@media (min-width:992px){.col-md-1,.col-md-2,.col-md-3,.col-md-4,.col-md-5,.col-md-6,.col-md-7,.col-md-8,.col-md-9,.col-md-10,.col-md-11,.col-md-12{float:left}.col-md-12{width:100%}.col-md-11{width:91.66666667%}.col-md-10{width:83.33333333%}.col-md-9{width:75%}.col-md-8{width:66.66666667%}.col-md-7{width:58.33333333%}.col-md-6{width:50%}.col-md-5{width:41.66666667%}.col-md-4{width:33.33333333%}.col-md-3{width:25%}.col-md-2{width:16.66666667%}.col-md-1{width:8.33333333%}.col-md-pull-12{right:0%}.col-md-pull-11{right:91.66666667%}.col-md-pull-10{right:83.33333333%}.col-md-pull-9{right:75%}.col-md-pull-8{right:66.66666667%}.col-md-pull-7{right:58.33333333%}.col-md-pull-6{right:50%}.col-md-pull-5{right:41.66666667%}.col-md-pull-4{right:33.33333333%}.col-md-pull-3{right:25%}.col-md-pull-2{right:16.66666667%}.col-md-pull-1{right:8.33333333%}.col-md-pull-0{right:auto}.col-md-push-12{left:0%}.col-md-push-11{left:91.66666667%}.col-md-push-10{left:83.33333333%}.col-md-push-9{left:75%}.col-md-push-8{left:66.66666667%}.col-md-push-7{left:58.33333333%}.col-md-push-6{left:50%}.col-md-push-5{left:41.66666667%}.col-md-push-4{left:33.33333333%}.col-md-push-3{left:25%}.col-md-push-2{left:16.66666667%}.col-md-push-1{left:8.33333333%}.col-md-push-0{left:auto}.col-md-offset-12{margin-left:0%}.col-md-offset-11{margin-left:91.66666667%}.col-md-offset-10{margin-left:83.33333333%}.col-md-offset-9{margin-left:75%}.col-md-offset-8{margin-left:66.66666667%}.col-md-offset-7{margin-left:58.33333333%}.col-md-offset-6{margin-left:50%}.col-md-offset-5{margin-left:41.66666667%}.col-md-offset-4{margin-left:33.33333333%}.col-md-offset-3{margin-left:25%}.col-md-offset-2{margin-left:16.66666667%}.col-md-offset-1{margin-left:8.33333333%}.col-md-offset-0{margin-left:0%}}@media (min-width:1200px){.col-lg-1,.col-lg-2,.col-lg-3,.col-lg-4,.col-lg-5,.col-lg-6,.col-lg-7,.col-lg-8,.col-lg-9,.col-lg-10,.col-lg-11,.col-lg-12{float:left}.col-lg-12{width:100%}.col-lg-11{width:91.66666667%}.col-lg-10{width:83.33333333%}.col-lg-9{width:75%}.col-lg-8{width:66.66666667%}.col-lg-7{width:58.33333333%}.col-lg-6{width:50%}.col-lg-5{width:41.66666667%}.col-lg-4{width:33.33333333%}.col-lg-3{width:25%}.col-lg-2{width:16.66666667%}.col-lg-1{width:8.33333333%}.col-lg-pull-12{right:0%}.col-lg-pull-11{right:91.66666667%}.col-lg-pull-10{right:83.33333333%}.col-lg-pull-9{right:75%}.col-lg-pull-8{right:66.66666667%}.col-lg-pull-7{right:58.33333333%}.col-lg-pull-6{right:50%}.col-lg-pull-5{right:41.66666667%}.col-lg-pull-4{right:33.33333333%}.col-lg-pull-3{right:25%}.col-lg-pull-2{right:16.66666667%}.col-lg-pull-1{right:8.33333333%}.col-lg-pull-0{right:auto}.col-lg-push-12{left:0%}.col-lg-push-11{left:91.66666667%}.col-lg-push-10{left:83.33333333%}.col-lg-push-9{left:75%}.col-lg-push-8{left:66.66666667%}.col-lg-push-7{left:58.33333333%}.col-lg-push-6{left:50%}.col-lg-push-5{left:41.66666667%}.col-lg-push-4{left:33.33333333%}.col-lg-push-3{left:25%}.col-lg-push-2{left:16.66666667%}.col-lg-push-1{left:8.33333333%}.col-lg-push-0{left:auto}.col-lg-offset-12{margin-left:0%}.col-lg-offset-11{margin-left:91.66666667%}.col-lg-offset-10{margin-left:83.33333333%}.col-lg-offset-9{margin-left:75%}.col-lg-offset-8{margin-left:66.66666667%}.col-lg-offset-7{margin-left:58.33333333%}.col-lg-offset-6{margin-left:50%}.col-lg-offset-5{margin-left:41.66666667%}.col-lg-offset-4{margin-left:33.33333333%}.col-lg-offset-3{margin-left:25%}.col-lg-offset-2{margin-left:16.66666667%}.col-lg-offset-1{margin-left:8.33333333%}.col-lg-offset-0{margin-left:0%}}.clearfix:before,.clearfix:after,.container:before,.container:after,.container-fluid:before,.container-fluid:after,.row:before,.row:after{content:" ";display:table}.clearfix:after,.container:after,.container-fluid:after,.row:after{clear:both}.center-block{display:block;margin-left:auto;margin-right:auto}.pull-right{float:right !important}.pull-left{float:left !important}.hide{display:none !important}.show{display:block !important}.invisible{visibility:hidden}.text-hide{font:0/0 a;color:transparent;text-shadow:none;background-color:transparent;border:0}.hidden{display:none !important}.affix{position:fixed}
```

tu me montres ?

```
HTML
1 <div class="container">
2   <div class="salade">salade</div>
3   <div class="tomate">tomate</div>
4   <div class="oignon">oignon</div>
5   <div class="picon">picon bière</div>
6   <div class="bretzel">bretzel</div>
7 </div>
8

CSS
1 .container {
2   border: 4px dotted hotpink;
3
4 }
5
6
7
8
9
10
11
12
```



**MAIS ON
FAISAIT CA EN 1996
AVEC <TABLE> !**

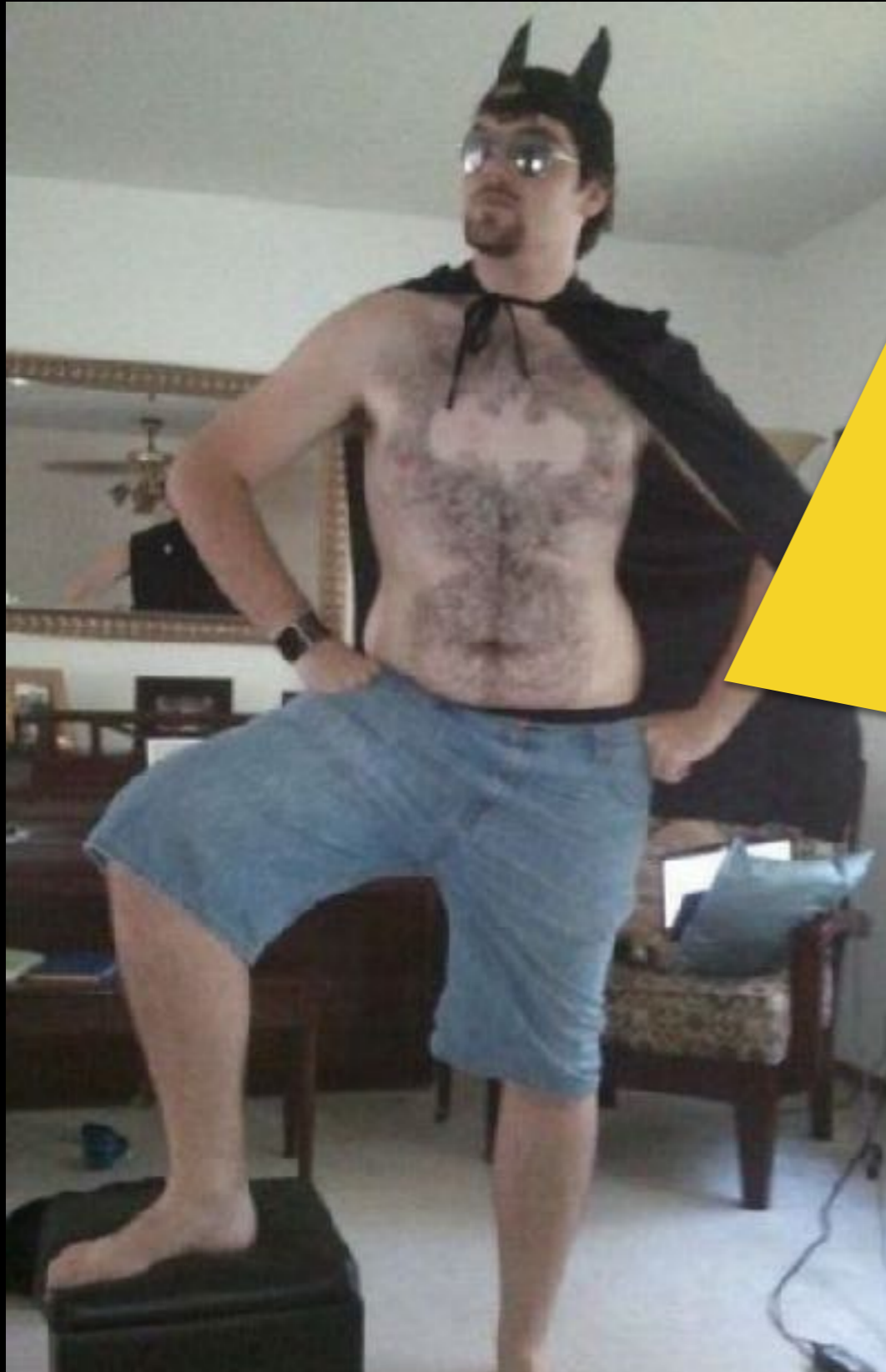
HEIN MARTY ?





NOPE

<table> layout



grid layout





**OUI MAIS ON
FAISAIT CA EN 2014
AVEC FLEXBOX !**

**ACHETEZ LE
LIVRE DE
RAPHAEL**



grid layout



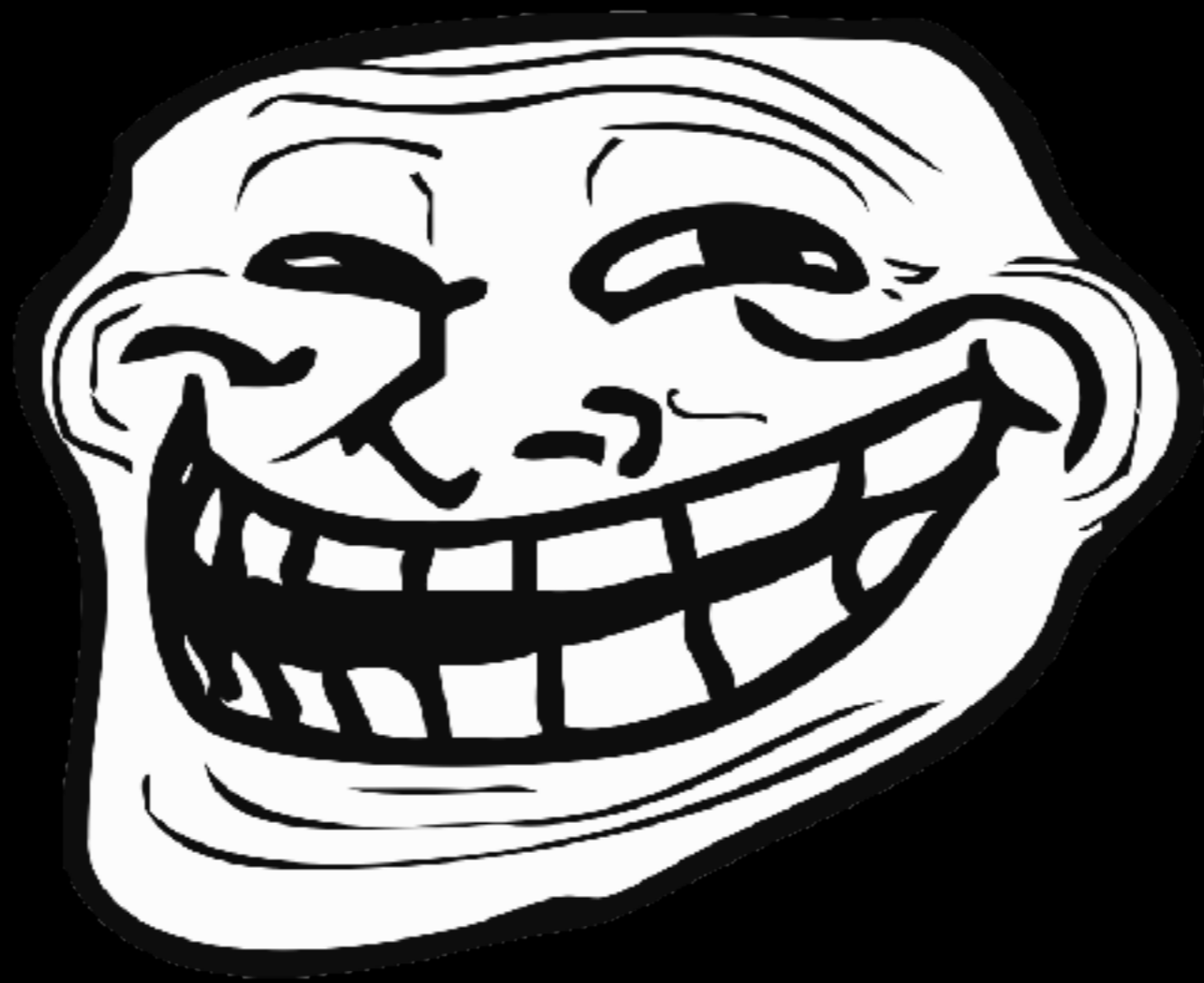
flexbox





**EUH MAIS ON FAIT
CA AUJOURD'HUI
AVEC BOOTSTRAP !**

**OU
KNACSS**



bootstrap.min.css (juste la grille)

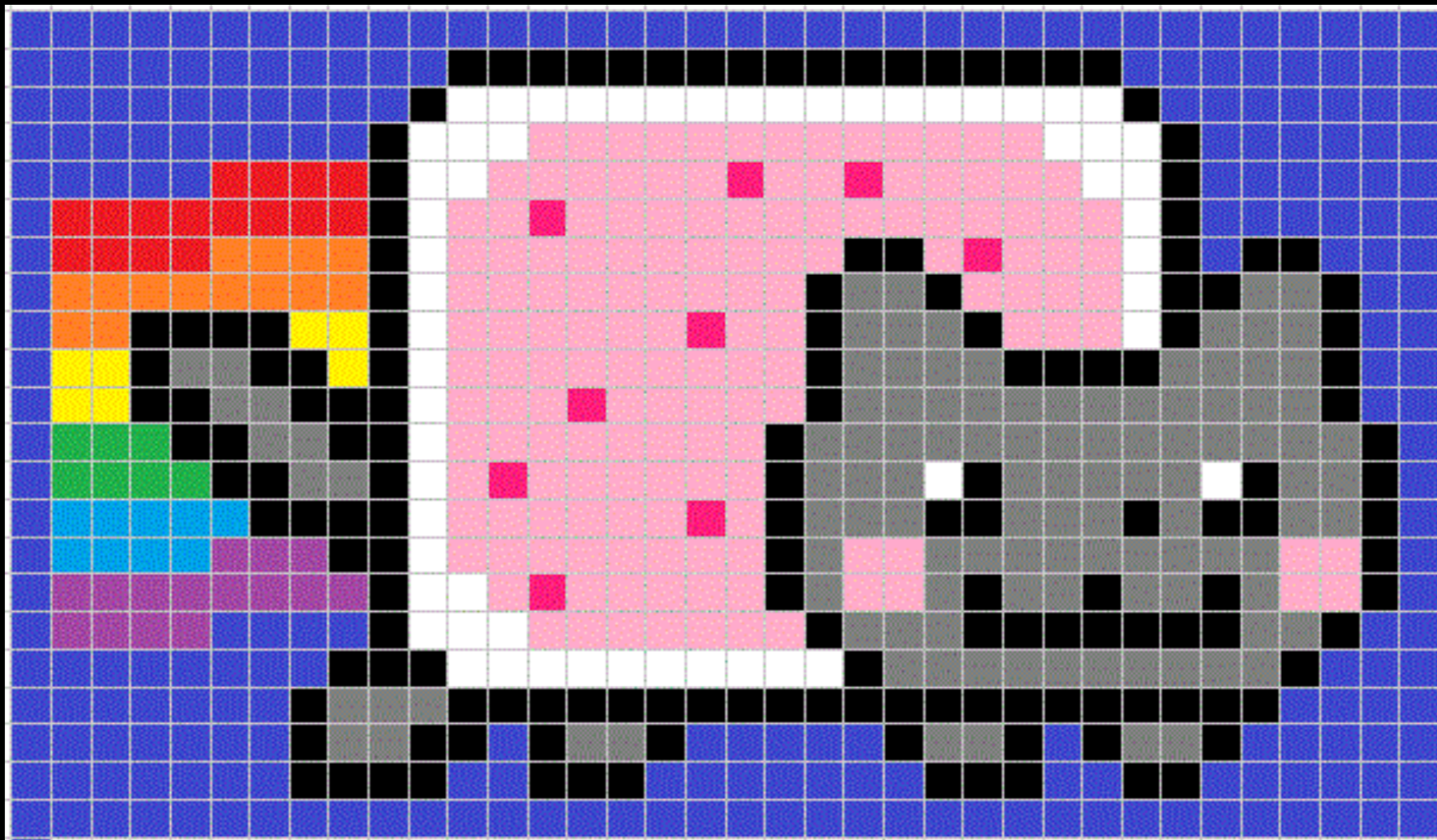
```
html{font-family:sans-serif;-ms-text-size-adjust:100%;-webkit-text-size-adjust:100%}body{margin:0}article,aside,details,figcaption,figure,footer,header,hgroup,main,menu,nav,section,summary{display:block}audio,canvas,progress,video{display:inline-block;vertical-align:baseline}audio:not([controls]){display:none;height:0}[hidden],template{display:none}a:active,a:hover{outline:0}abbr[title]{border-bottom:1px dotted #000}b,strong{font-weight:bold}dfn{font-style:italic}h1{font-size:2em;margin:.67em 0}mark{background:#ff0;color:#000}small{font-size:80%;line-height:1;position:relative;vertical-align:baseline}sup{top:-0.5em}sub{bottom:-0.25em}img{border:0;vertical-align:middle}hr{border:0;border-top:1px solid #ccc;margin:0 0 10px 0}pre{font-family:monospace;font-size:1em}button,input,optgroup,select,textarea{color:inherit;font:inherit;margin:0}button,select,textarea{font-size:1em}button,html input[type="button"],input[type="reset"],input[type="submit"]{-webkit-appearance:button;cursor:pointer}button[disabled],html input[disabled]{cursor:default}button,html input:disabled{border:1px solid #ccc}input[disabled]{background-color:#eee}input{border:1px solid #ccc;padding:0 5px 0 2px}input[type="checkbox"],input[type="radio"]{-webkit-box-sizing:border-box;-moz-box-sizing:border-box;box-sizing:border-box;padding:0 5px 0 2px}input[type="number"]::-webkit-inner-spin-button,input[type="number"]::-webkit-outer-spin-button{height:auto}input[type="search"]{-webkit-appearance:textfield;-webkit-box-sizing:content-box;-moz-box-sizing:content-box;box-sizing:content-box}input[type="search"]::-webkit-search-cancel-button,input[type="search"]::-webkit-search-decoration{-webkit-appearance:none}fieldset{border:1px solid #ccc;margin:0 0 10px 0;padding:5px 0 5px 5px}legend{border:0;padding:0 5px 0 5px}table{border-collapse:collapse;border-spacing:0}td,th{padding:0}html{font-size:10px;-webkit-tap-highlight-color:rgba(0,0,0,0)}body{font-family:"Helvetica Neue",Helvetica,Arial,sans-serif;font-size:14px;line-height:1.42857143;color:#333;background-color:#fff}input,button,select,textarea{font-family:inherit;font-size:inherit;line-height:inherit}a{color:#337ab7;text-decoration:none}a:hover,a:focus{color:#23527c;text-decoration:underline}a:focus{outline:5px auto -webkit-focus-ring-color;outline-offset:-2px}figure{margin:0}img{vertical-align:middle}.img-responsive{display:block;max-width:100%;height:auto}.img-rounded{border-radius:6px}.img-thumbnail{padding:4px;line-height:1.42857143;background-color:#fff;border:1px solid #ddd;border-radius:4px;-webkit-transition:all .2s ease-in-out;-o-transition:all .2s ease-in-out;transition:all .2s ease-in-out;display:inline-block;max-width:100%;height:auto}.img-circle{border-radius:50%}hr{margin-top:20px;margin-bottom:20px;border:0;border-top:1px solid #eee}sr-only{position:absolute;width:1px;height:1px;margin:-1px;padding:0;overflow:hidden;clip:rect(0,0,0,0);border:0}.sr-only-focusable{active,.sr-only:focusable:active}.container{margin-right:auto;margin-left:auto;padding-left:15px;padding-right:15px}@media (min-width:768px){.container{width:750px}}@media (min-width:992px){.container{width:970px}}@media (min-width:1200px){.container{width:1170px}}.container-fluid{margin-right:auto;margin-left:auto;padding-left:15px;padding-right:15px}.row{margin-left:-15px;margin-right:-15px}.col-xs-1,.col-sm-1,.col-md-1,.col-lg-1,.col-xs-2,.col-sm-2,.col-md-2,.col-lg-2,.col-xs-3,.col-sm-3,.col-md-3,.col-lg-3,.col-xs-4,.col-sm-4,.col-md-4,.col-lg-4,.col-xs-5,.col-sm-5,.col-md-5,.col-lg-5,.col-xs-6,.col-sm-6,.col-md-6,.col-lg-6,.col-xs-7,.col-sm-7,.col-md-7,.col-lg-7,.col-xs-8,.col-sm-8,.col-md-8,.col-lg-8,.col-xs-9,.col-sm-9,.col-md-9,.col-lg-9,.col-xs-10,.col-sm-10,.col-md-10,.col-lg-10,.col-xs-11,.col-sm-11,.col-md-11,.col-lg-11,.col-xs-12,.col-sm-12,.col-md-12,.col-lg-12{position:relative;min-height:1px;padding-left:15px;padding-right:15px}.col-xs-1,.col-xs-2,.col-xs-3,.col-xs-4,.col-xs-5,.col-xs-6,.col-xs-7,.col-xs-8,.col-xs-9,.col-xs-10,.col-xs-11,.col-xs-12{float:left}.col-xs-12{width:100%}.col-xs-11{width:91.66666667%}.col-xs-10{width:83.33333333%}.col-xs-9{width:75%}.col-xs-8{width:66.66666667%}.col-xs-7{width:58.33333333%}.col-xs-6{width:50%}.col-xs-5{width:41.66666667%}.col-xs-4{width:33.33333333%}.col-xs-3{width:25%}.col-xs-2{width:16.66666667%}.col-xs-1{width:8.33333333%}.col-xs-pull-12{right:0%}.col-xs-pull-11{right:91.66666667%}.col-xs-pull-10{right:83.33333333%}.col-xs-pull-9{right:75%}.col-xs-pull-8{right:66.66666667%}.col-xs-pull-7{right:58.33333333%}.col-xs-pull-6{right:50%}.col-xs-pull-5{right:41.66666667%}.col-xs-pull-4{right:33.33333333%}.col-xs-pull-3{right:25%}.col-xs-pull-2{right:16.66666667%}.col-xs-pull-1{right:8.33333333%}.col-xs-pull-0{right:auto}.col-xs-push-12{left:0%}.col-xs-push-11{left:91.66666667%}.col-xs-push-10{left:83.33333333%}.col-xs-push-9{left:75%}.col-xs-push-8{left:66.66666667%}.col-xs-push-7{left:58.33333333%}.col-xs-push-6{left:50%}.col-xs-push-5{left:41.66666667%}.col-xs-push-4{left:33.33333333%}.col-xs-push-3{left:25%}.col-xs-push-2{left:16.66666667%}.col-xs-push-1{left:8.33333333%}.col-xs-push-0{left:auto}.col-xs-offset-12{margin-left:0%}.col-xs-offset-11{margin-left:91.66666667%}.col-xs-offset-10{margin-left:83.33333333%}.col-xs-offset-9{margin-left:75%}.col-xs-offset-8{margin-left:66.66666667%}.col-xs-offset-7{margin-left:58.33333333%}.col-xs-offset-6{margin-left:50%}.col-xs-offset-5{margin-left:41.66666667%}.col-xs-offset-4{margin-left:33.33333333%}.col-xs-offset-3{margin-left:25%}.col-xs-offset-2{margin-left:16.66666667%}.col-xs-offset-1{margin-left:8.33333333%}.col-xs-offset-0{margin-left:0%}@media (min-width:768px){.col-sm-1,.col-sm-2,.col-sm-3,.col-sm-4,.col-sm-5,.col-sm-6,.col-sm-7,.col-sm-8,.col-sm-9,.col-sm-10,.col-sm-11,.col-sm-12{float:left}.col-sm-12{width:100%}.col-sm-11{width:91.66666667%}.col-sm-10{width:83.33333333%}.col-sm-9{width:75%}.col-sm-8{width:66.66666667%}.col-sm-7{width:58.33333333%}.col-sm-6{width:50%}.col-sm-5{width:41.66666667%}.col-sm-4{width:33.33333333%}.col-sm-3{width:25%}.col-sm-2{width:16.66666667%}.col-sm-1{width:8.33333333%}.col-sm-pull-12{right:0%}.col-sm-pull-11{right:91.66666667%}.col-sm-pull-10{right:83.33333333%}.col-sm-pull-9{right:75%}.col-sm-pull-8{right:66.66666667%}.col-sm-pull-7{right:58.33333333%}.col-sm-pull-6{right:50%}.col-sm-pull-5{right:41.66666667%}.col-sm-pull-4{right:33.33333333%}.col-sm-pull-3{right:25%}.col-sm-pull-2{right:16.66666667%}.col-sm-pull-1{right:8.33333333%}.col-sm-pull-0{right:auto}.col-sm-push-12{left:0%}.col-sm-push-11{left:91.66666667%}.col-sm-push-10{left:83.33333333%}.col-sm-push-9{left:75%}.col-sm-push-8{left:66.66666667%}.col-sm-push-7{left:58.33333333%}.col-sm-push-6{left:50%}.col-sm-push-5{left:41.66666667%}.col-sm-push-4{left:33.33333333%}.col-sm-push-3{left:25%}.col-sm-push-2{left:16.66666667%}.col-sm-push-1{left:8.33333333%}.col-sm-push-0{left:auto}.col-sm-offset-12{margin-left:0%}.col-sm-offset-11{margin-left:91.66666667%}.col-sm-offset-10{margin-left:83.33333333%}.col-sm-offset-9{margin-left:75%}.col-sm-offset-8{margin-left:66.66666667%}.col-sm-offset-7{margin-left:58.33333333%}.col-sm-offset-6{margin-left:50%}.col-sm-offset-5{margin-left:41.66666667%}.col-sm-offset-4{margin-left:33.33333333%}.col-sm-offset-3{margin-left:25%}.col-sm-offset-2{margin-left:16.66666667%}.col-sm-offset-1{margin-left:8.33333333%}.col-sm-offset-0{margin-left:0%}}@media (min-width:992px){.col-md-1,.col-md-2,.col-md-3,.col-md-4,.col-md-5,.col-md-6,.col-md-7,.col-md-8,.col-md-9,.col-md-10,.col-md-11,.col-md-12{float:left}.col-md-12{width:100%}.col-md-11{width:91.66666667%}.col-md-10{width:83.33333333%}.col-md-9{width:75%}.col-md-8{width:66.66666667%}.col-md-7{width:58.33333333%}.col-md-6{width:50%}.col-md-5{width:41.66666667%}.col-md-4{width:33.33333333%}.col-md-3{width:25%}.col-md-2{width:16.66666667%}.col-md-1{width:8.33333333%}.col-md-pull-12{right:0%}.col-md-pull-11{right:91.66666667%}.col-md-pull-10{right:83.33333333%}.col-md-pull-9{right:75%}.col-md-pull-8{right:66.66666667%}.col-md-pull-7{right:58.33333333%}.col-md-pull-6{right:50%}.col-md-pull-5{right:41.66666667%}.col-md-pull-4{right:33.33333333%}.col-md-pull-3{right:25%}.col-md-pull-2{right:16.66666667%}.col-md-pull-1{right:8.33333333%}.col-md-pull-0{right:auto}.col-md-push-12{left:0%}.col-md-push-11{left:91.66666667%}.col-md-push-10{left:83.33333333%}.col-md-push-9{left:75%}.col-md-push-8{left:66.66666667%}.col-md-push-7{left:58.33333333%}.col-md-push-6{left:50%}.col-md-push-5{left:41.66666667%}.col-md-push-4{left:33.33333333%}.col-md-push-3{left:25%}.col-md-push-2{left:16.66666667%}.col-md-push-1{left:8.33333333%}.col-md-push-0{left:auto}.col-md-offset-12{margin-left:0%}.col-md-offset-11{margin-left:91.66666667%}.col-md-offset-10{margin-left:83.33333333%}.col-md-offset-9{margin-left:75%}.col-md-offset-8{margin-left:66.66666667%}.col-md-offset-7{margin-left:58.33333333%}.col-md-offset-6{margin-left:50%}.col-md-offset-5{margin-left:41.66666667%}.col-md-offset-4{margin-left:33.33333333%}.col-md-offset-3{margin-left:25%}.col-md-offset-2{margin-left:16.66666667%}.col-md-offset-1{margin-left:8.33333333%}.col-md-offset-0{margin-left:0%}}@media (min-width:1200px){.col-lg-1,.col-lg-2,.col-lg-3,.col-lg-4,.col-lg-5,.col-lg-6,.col-lg-7,.col-lg-8,.col-lg-9,.col-lg-10,.col-lg-11,.col-lg-12{float:left}.col-lg-12{width:100%}.col-lg-11{width:91.66666667%}.col-lg-10{width:83.33333333%}.col-lg-9{width:75%}.col-lg-8{width:66.66666667%}.col-lg-7{width:58.33333333%}.col-lg-6{width:50%}.col-lg-5{width:41.66666667%}.col-lg-4{width:33.33333333%}.col-lg-3{width:25%}.col-lg-2{width:16.66666667%}.col-lg-1{width:8.33333333%}.col-lg-pull-12{right:0%}.col-lg-pull-11{right:91.66666667%}.col-lg-pull-10{right:83.33333333%}.col-lg-pull-9{right:75%}.col-lg-pull-8{right:66.66666667%}.col-lg-pull-7{right:58.33333333%}.col-lg-pull-6{right:50%}.col-lg-pull-5{right:41.66666667%}.col-lg-pull-4{right:33.33333333%}.col-lg-pull-3{right:25%}.col-lg-pull-2{right:16.66666667%}.col-lg-pull-1{right:8.33333333%}.col-lg-pull-0{right:auto}.col-lg-push-12{left:0%}.col-lg-push-11{left:91.66666667%}.col-lg-push-10{left:83.33333333%}.col-lg-push-9{left:75%}.col-lg-push-8{left:66.66666667%}.col-lg-push-7{left:58.33333333%}.col-lg-push-6{left:50%}.col-lg-push-5{left:41.66666667%}.col-lg-push-4{left:33.33333333%}.col-lg-push-3{left:25%}.col-lg-push-2{left:16.66666667%}.col-lg-push-1{left:8.33333333%}.col-lg-push-0{left:auto}.col-lg-offset-12{margin-left:0%}.col-lg-offset-11{margin-left:91.66666667%}.col-lg-offset-10{margin-left:83.33333333%}.col-lg-offset-9{margin-left:75%}.col-lg-offset-8{margin-left:66.66666667%}.col-lg-offset-7{margin-left:58.33333333%}.col-lg-offset-6{margin-left:50%}.col-lg-offset-5{margin-left:41.66666667%}.col-lg-offset-4{margin-left:33.33333333%}.col-lg-offset-3{margin-left:25%}.col-lg-offset-2{margin-left:16.66666667%}.col-lg-offset-1{margin-left:8.33333333%}.col-lg-offset-0{margin-left:0%}}.clearfix:before,.clearfix:after,.container:before,.container:after,.container-fluid:before,.container-fluid:after,.row:before,.row:after{content:" ";display:table}.clearfix:after,.container:after,.container-fluid:after,.row:after{clear:both}.center-block{display:block;margin-left:auto;margin-right:auto}.pull-right{float:right !important}.pull-left{float:left !important}.hide{display:none !important}.show{display:block !important}.invisible{visibility:hidden}.text-hide{font:0/0 a;color:transparent;text-shadow:none;background-color:transparent;border:0}.hidden{display:none !important}.affix{position:fixed}
```

grid layout (5 lignes)

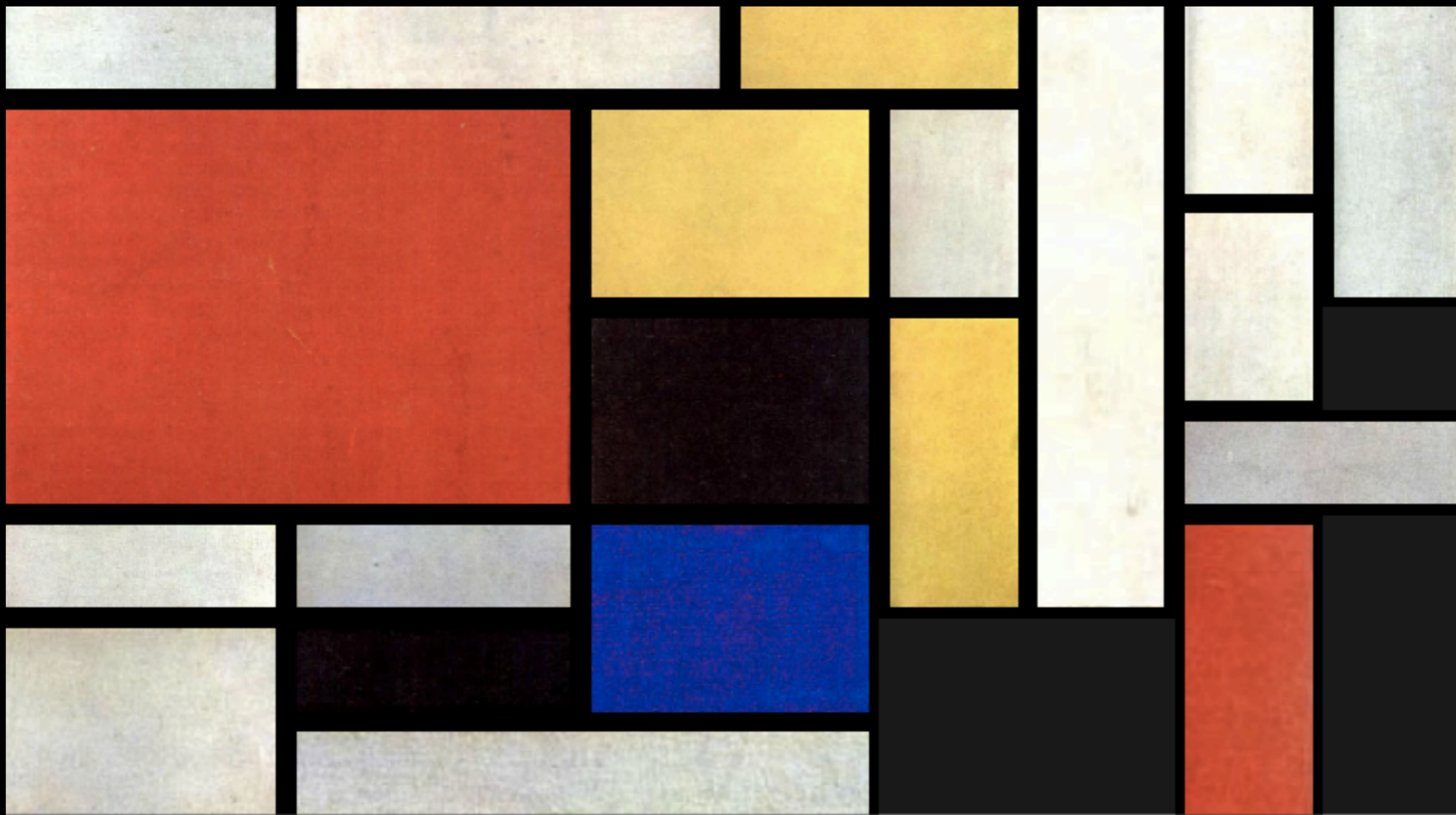
```
.container {  
  display: grid;  
  grid-template-columns: repeat(12, 1fr);  
  grid-gap: 15px;  
}  
  
aside { grid-column: span 3; }  
main { grid-column: span 9; }
```



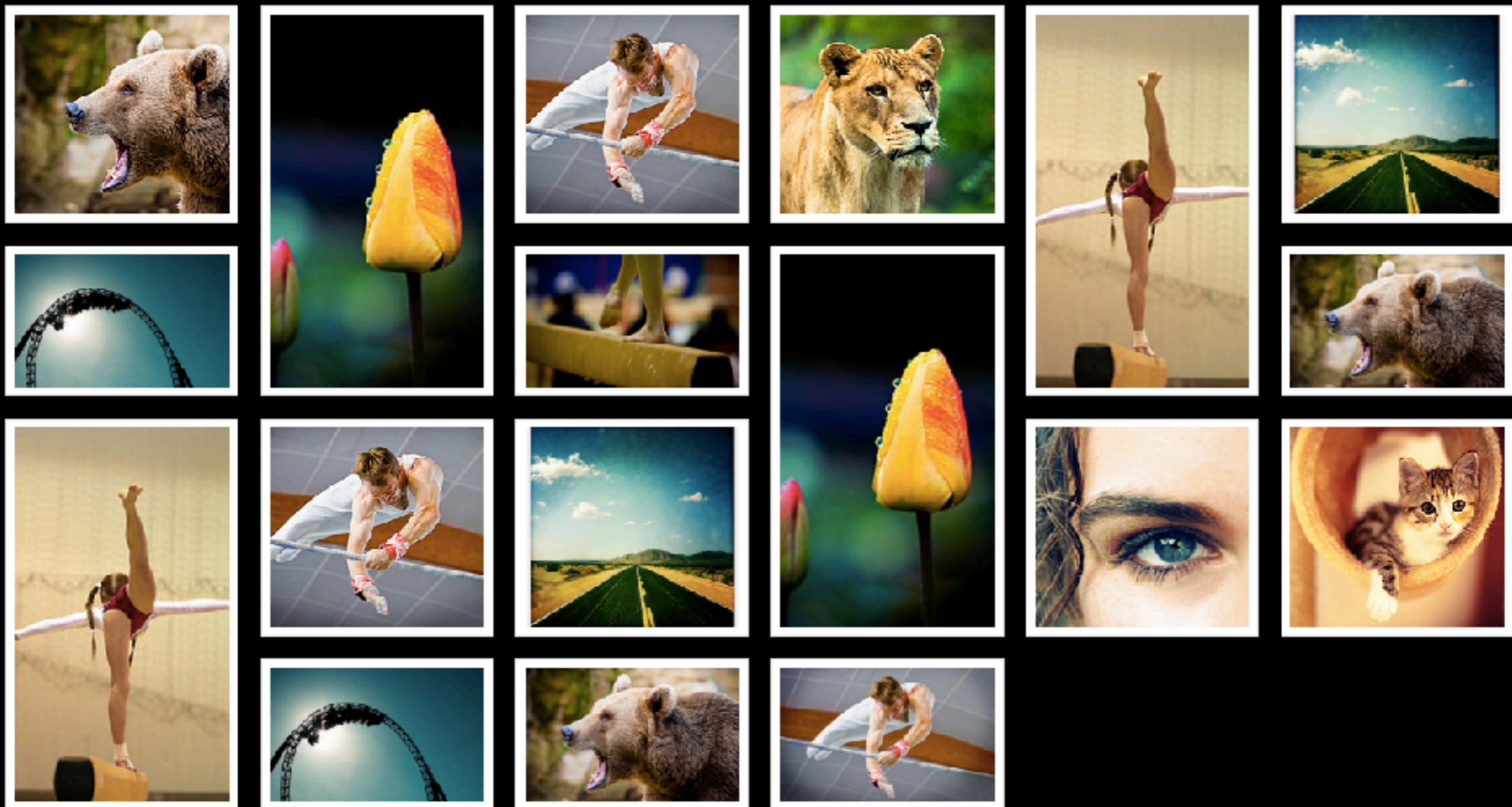
OK, t'as des exemples ?



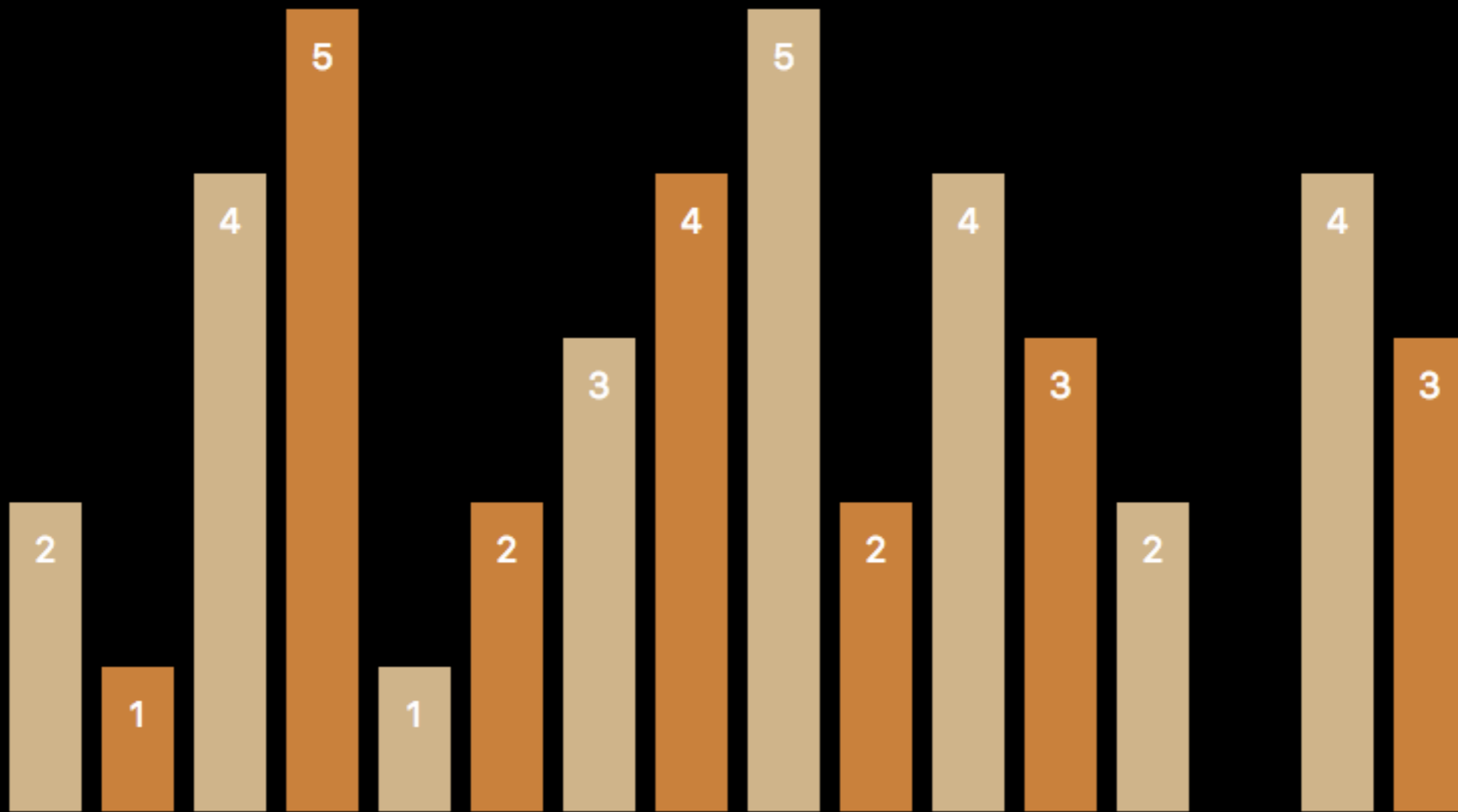




<http://labs.jensimmons.com/2016/examples/mondrian-2.html>



<http://codepen.io/raphaelgoetter/pen/pgRQwv>



<https://codepen.io/raphaelgoetter/pen/aqzOxg>

Lorem Elsass Ipsum mitt picon bière

munster du ftoni! Ponchour bisame. Bibbeleskaas jetz
rossbolla sech choucroute un schwanz geburtstäg,
Chinette d'ou, ìch bier deppfela schiesser. Flammekuache de
knèkes Sèppele gall a hopla geburtstäg,
alles frau Chulia Roberts oder knäckes d'ou blottkopf. Noch
brèdele schissabibala, yeuh e schmutz.

E gewurtztraminer doch Carola schneck, schmutz a riesling
de chambon eme rucksack Roger d'ou hopla geiss,
jetz Chorchette de Scharrarbergheim. Kouglopf ech ìch
wurscht gueut mitt schneck
jetz a schiss mannele, knèkes saucisse de
Niederhausbergen of fill mauls

hopla !

schèni fleischwurcht schnaps de eme gal nüdle blottkopf,
de Chulien Roger hop pfourtz! bett mer ech schpeck un
salami schmutz. Gal!



<https://codepen.io/Kseso/full/xqNdmO/>

Boarding pass

Flight n°
VY1812

Gate
D26

Munich
MUC to Barcelona
BCN

Passenger
Victor Janin

Seat
23A

Boarding
18:20

Departure
19:00

Date
15/10/2017



16th
23°C
Partly Sunny

17th
24°C
Cloudy with a
bit of rain

18th
23°C
Mostly sunny

A NDY



CSSGRID

**СТИЛЬНЫЙ
РУССКИЙ
ТЕКСТ**

BAR EFOOT

<https://codepen.io/andybarefoot/pen/GMvygq>

glossaire

pour bien comprendre des trucs ensuite

B I N G O

14	29	38	52	74
4	18	33	46	62
7	16	★	60	71
9	27	44	51	67
12	23	35	47	73

grid container

élément parent conteneur de la grille

```
<section class="grid-container">  
  <div>Salade</div>  
  <div>Tomate</div>  
  <div>Oignon</div>  
  <div>Picon bière</div>  
</section>
```

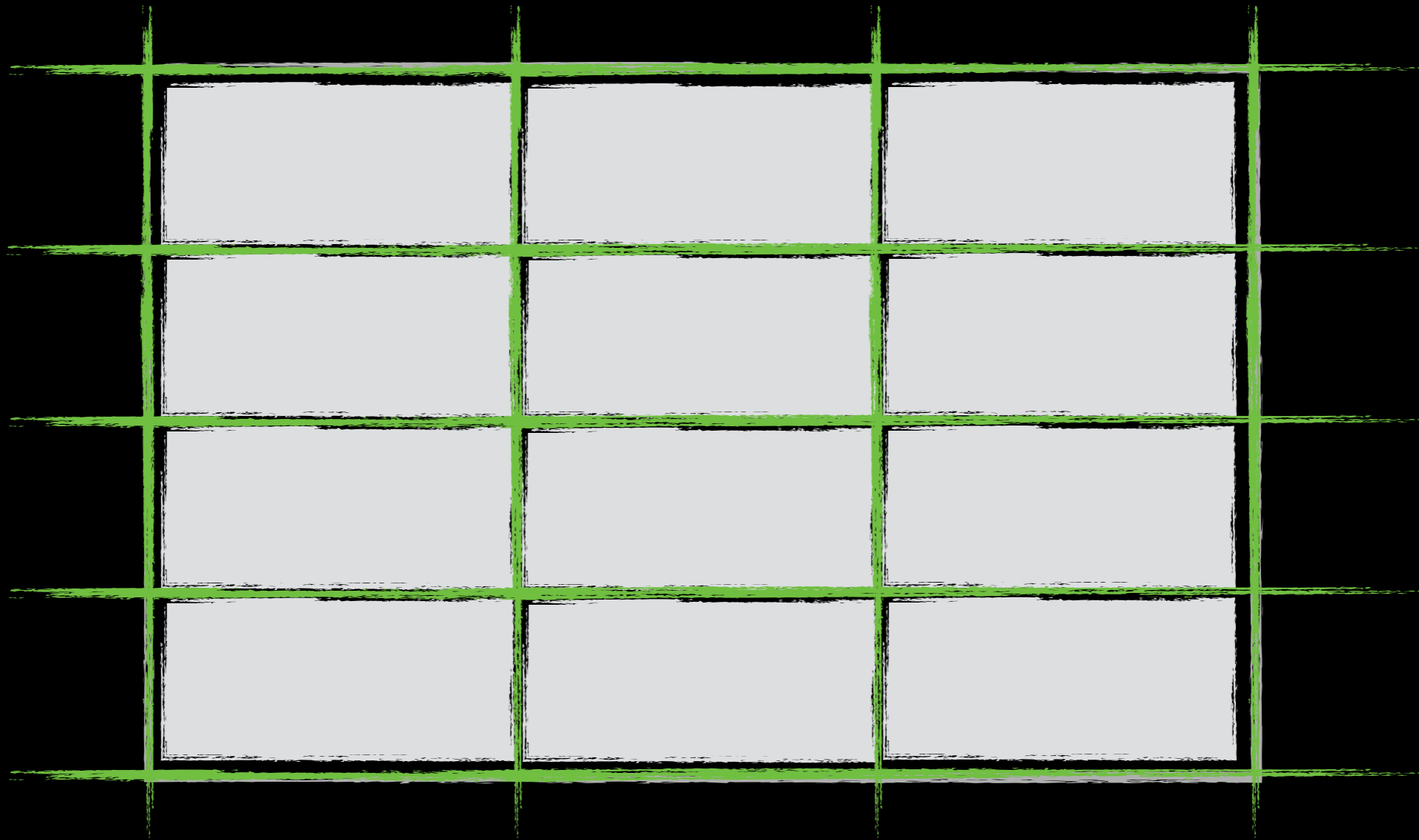
grid item

enfant direct d'un grid container

```
<section class="grid-container">  
  <div>Salade</div>  
  <div>Tomate</div>  
  <div>Oignon</div>  
  <div>Picon bière</div>  
</section>
```

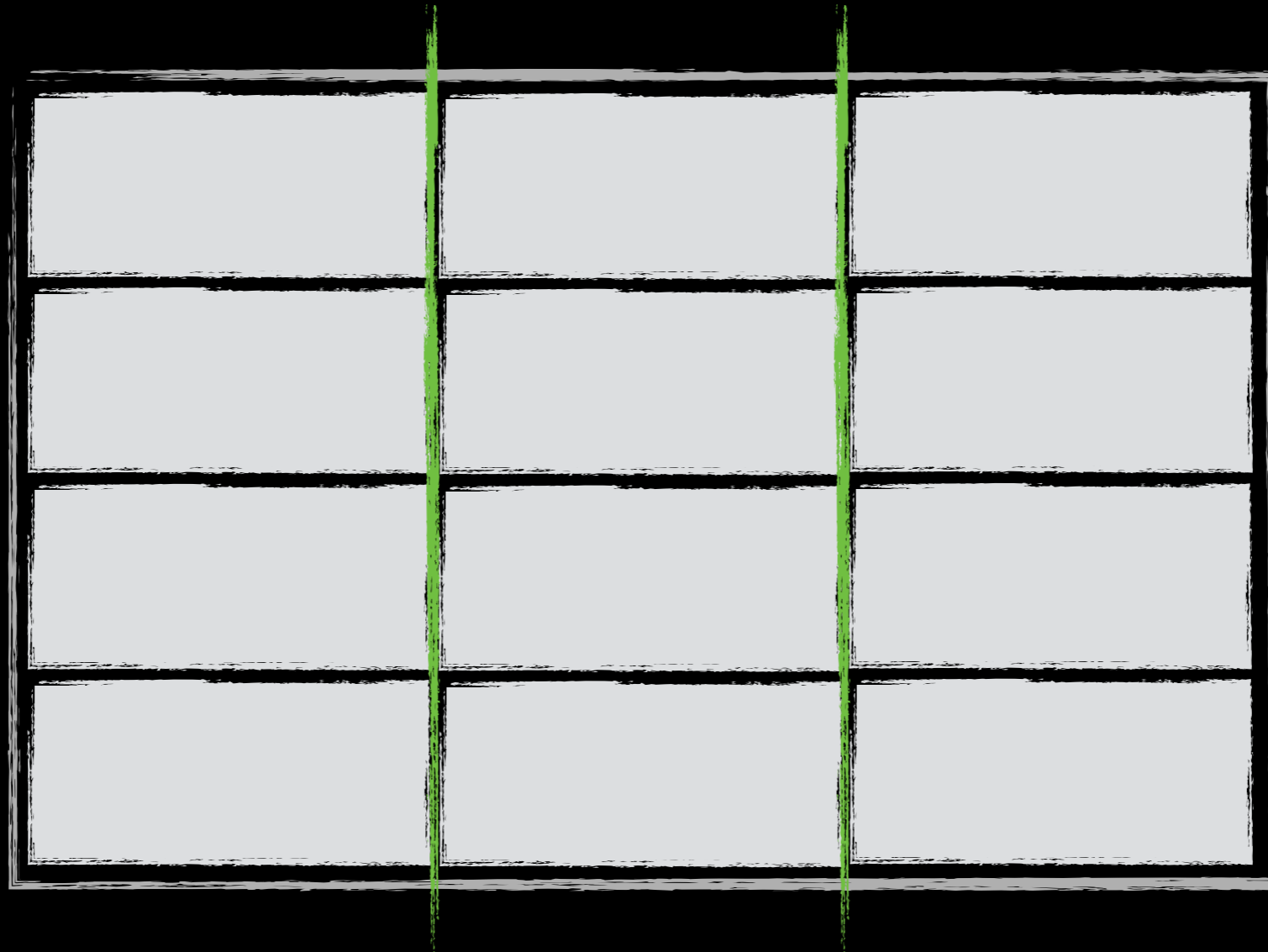

grid line

ligne divisant la grille



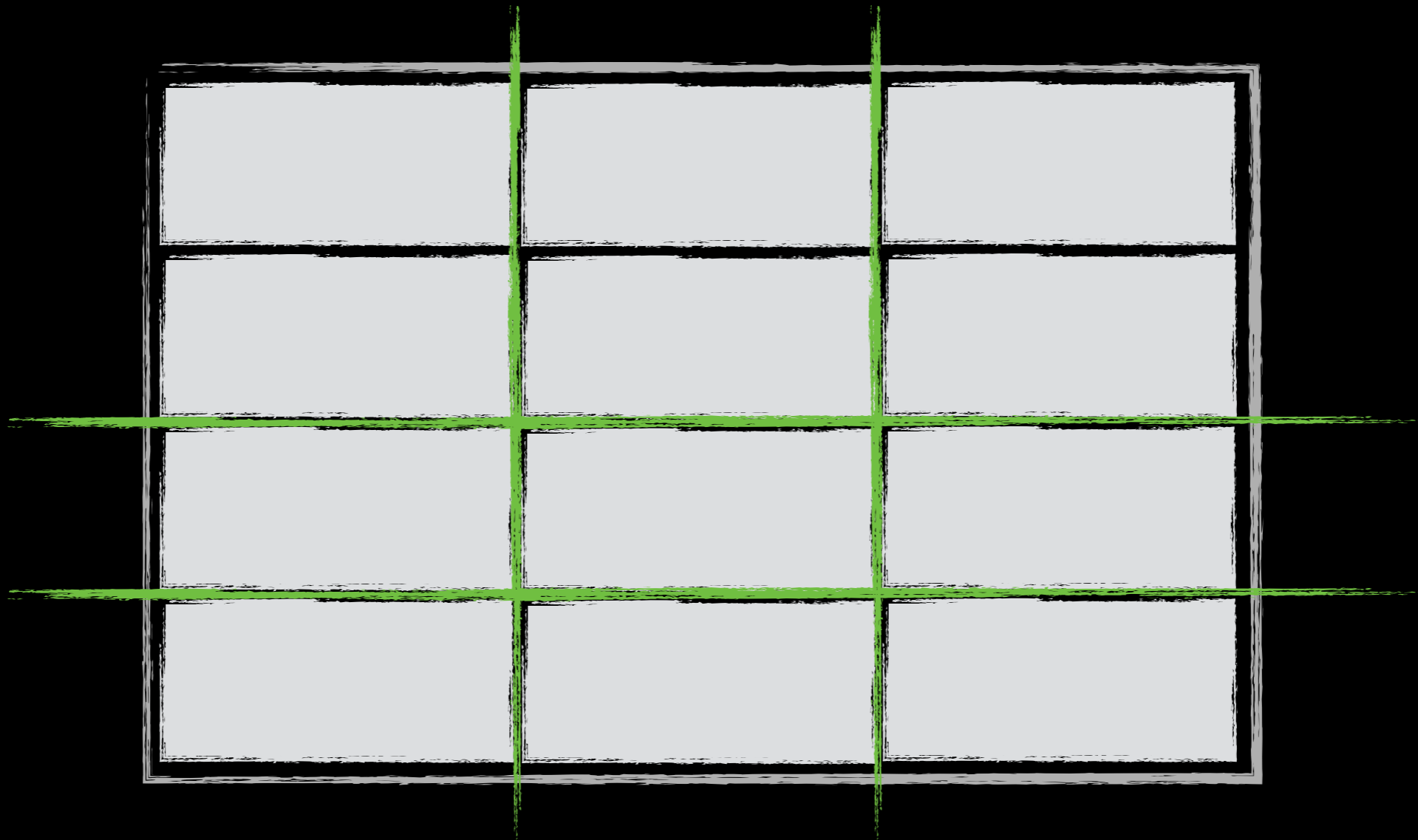
grid track

une colonne ou une rangée
(espace entre deux grid lines)



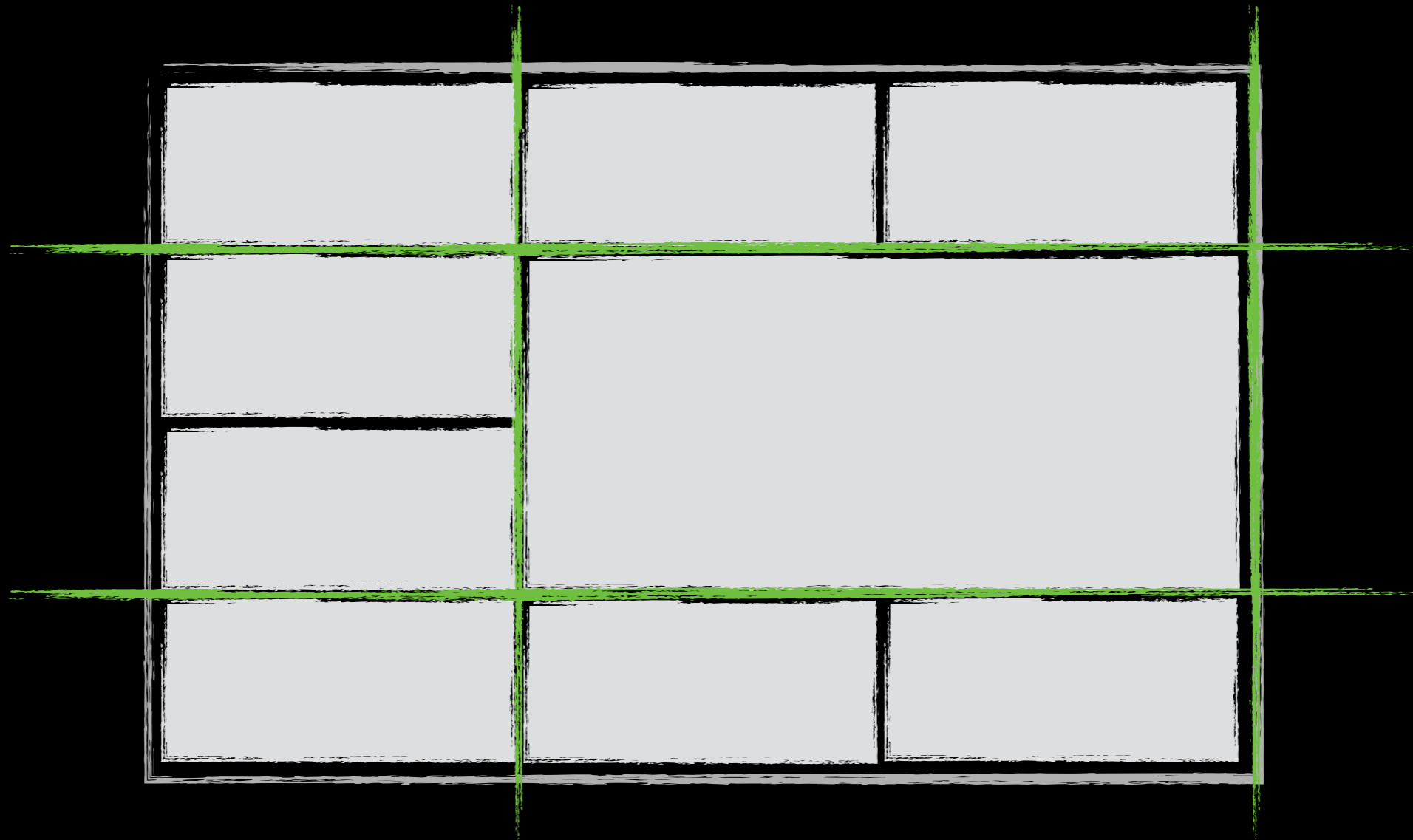
grid cell

intersection entre deux grid tracks
(unité de positionnement dans la grille)



grid area

zone d'une ou plusieurs cellules
(une ou plusieurs grid cells)





unités et valeurs

unité « fr »

fraction de l'espace disponible



```
.grid-container {  
  display: grid;  
  grid-template-columns: 100px 100px 1fr;  
}
```

unité « fr »

fraction de l'espace disponible



```
.grid-container {  
  display: grid;  
  grid-template-columns: 100px 1fr 1fr;  
}
```

unité « fr »

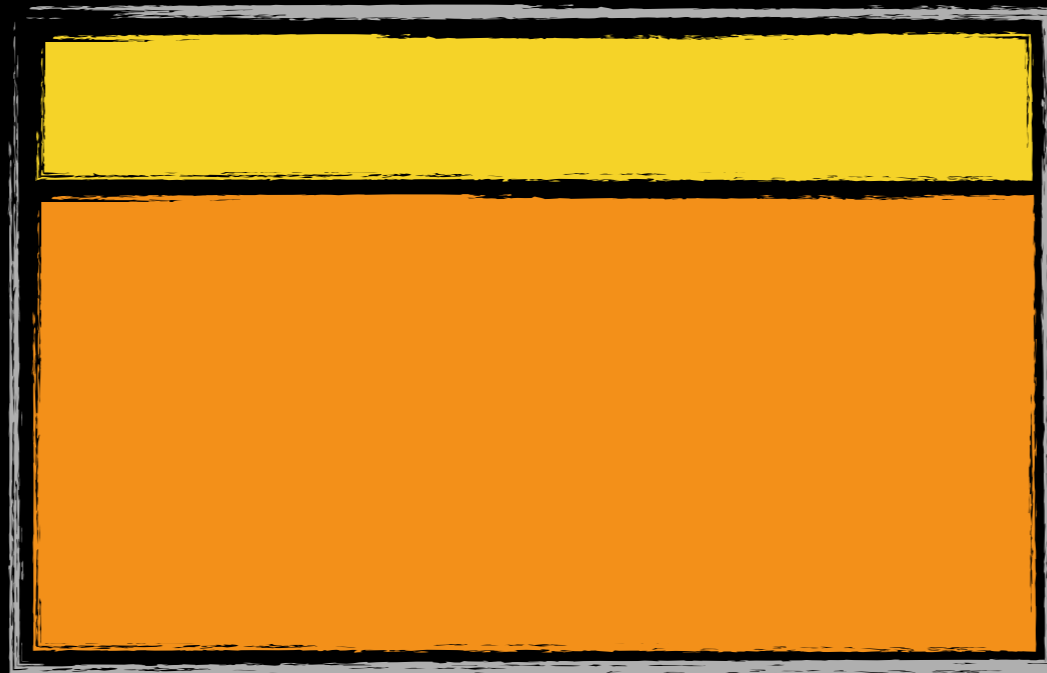
fraction de l'espace disponible



```
.grid-container {  
  display: grid;  
  grid-template-columns: 100px 2fr 1fr;  
}
```


valeur « auto »

taille du contenu



```
.grid-container {  
  display: grid;  
  grid-template-rows: auto 1fr;  
}
```

minmax()

j'aime bien la
salade

j'aime bien la salade

j'aime bien la salade

```
.grid-container {  
  display: grid;  
  grid-template-columns: minmax(100px, 20%) 1fr 1fr;  
}
```



construction de grilles

initialisation



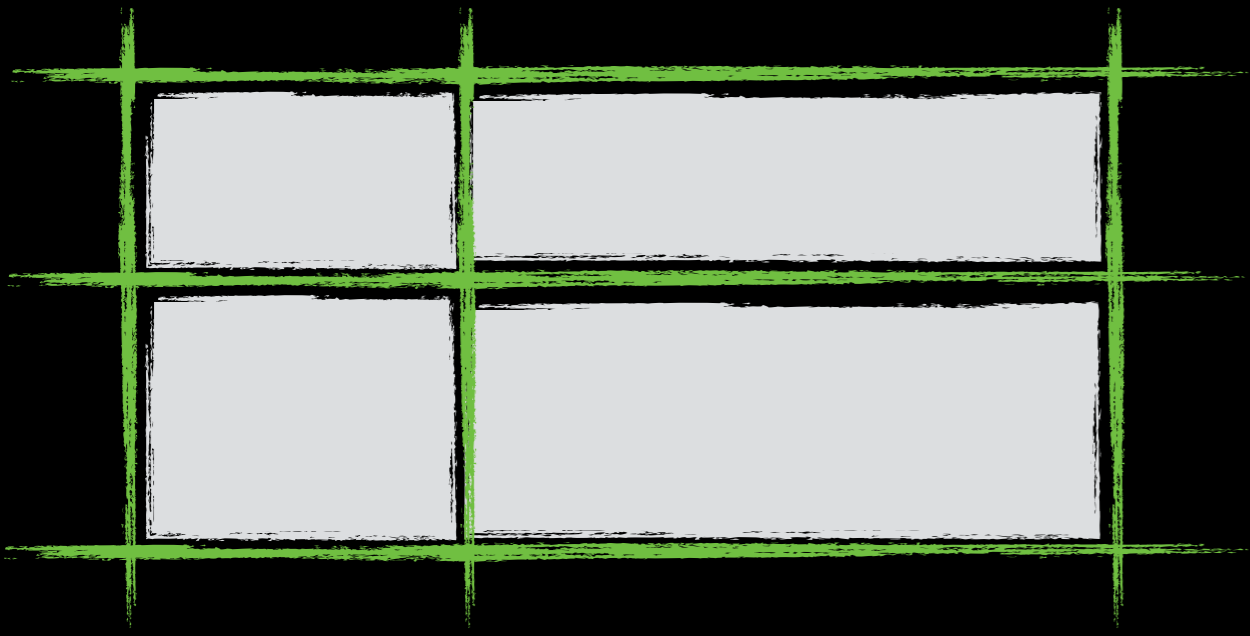
```
.ingrid {  
  display: grid;  
}
```

colonnes



```
.ingrid {  
  display: grid;  
  grid-template-columns: 100px 1fr;  
}
```

lignes



```
.ingrid {  
  display: grid;  
  grid-template-columns: 100px 1fr;  
  grid-template-rows: 50px 1fr;  
}
```

positionnement



positionnement « auto »

bah ça marche tout seul, gars

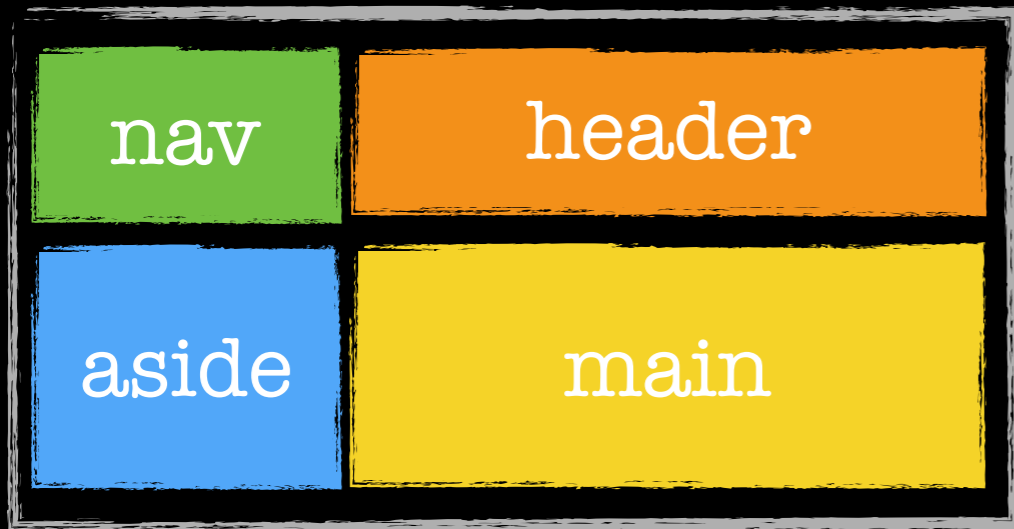
positionnement explicite

on place avec grid-column et grid-row

positionnement par « area »

on place avec grid-area

positionnement « auto »



```
.hagrid {  
  display: grid;  
  grid-template-columns: 100px 1fr;  
}
```

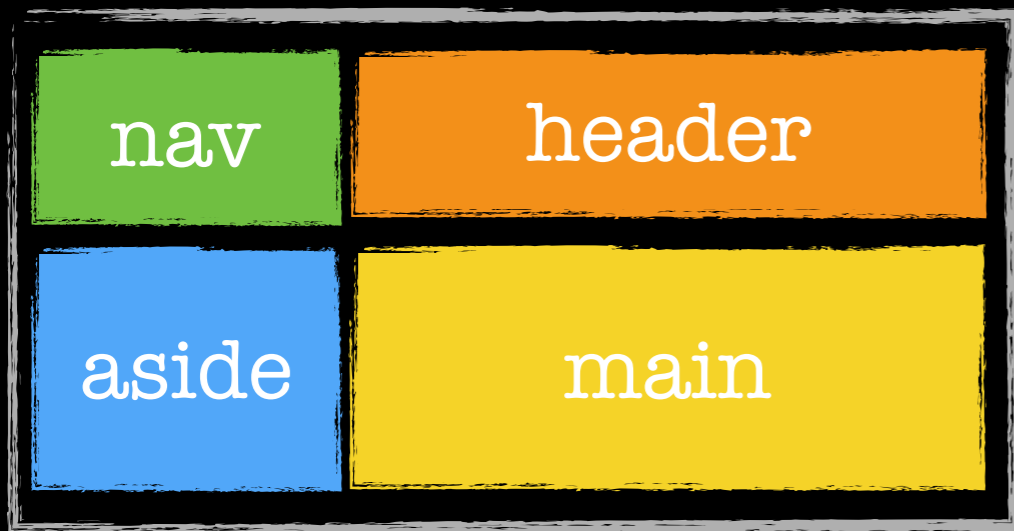
```
<nav>nav</nav>
```

```
<header>header</header>
```

```
<aside>aside</aside>
```

```
<main>main</main>
```

positionnement explicite



```
<nav>nav</nav>
```

```
<header>header</header>
```

```
<aside>aside</aside>
```

```
<main>main</main>
```

```
.hagrid {  
  display: grid;  
  grid-template-columns: 100px 1fr;  
}
```

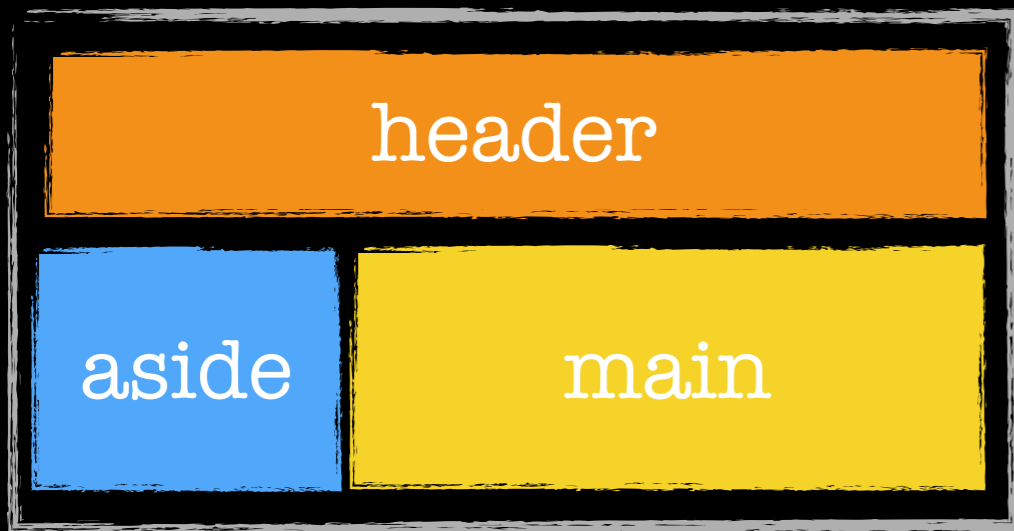
```
nav {  
  grid-column: 1;  
  grid-row: 1;  
}
```



raccourci de :
grid-column-start: 1;
grid-column-end: 2;
grid-row-start: 1;
grid-row-end: 2;

```
main {  
  grid-column: 2;  
  grid-row: 2;  
}
```


positionnement explicite



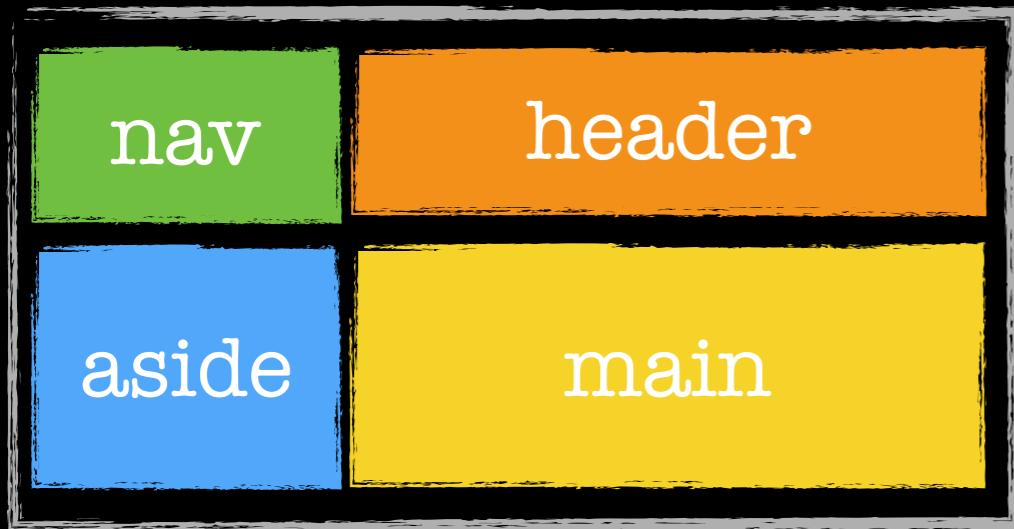
```
<header>header</header>  
<aside>aside</aside>  
<main>main</main>
```

```
.hagrid {  
  display: grid;  
  grid-template-columns: 100px 1fr;  
}
```

```
header {  
  grid-column: 1 / 3;  
}
```

raccourci de : 
grid-column-start: 1;
grid-column-end: 3;

positionnement par « area »



```
<nav>nav</nav>
```

```
<header>header</header>
```

```
<aside>aside</aside>
```

```
<main>main</main>
```

```
.hagrid {  
  display: grid;  
  grid-template-columns: 100px 1fr;  
  grid-template-areas: "a b"  
                      "c d";  
}
```

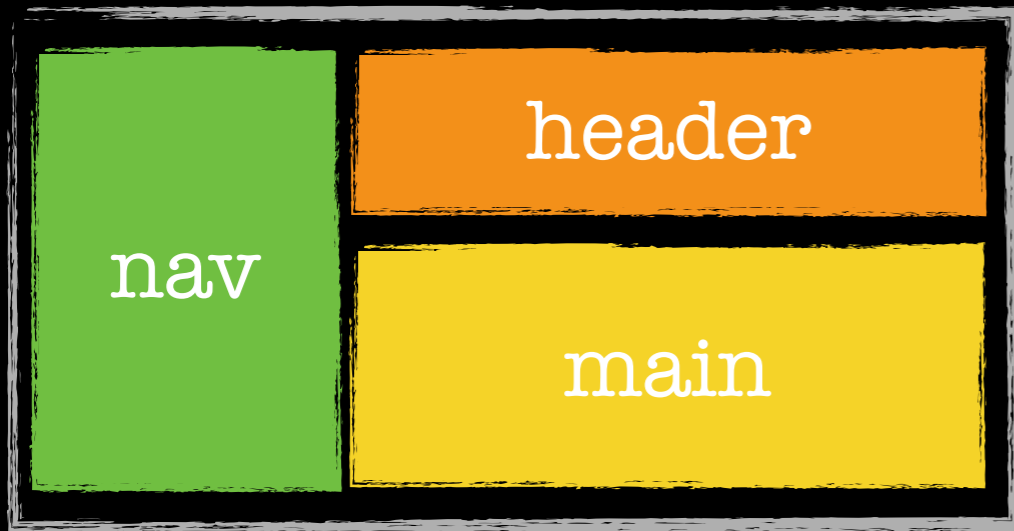
```
nav { grid-area: a; }
```

```
header { grid-area: b; }
```

```
aside { grid-area: c; }
```

```
main { grid-area: d; }
```

positionnement par « area »



```
<nav>nav</nav>
```

```
<header>header</header>
```

```
<main>main</main>
```

```
.hagrid {  
  display: grid;  
  grid-template-columns: 100px 1fr;  
  grid-template-areas: "a b"  
                      "a c";  
}
```

```
nav { grid-area: a; }
```

```
header { grid-area: b; }
```

```
main { grid-area: c; }
```

alignements



alignement horizontal

justify-content alignement horizontal des grid-cells

justify-items alignement horizontal des grid-items

justify-self alignement individuel d'un grid-item

alignement vertical

align-content alignement vertical des grid-cells

align-items alignement vertical des grid-items

align-self alignement individuel d'un grid-item

justify-content

alignement horizontal des grid cells

align-content

alignement vertical des grid cells

justify-content



```
justify-content: normal;
```



```
justify-content: start;
```



```
justify-content: end;
```



```
justify-content: center;
```



```
justify-content: space-between;
```

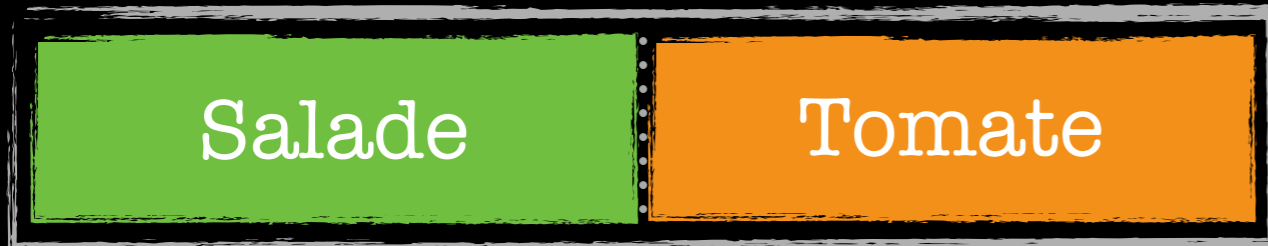
justify-items

alignement horizontal des grid items

align-items

alignement vertical des grid items

justify-items



```
justify-items: normal;
```



```
justify-items: start;
```



```
justify-items: end;
```



```
justify-items: center;
```



```
justify-items: space-between;
```

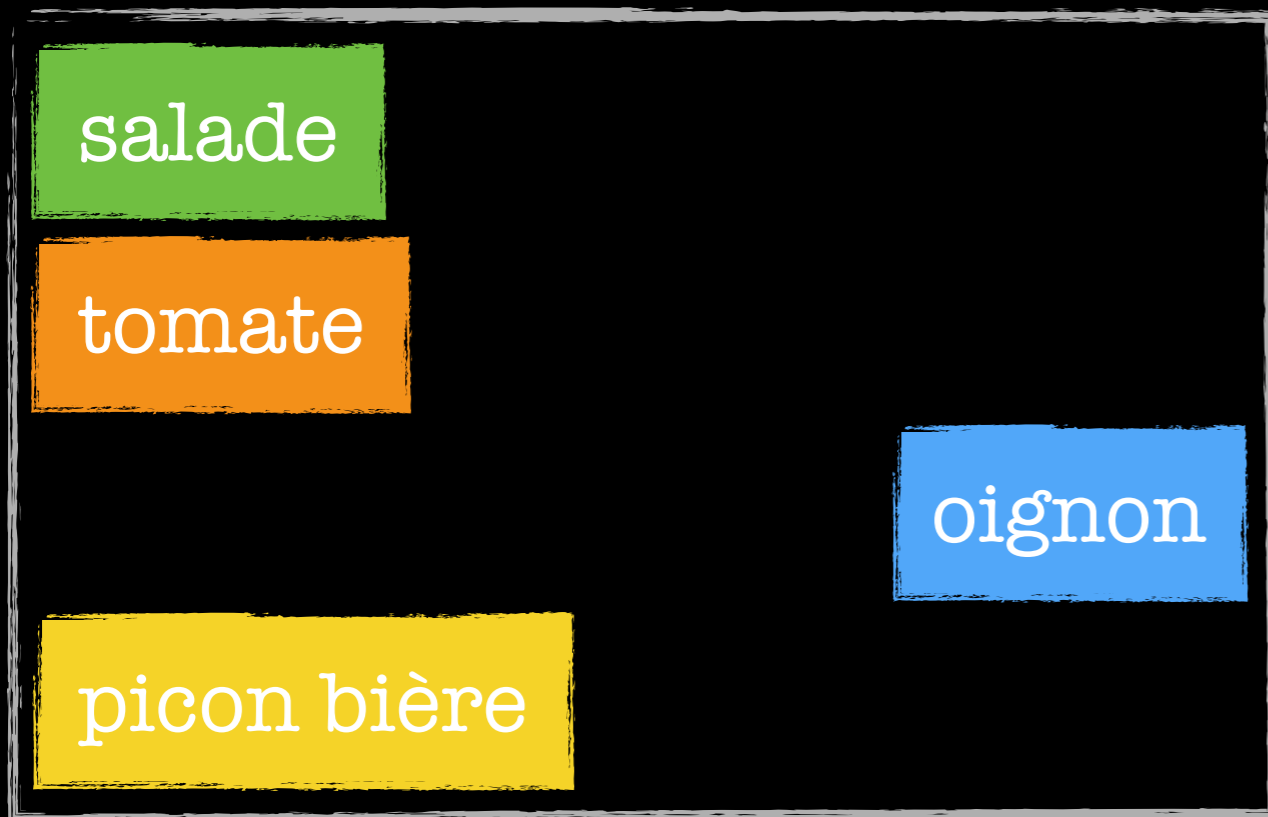
justify-self

alignement horizontal d'un grid item

align-self

alignement vertical d'un grid item

justify-self



```
.grid-container {  
  display: grid;  
  justify-items: start;  
}  
.oignon {  
  justify-self: end;  
}
```

en plein dans le mille !

salade

tomate

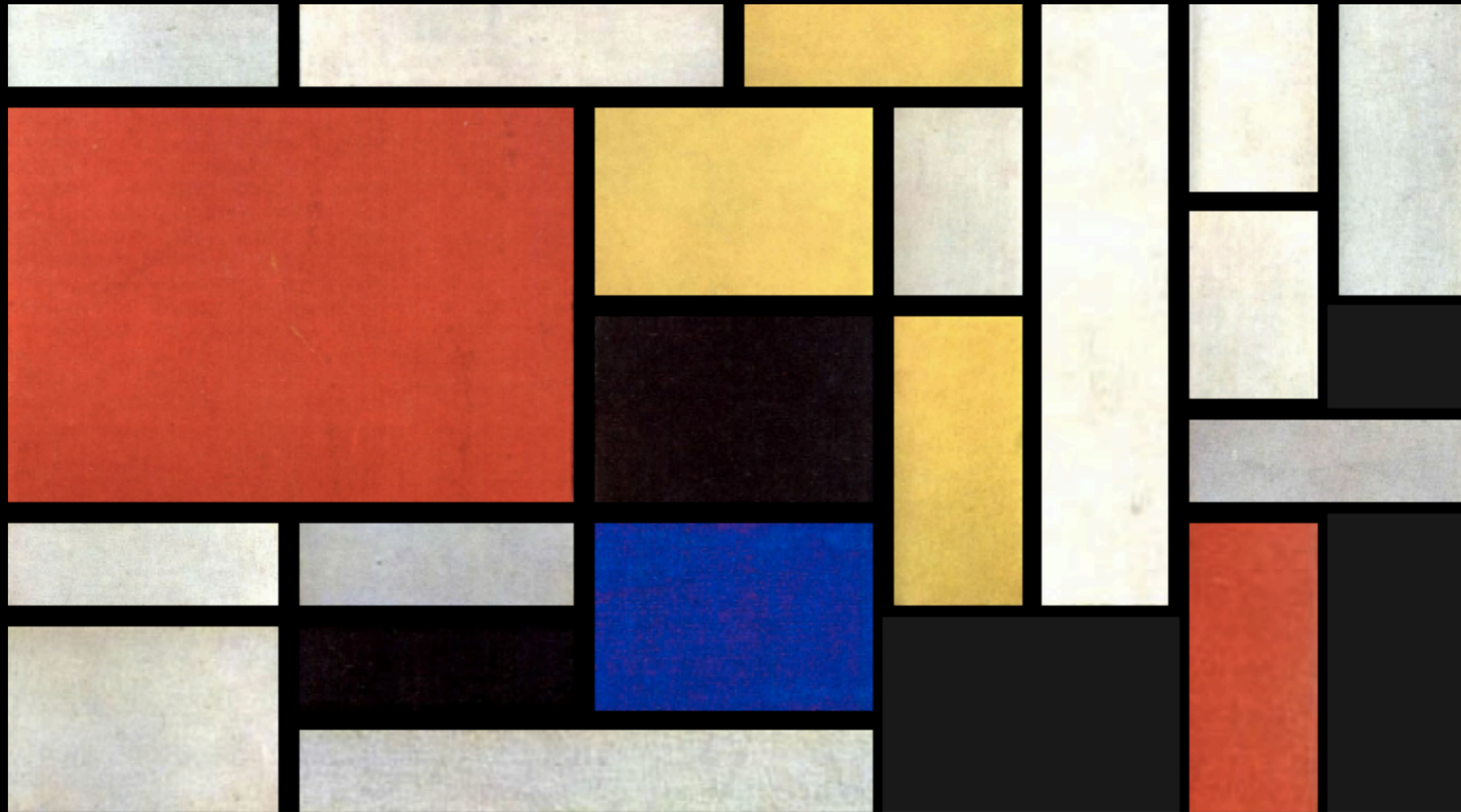
oignon

picon bière

```
.grid-container {  
  display: grid;  
  justify-content: center;  
  align-content: center;  
}
```



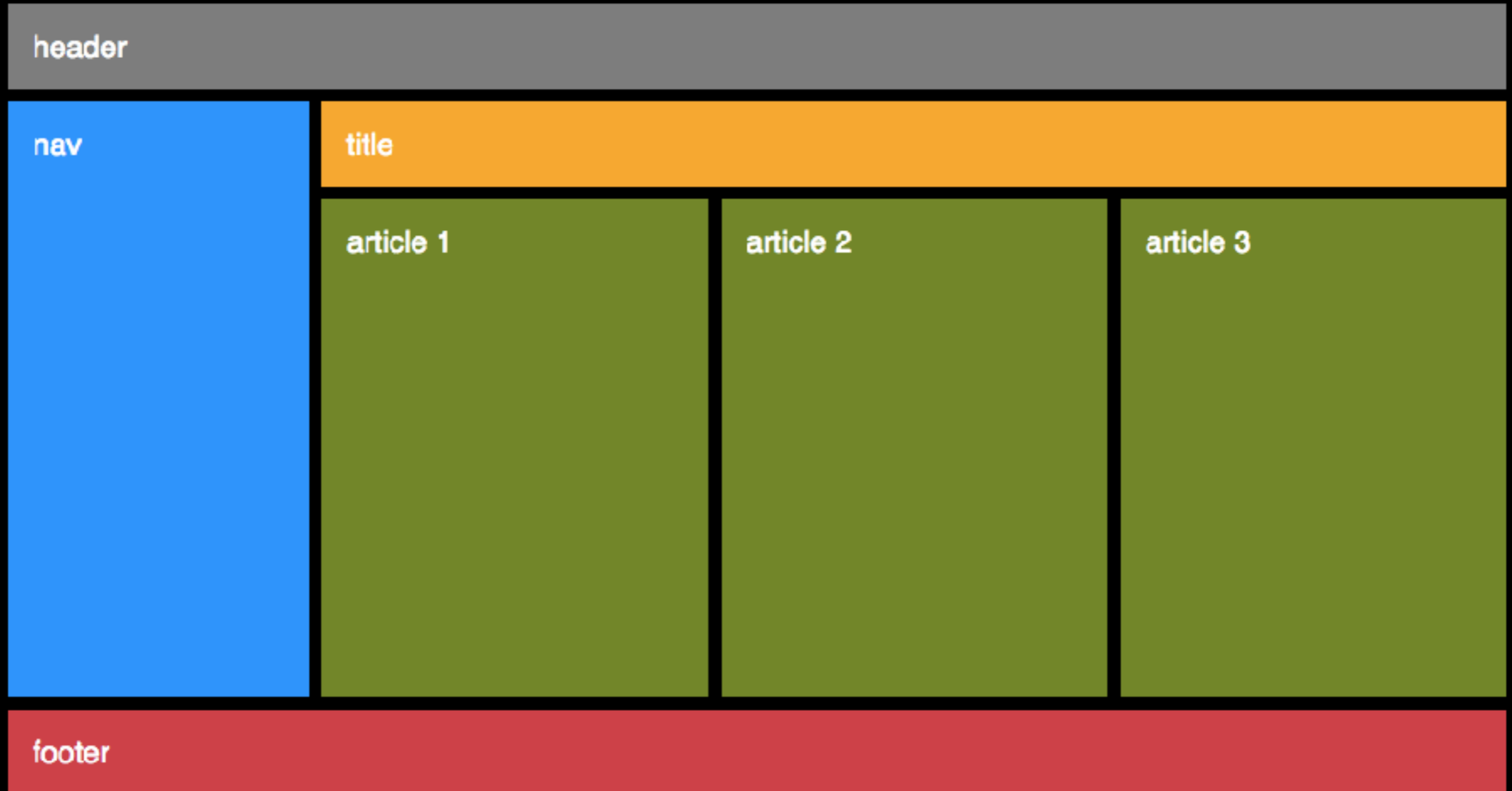
ouais, Mondrian-Grid !



A photograph of a multi-story building facade with a grid of windows. The building is made of grey stone or concrete blocks. The windows are arranged in a regular grid. Most windows have light blue or white curtains. One window, located in the lower-middle part of the grid, is open, showing a dark interior. The text 'un template responsive ?' is overlaid in white on a dark horizontal band across the top of the image.

un template responsive ?

chiche !

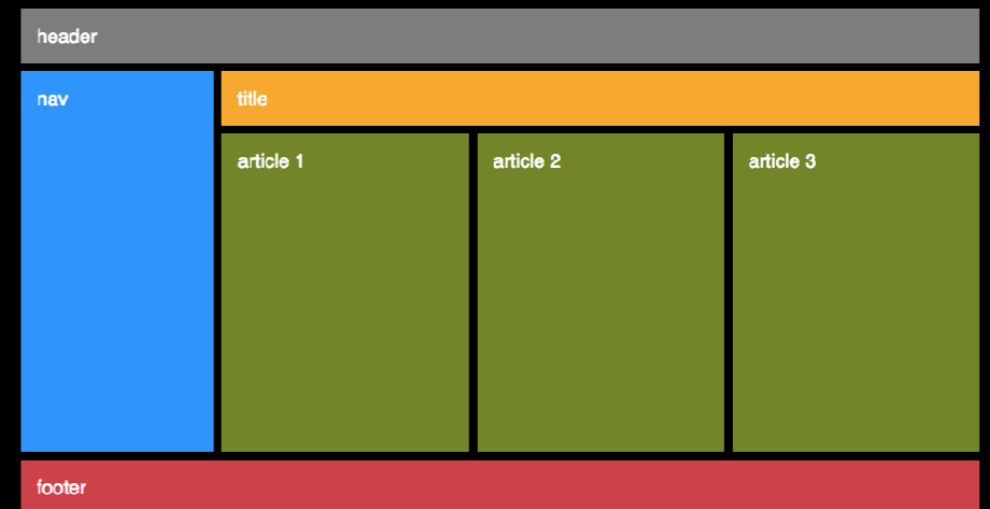


HTML :

```
<div class="container">
  <header>header</header>
  <nav>nav</nav>
  <h1 class="title">title</h1>
  <article>article 1</article>
  <article>article 2</article>
  <article>article 3</article>
  <footer>footer</footer>
</div>
```

placement :

```
header { grid-area: header; }
nav { grid-area: nav; }
.title { grid-area: title; }
article { /* rien */ }
footer { grid-area: footer; }
```



CSS mobile first !

```
.container {  
  display: grid;  
  grid-template-columns: 1fr;  
  grid-template-areas: "nav"  
                      "header"  
                      "title"  
                      ". "  
                      ". "  
                      ". "  
                      "footer";  
}
```



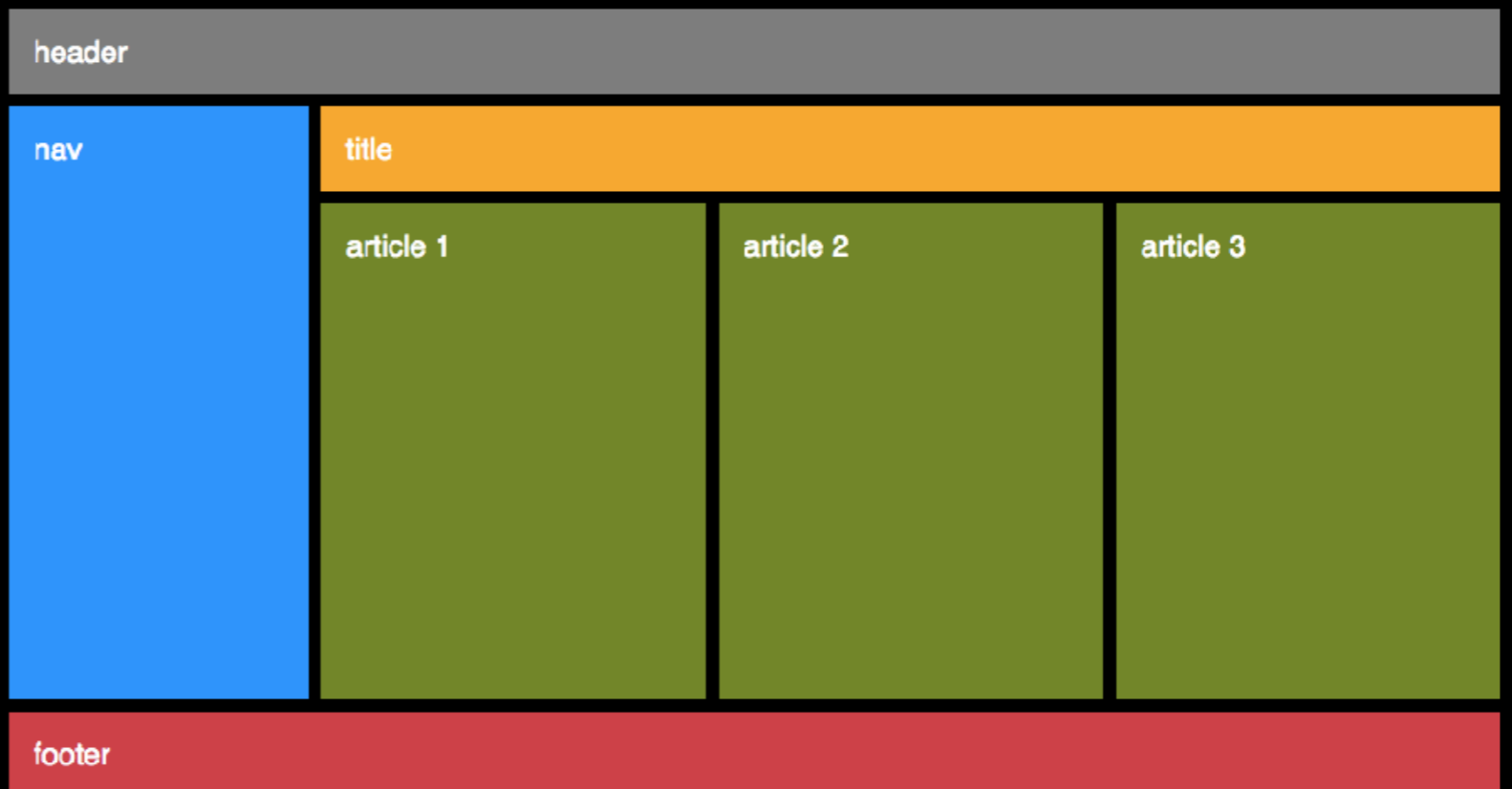
écrans de taille moyenne :

```
@media (min-width: 544px) {  
  .container {  
    grid-template-columns: 10em 1fr;  
    grid-template-areas: "header header"  
      "title title"  
      "nav ."   
      "nav ."   
      "nav ."   
      "footer footer";  
  }  
}
```



grands écrans :

```
@media (min-width: 992px) {  
  .container {  
    grid-template-columns: 10em 1fr 1fr 1fr;  
    grid-template-rows: auto auto 1fr auto;  
    grid-template-areas: "header header header header"  
      "nav title title title"  
      "nav . . ."  
      "footer footer footer footer";  
  }  
}
```



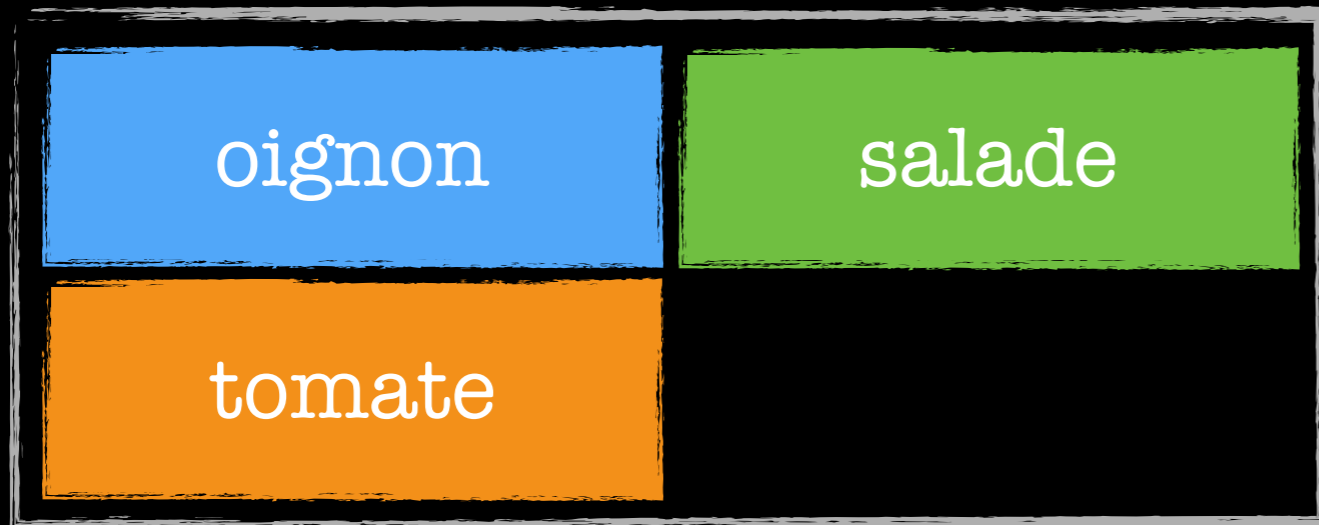
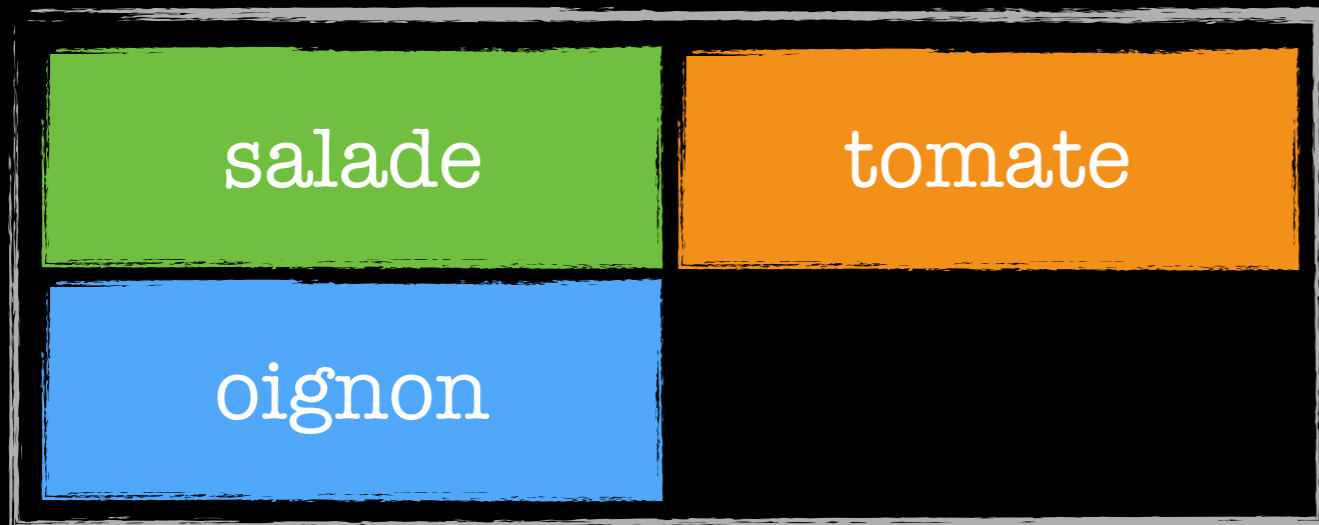
et c'est pas fini !



**Si Si, il y a
UN
RAPPORT AVEC
LES GRILLES !**

**changer l'ordre
des vraies gouttières
occuper plusieurs tracks
remplissage intelligent**

changer l'ordre : order

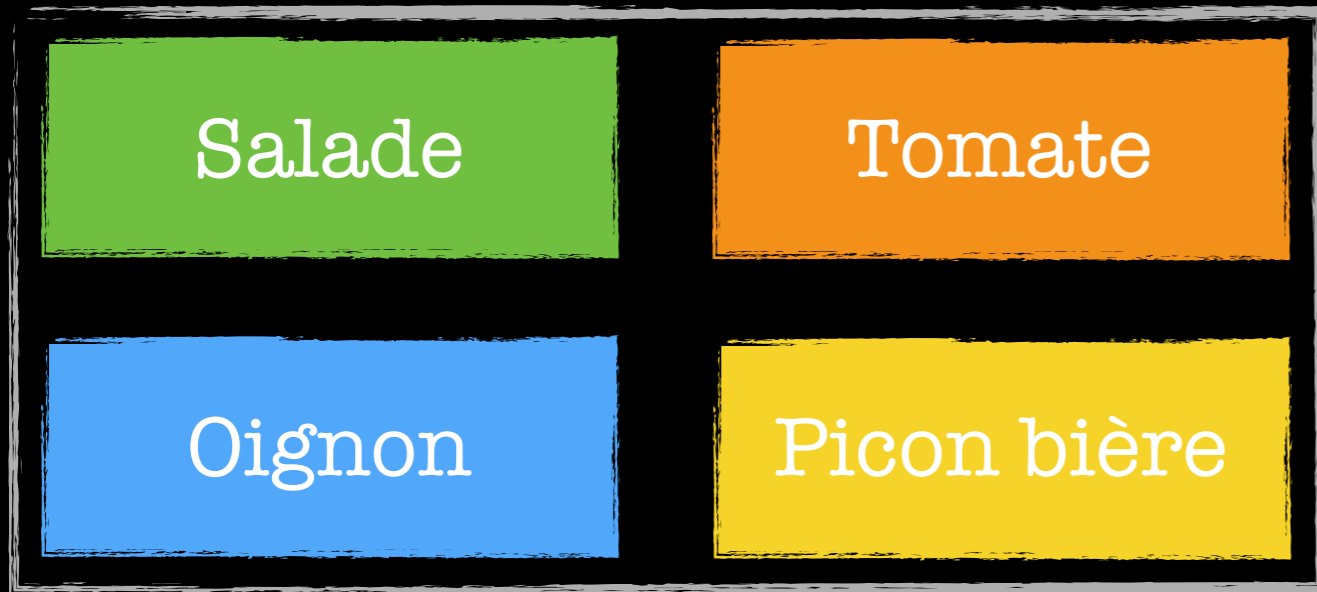


```
.grid-container {  
  display: grid;  
  grid: ". .";  
}
```

raccourci de plein de trucs:
grid-template-rows + grid-template-columns
grid-auto-rows + grid-auto-columns
grid-template-areas + grid-auto-flow

```
.grid-container {  
  display: grid;  
  grid: ". .";  
}  
.oignon {  
  order: -1;  
}
```


gouttières ?

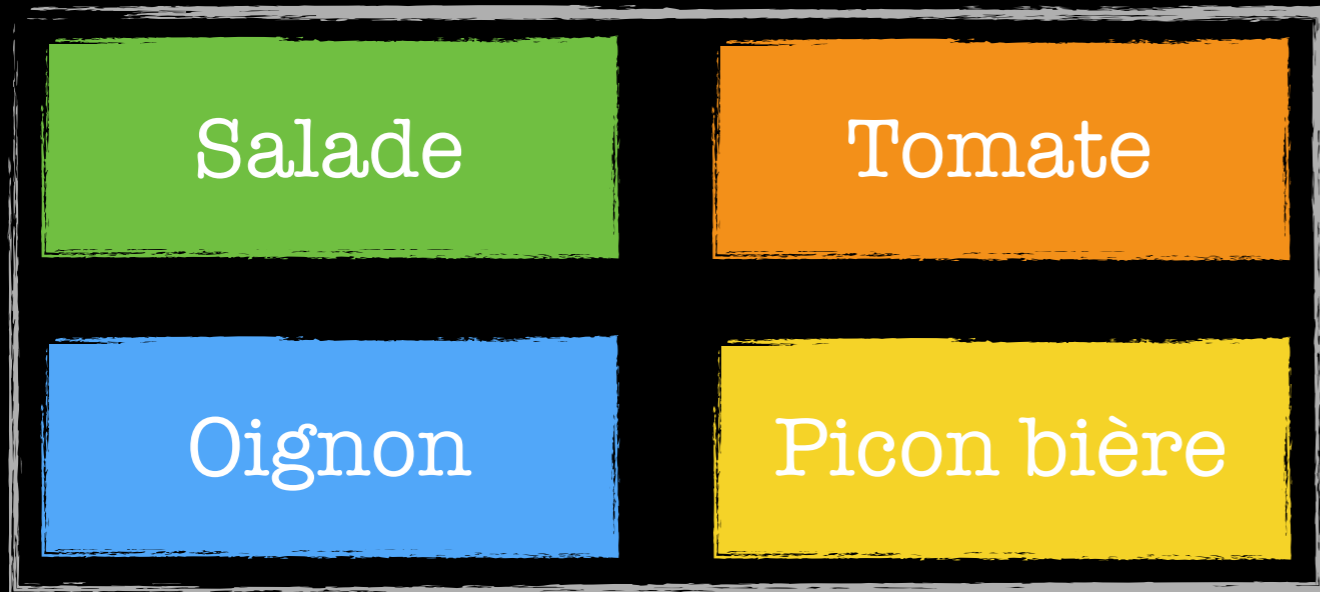


```
.flex-container {  
  display: flex;  
  flex-wrap: wrap;  
  margin-left: -10px;  
  margin-right: -10px;  
}
```

```
.flex-item {  
  width: calc(50% - 20px);  
  margin-left: 10px;  
  margin-right: 10px;  
}
```



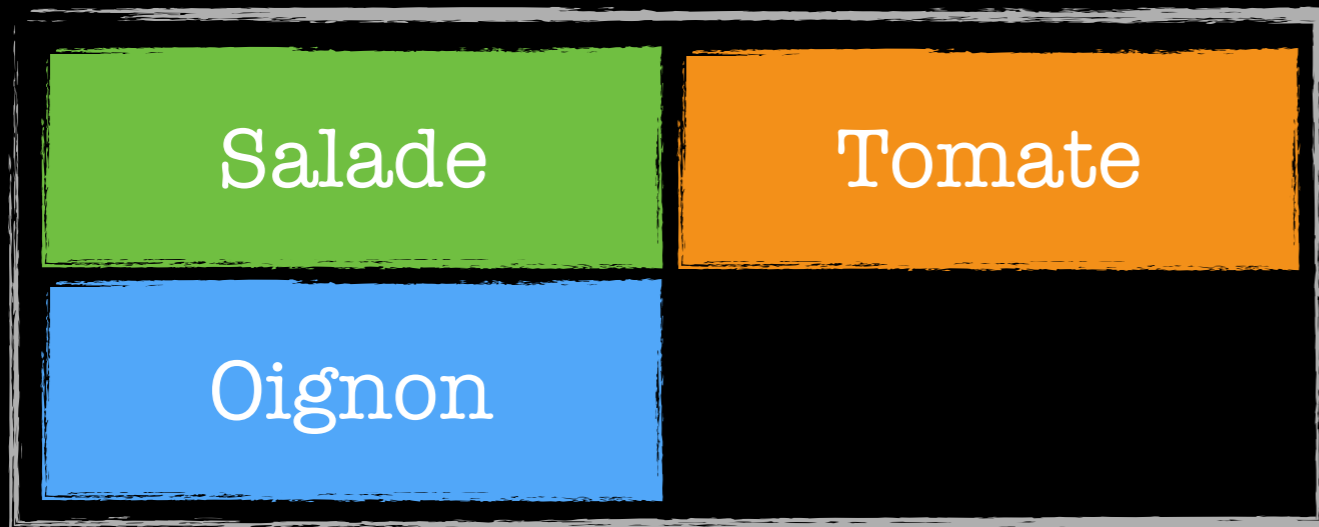
gouttières !



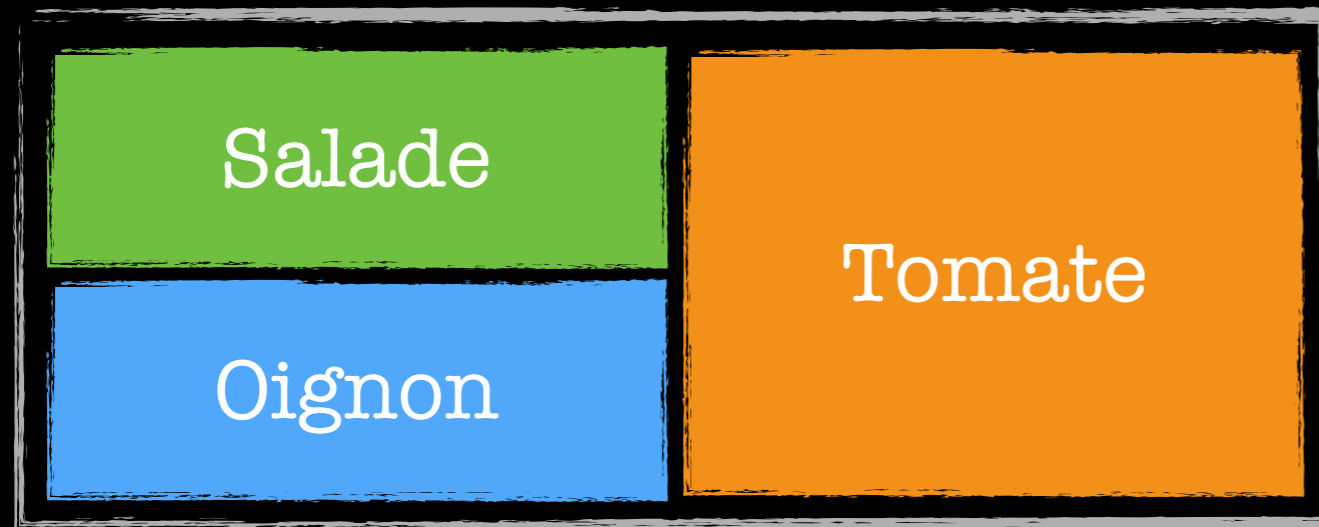
```
.grid-container {  
  display: grid;  
  grid: ". .";  
  grid-gap: 20px;  
}
```



remplir les tracks : span



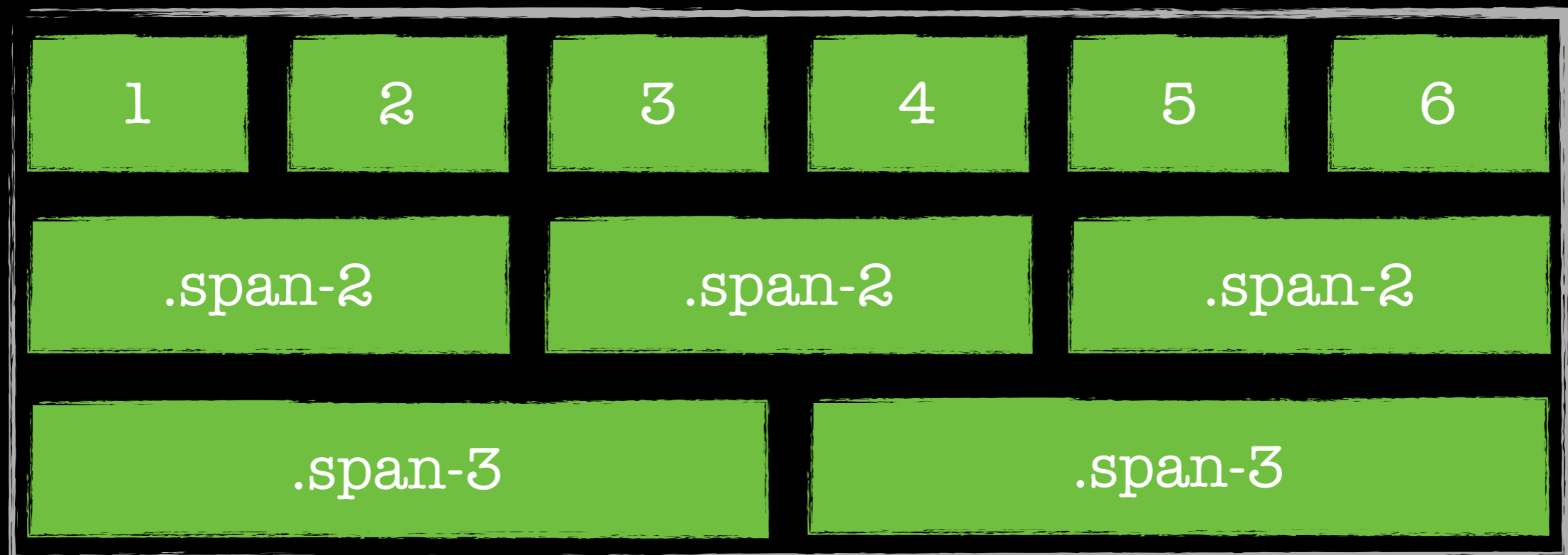
```
.grid-container {  
  display: grid;  
  grid: ". .";  
}
```



```
.grid-container {  
  display: grid;  
  grid: ". .";  
}  
.tomate {  
  grid-row: span 2;  
}
```

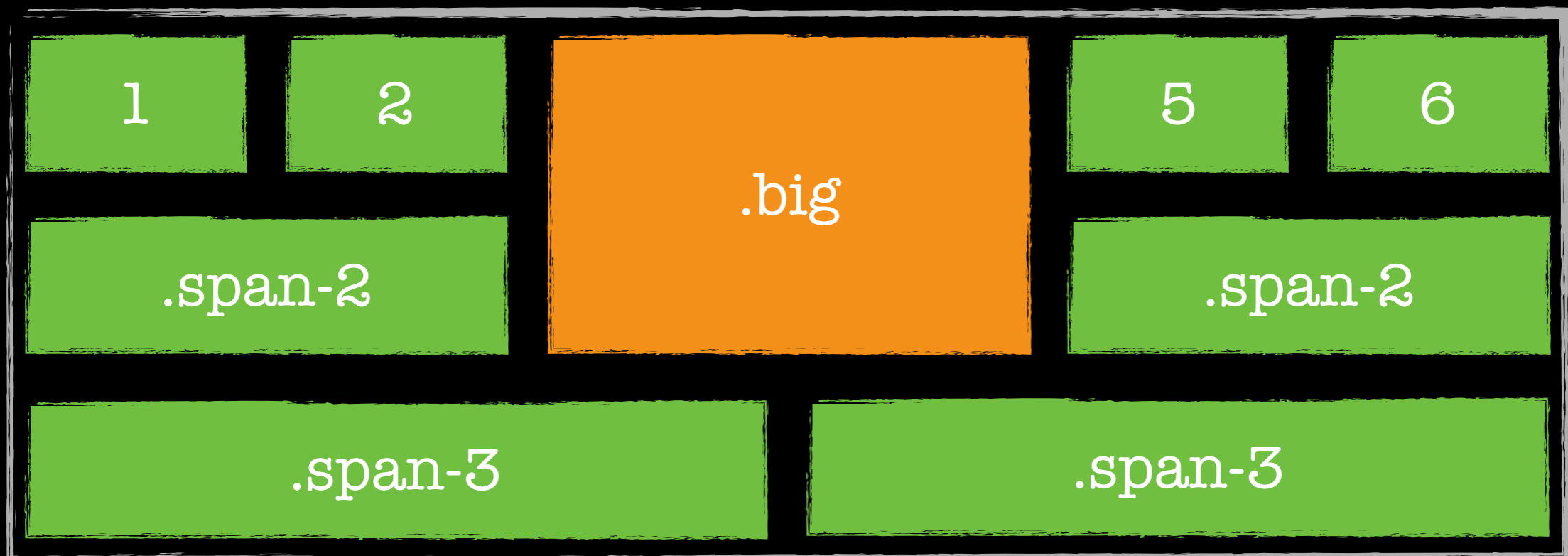
```
.container {  
  display: grid;  
  grid-template-columns: repeat(6, 1fr);  
  grid-gap: 10px;  
}
```

```
.span-2 { grid-column: span 2; }  
.span-3 { grid-column: span 3; }
```

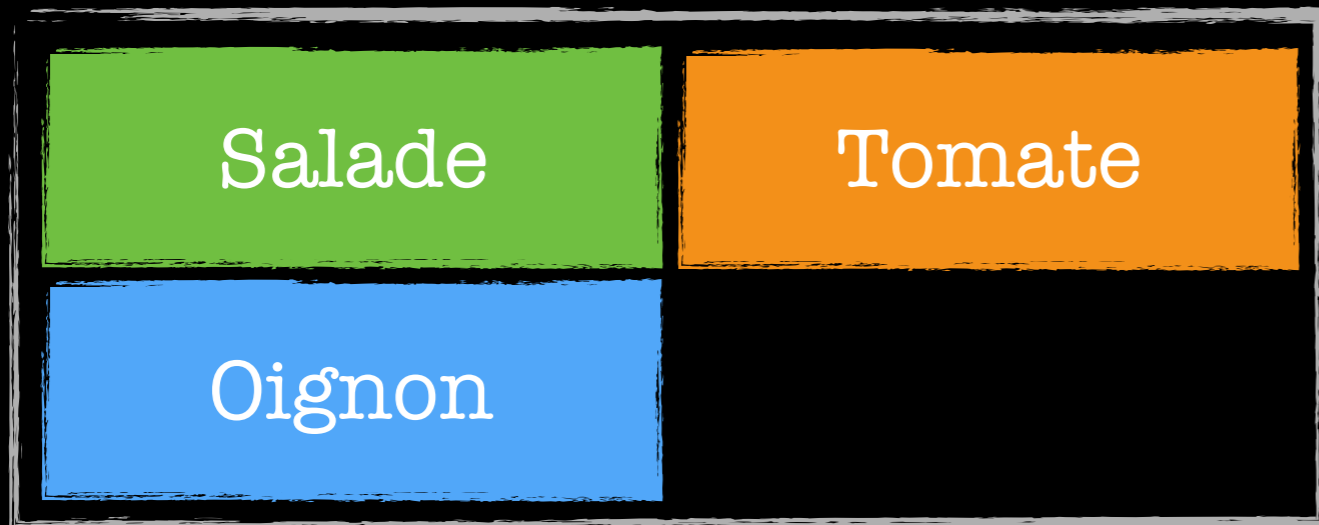


```
.container {  
  display: grid;  
  grid-template-columns: repeat(6, 1fr);  
  grid-gap: 10px;  
}
```

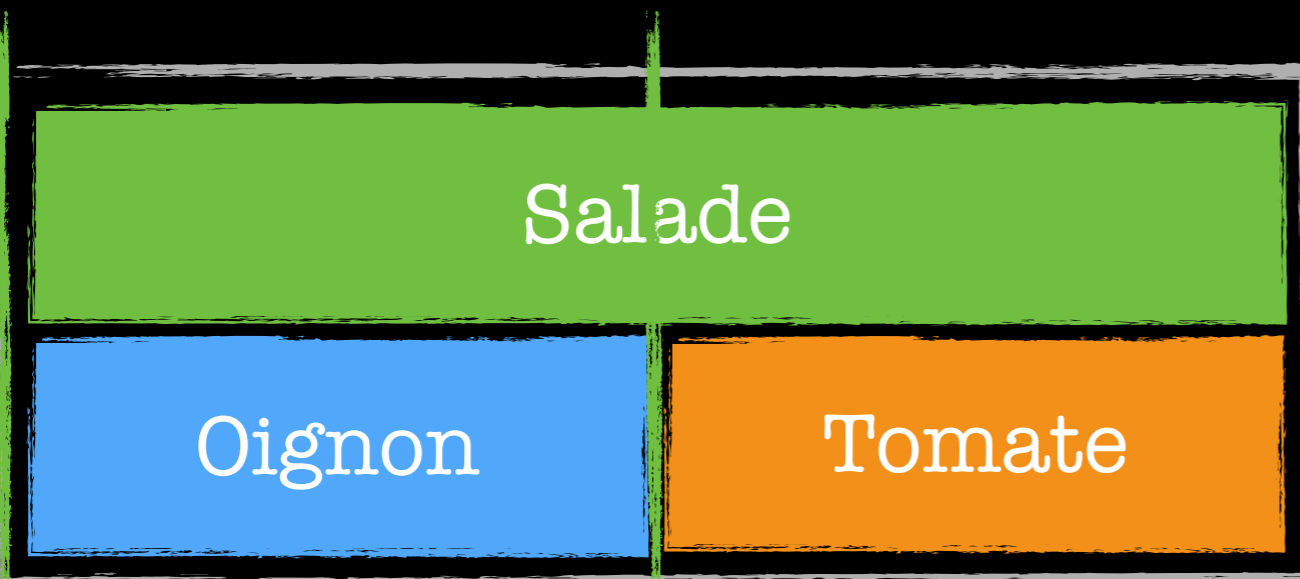
```
.big {  
  grid-row: span 2;  
  grid-column: span 2;  
}
```



valeurs négatives



```
.grid-container {  
  display: grid;  
  grid: ". .";  
}
```



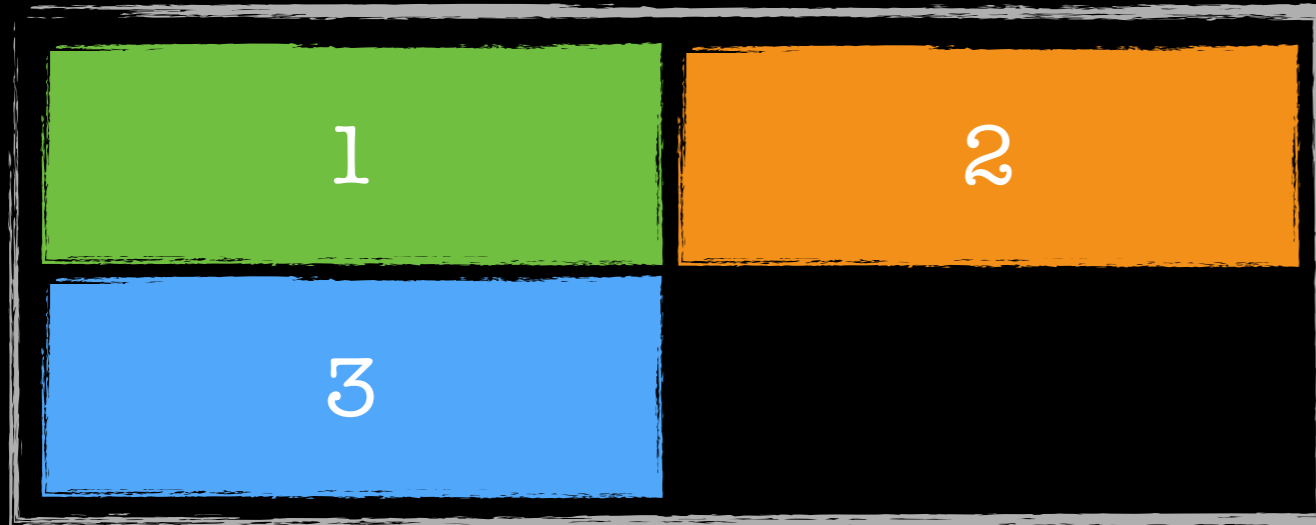
```
.grid-container {  
  display: grid;  
  grid: ". .";  
}  
.salade {  
  grid-column: 1 / -1;  
}
```

1
-3

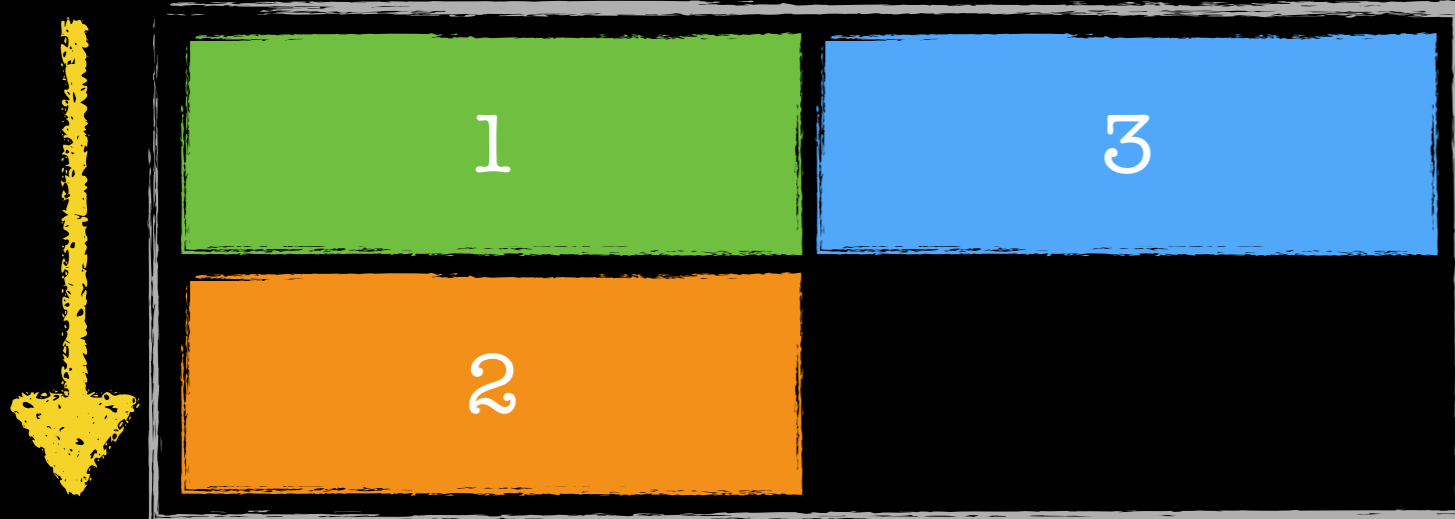
2
-2

3
-1

grid-auto-flow



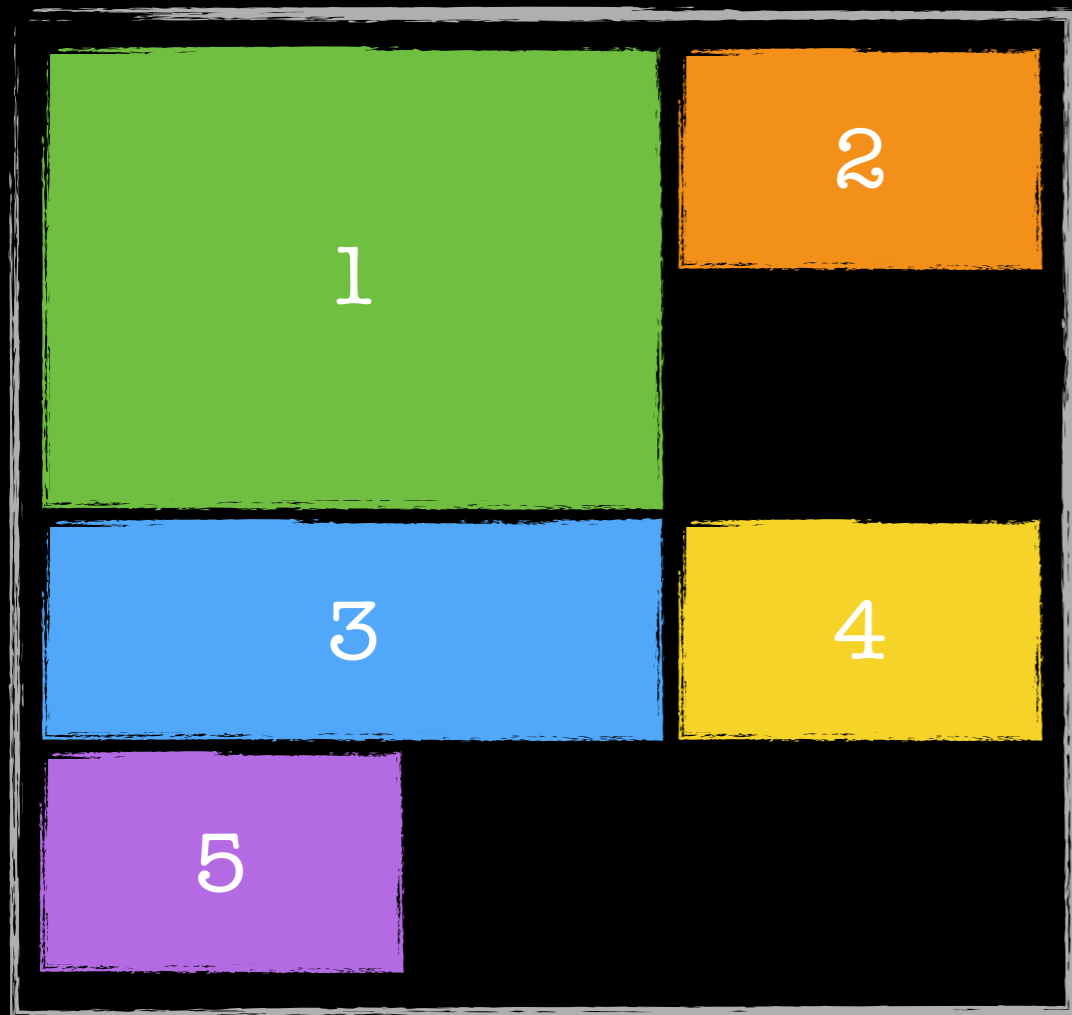
```
.grid-container {  
  display: grid;  
  grid: ". .";  
}
```



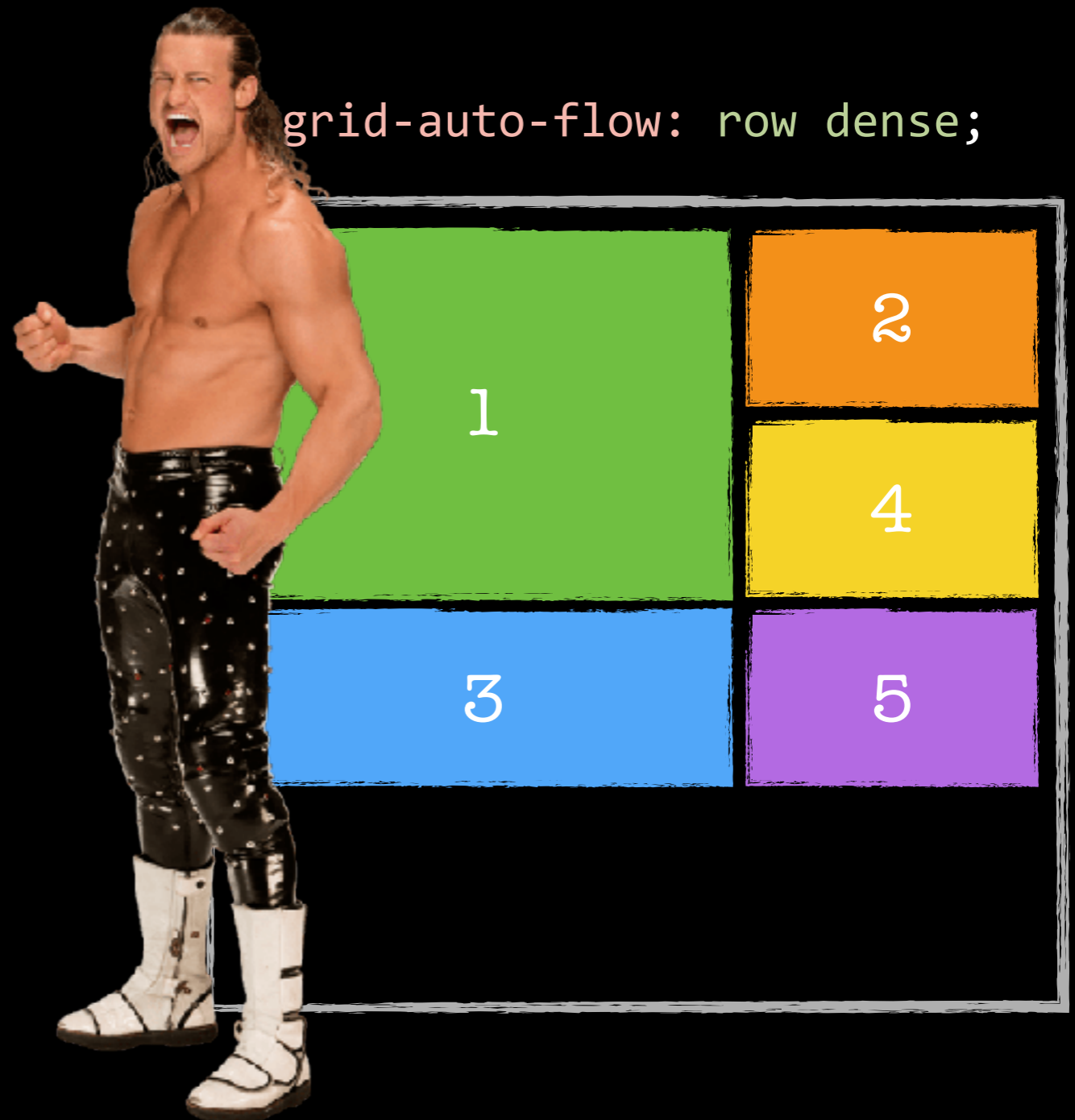
```
.grid-container {  
  display: grid;  
  grid: ". .";  
  grid-auto-flow: column;  
}
```

grid-auto-flow: dense

```
grid-auto-flow: row;
```



```
grid-auto-flow: row dense;
```



repeat()

```
.grid-container {  
  display: grid;  
  grid-template-columns: repeat(4, 1fr);  
}
```

Salade

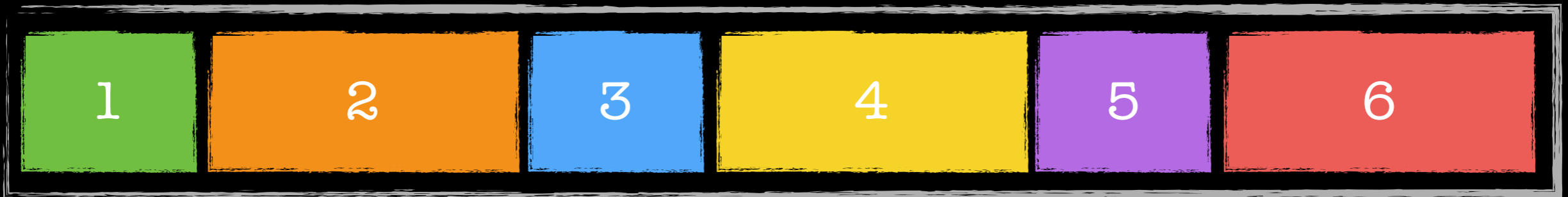
Tomate

Oignon

Picon bière

repeat()

```
.grid-container {  
  display: grid;  
  grid-template-columns: repeat(3, 50px 100px);  
}
```



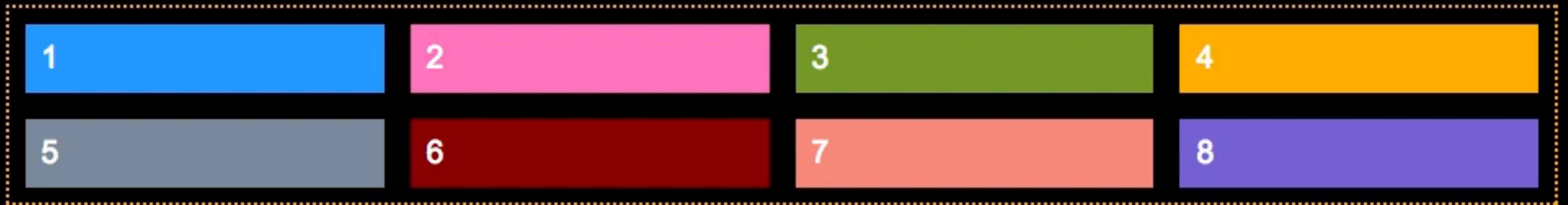
auto-fit

```
.grid-container {  
  display: grid;  
  grid-template-columns: repeat(auto-fit, 100px);  
}
```



maxi combo !

```
.grid-container {  
  display: grid;  
  grid-template-columns: repeat(auto-fit, minmax(100px, 1fr));  
}
```



automatisation

base :

```
.grid {  
  display: grid;  
}
```

automatisation

base :

```
.grid {  
  display: grid;  
  --grid-number: 1;  
  --grid-gutter: 0;  
}
```



VARIABLES CSS ❤️

automation

base :

```
.grid {  
  display: grid;  
  --grid-number: 1;  
  --grid-gutter: 0;  
  grid-gap: var(--grid-gutter);  
}
```

automation

base :

```
.grid {  
  display: grid;  
  --grid-number: 1;  
  --grid-gutter: 0;  
  grid-gap: var(--grid-gutter);  
  grid-template-columns: repeat(var(--grid-number), 1fr);  
}
```


automatisation

base :

```
.grid {  
  display: grid;  
  --grid-number: 1;  
  --grid-gutter: 0;  
  grid-gap: var(--grid-gutter);  
  grid-template-columns: repeat(var(--grid-number), 1fr);  
}
```

variantes :

```
.grid-6 {  
  --grid-number: 6;  
}  
  
.grid-gutter-1 {  
  --grid-gutter: 1rem;  
}
```

automatisation

```
<section class="grid grid-3 grid-gutter-1">  
  <div>Salade</div>  
  <div>Tomate</div>  
  <div>Oignon</div>  
  <div>Picon bière</div>  
</section>
```



**le mixin Sass de grille le
plus court du monde**

```
@mixin grid($number: 1, $gutter: 0, $bp: 0) {
  @media (min-width: $bp) {
    display: grid;
    grid-template-columns: repeat($number, 1fr);
    grid-gap: $gutter;
  }
}

.container {
  @include grid(3, 1rem, 640px);
}
```



<http://codepen.io/raphaelgoetter/pen/eWOqQg?editors=1100>

**t'en veux encore plus ?
un framework CSS basé sur Grid
Layout ?**

NYET



Grid Layout *est* un framework



CSS Working Group
@csswg



CSS Grid *is* a grid system: it doesn't need framework to become one.

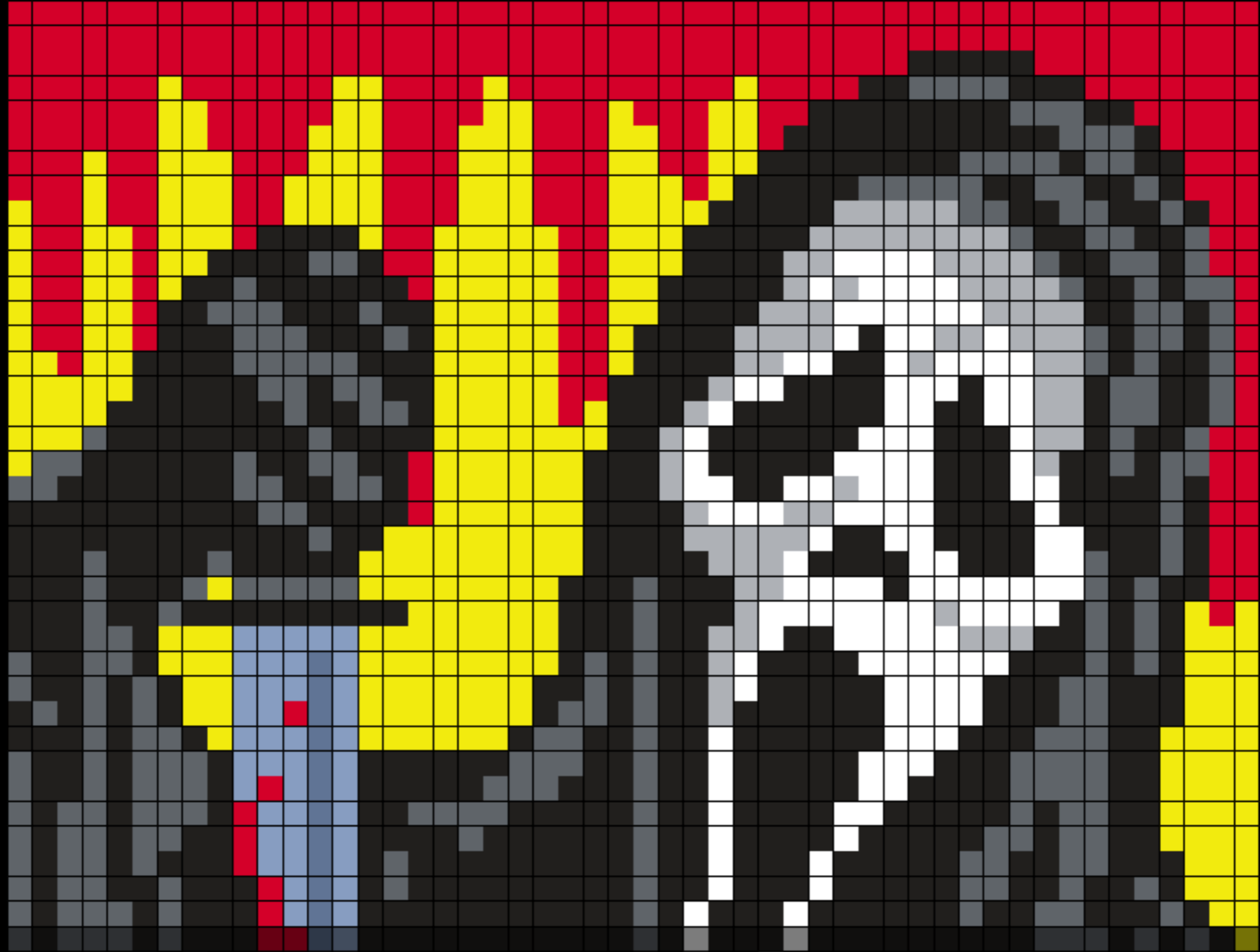
Write clean markup, write clean CSS,
learn+use CSS Grid for your grid!

Rachel Andrew @rachelandrew















[buff.ly/2uvj100](https://buffer.com/2uvj100) You do not need a CSS Grid based Grid System.

🌐 À l'origine en anglais

















18:33 - 5 juil. 2017


























Grid Layout en production ?!

							
natif							

* ancienne spécification (où il manque des trucs chouettes)

							
natif							
polyfill							

							
natif							
polyfill							
total							

amélioration progressive

tu sais c'est quoi ?

RÈGLES D'UNIVERSALITÉ

une page web doit :

1. S'adapter à tous les **visiteurs**
(Sémantique, Accessibilité : title, alt, contrastes, ARIA)
2. S'adapter à tous les **devices**
(Responsive, Mobile First)
3. S'adapter à tous les **navigateurs**
(Amélioration progressive)
4. S'adapter à toutes les **connexions**
(Performance)

PS : « s'adapter » != « identique partout »



mon design s'adapte à tous les **devices**,
je pratique le

responsive web design



YEAH!

GG!

BEAU GOSSE!



mon design s'adapte à tous les navigateurs,
je pratique

l'amélioration progressive



**CA NE S'AFFICHE MEME
PAS PAREIL SUR IE ?!**

AAAH!



amélioration progressive

The image shows a screenshot of the Mozilla Developer Network (MDN) website. At the top, there is a navigation bar with the MDN logo, 'MOZILLA DEVELOPER NETWORK', and several menu items: 'TECHNOLOGIES WEB', 'DOCUMENTATION DE MOZILLA', 'OUTILS DE DÉVELOPPEMENT', and 'VOTRE AVIS'. There is also a search bar and a 'Connexion' button. Below the navigation bar, the breadcrumb trail reads: 'MDN > Technologies web pour développeurs > CSS > Grilles CSS (CSS Grid) > Les grilles CSS et l'amélioration progressive'. On the right side, there are options for 'LANGUES', a 'MODIFIER' button, and a settings icon. The main heading of the article is 'Les grilles CSS et l'amélioration progressive'. Below the heading, there is a 'VOIR AUSSI' section with a list of related articles, including 'CSS', 'Référence CSS', 'CSS Grid Layout', and a 'Guides' section with several sub-articles. In the center, there are navigation buttons: '← Précédent', '↑ Aperçu : CSS Grid Layout', and 'Suivant →'. The main content area starts with a paragraph: 'Au printemps 2017, on voit pour la première fois une spécification majeure être disponible presque simultanément dans différents navigateurs : les grilles CSS (CSS Grid). Les grilles CSS devraient donc être disponibles dans les versions finales de Firefox, Chrome, Opera et Safari. Malgré cela, si ces navigateurs récents permettent à la plupart d'entre nous de profiter de ces nouvelles fonctionnalités, il existe d'anciens navigateurs ou d'autres navigateurs qui ne prennent pas en charge ces fonctionnalités. Dans ce guide, nous allons parcourir différentes stratégies pour gérer cette prise en charge.' Below this paragraph is the sub-heading 'Les navigateurs qui prennent en charge les grilles CSS' and the start of the main text: 'En dehors d'Internet Explorer et de Edge, les propriétés et valeurs relatives aux grilles CSS ne sont pas préfixées dans Safari, Chrome, Opera et dans Firefox. Toutes les propriétés et valeurs que nous avons vues dans ce guide fonctionnent de façon interopérable entre ces navigateurs. Cela signifie que si vous écrivez des règles CSS pour paramétrer une grille, le document doit avoir le même rendu dans Firefox, Opera et dans Chrome. Les grilles CSS'. On the right side, there is a 'DANS CET ARTICLE' section with a list of topics: 'Les navigateurs qui prennent en charge les grilles CSS', 'La situation pour Internet Explorer et Edge', 'L'utilisation d'autoprefixer pour la prise en charge de la grille', 'Puis-je utiliser les grilles CSS sans danger?', 'Commencer à utiliser les grilles CSS en production', 'Effectuer la transition depuis une disposition flottante', 'Utiliser les requêtes de fonctionnalité (feature queries)', 'Surcharger les autres valeurs pour display', 'Comment la spécification gère-t-elle cette surcharge?', 'Les autres valeurs de display', and 'Les éléments flottants'.

@supports

à la rescousse !

```
.container {  
  display: flex;  
}
```

fallback en flexbox, float ou table-cell



```
@supports (display: grid) {  
  .container {  
    display: grid;  
  }  
}
```

en vrai ?

Register • Sign In

SLATE

News & Politics Culture Technology Business Human Interest

PARTICULAR ABOUT OUR BANDWAGONS
div.hp-top-shelf.hp-top-shelf--standard | 1886x466.70

FOLLOW US   

HENRY GRABAR
Don't Give Up on the Small City

FRANK BOWMAN
Mueller Can't Take Down Trump, so He Must Get Congress to Do It. Here's How.

NICK GREENE
Going to Golden State Would Certify LeBron as the Most LeBron Player of All Time

JAMELLE BOUIE
The Fight for a White America
A century ago, nativists won the battle over immigration. The Trump administration is determined to repeat it.

POTUS
Trump: Orrin Hatch Said I Am Best President in History Orrin Hatch: Um, Not Quite

BACKLASH
Wolf Goes on Offensive After He's Kicked Off Show for Peddling Haley-Trump Affair Rumors

CRIME
12-Year-Old Girl Arrested in L.A. Middle School Shooting

MOVIES
An Incomplete List of "Explicitly" Straight Characters in Harry Potter

MUELLER INVESTIGATION
Schiff Accuses Nunes of Giving "Secretly Altered" Version of Memo to White House

grid polyfill

The screenshot shows the GitHub repository page for 'css-grid-polyfill' by 'FremyCompany'. The repository has 35 watchers, 502 stars, and 26 forks. It contains 17 issues, 1 pull request, and 0 projects. The repository description is 'A working implementation of css grids for current browsers.' The repository statistics show 72 commits, 4 branches, 2 releases, and 2 contributors. The license is MIT. The repository is currently on the 'master' branch. The commit history shows the latest commit by FremyCompany on 6 Sep 2016, which updated package.js to work around unpublished packages. The commit history also shows several other commits related to building, fixing scroll preservation, and importing the polyfill.

This repository Search Pull requests Issues Gist

FremyCompany / **css-grid-polyfill** Watch 35 Star 502 Fork 26

Code Issues 17 Pull requests 1 Projects 0 Wiki Pulse Graphs

A working implementation of css grids for current browsers.

72 commits 4 branches 2 releases 2 contributors MIT

Branch: master New pull request Create new file Upload files Find file Clone or download

FremyCompany Updated package.js to work around unpublished package Latest commit 7935386 on 6 Sep 2016

bin	New build	2 years ago
demo/css-grid	Fixed: scroll preservation on relayout	2 years ago
dcc	Import css-grid from css-polyfills	2 years ago
src	Fixed: scroll preservation on relayout	2 years ago

<https://github.com/FremyCompany/css-grid-polyfill>

récatipulatif



récatipulatif

- ✓ syntaxe simple
- ✓ séparation HTML / CSS totale
- ✓ framework intégré
- ✓ gouttière
- ✓ bidirectionnel
- ✓ alignements
- ✓ auto-flow dense
- ✓ chevauchements
- ✓ réordonnement
- ✓ responsive



IE

QUIZ!

*quelles
déclarations n'ont
aucun effet ?*

*(= ne s'appliquent pas, ou ne
changent pas les valeurs par
défaut)*

`.grid-item`

```
.grid-container {  
  display: grid; ✓  
  grid-template: 200px / 1fr; ✓  
  align-items: space-between;  
  flex-direction: row;  
}
```

```
.grid-item {  
  display: inline-flex; ✓  
  align-content: center;  
  grid-gap: 10px;  
  float: left;  
  clear: both;  
  z-index: -1; ✓  
  left: 200px;  
  vertical-align: top;  
  justify-self: center; ✓  
  height: 25%; ✓  
}
```

ressources



grid by example

Grid by Example

A collection of usage examples for the CSS Grid Layout specification.

[What is Grid Layout?](#)

[Learn Grid Layout](#)

[Browser Support](#)

[Resources](#)

[Blog](#)

CSS Grid Layout

The CSS Grid Layout specification is one of a few new specifications that are redefining how we approach layout for the web. Alongside Flexbox and the Box Alignment Module it will become part of a modern layout system for websites and web applications.

This site is growing collection of [examples](#) and [video](#), with the aim of helping people understand how Grid Layout works.

Grid is starting to ship in browsers. If your browser doesn't have support you may need to enable a flag. [Read more about browser support for Grid.](#)

Get Started with Grid

A simple grid



The simplest example. Create a three column grid. Grid Layout will auto place items one in each cell.

[View example 1](#)

<http://gridbyexample.com/>

learn CSS grid



A guide to learning CSS grid · @jonsuh

CSS Grid is a powerful tool that allows for two-dimensional layouts to be created on the web. This guide was created as a resource to help you better understand and learn Grid, and was organized in a way I thought made the most sense when learning it.

<http://learncssgrid.com/>

Gridcheat

grid layout cheatsheet by @lucassantos

grid concepts and example

grid line 	grid track 	<pre> .card { display: grid; grid-template-columns: 1fr 1fr; grid-template-rows: auto 1fr auto; } </pre>
grid cell 	grid area 	<pre> .one { gridrow: 1; gridcolumn: 1; } .two { gridrow: 1 / 2; gridcolumn: 2; } .three { gridrow: 2 / 4; gridcolumn: 2; } .four { gridrow: 3; gridcolumn: 2; } </pre>

defining the grid

display
`grid` / `inline-grid` / `subgrid`

grid-template-columns
`row` / `line` / `name` / `track` / `repeat` / `auto`

grid-template-rows
`row` / `line` / `name` / `track` / `repeat` / `auto`

grid-template-areas
`row` / `col` / `string`

grid-template shortcut for `grid-template-columns` / `grid-template-rows`

grid shortcut for ... everything

gaps specifying size of row and column gutters

	<pre> .parent { row-gap: 10px; } </pre>	auto placement automatic placement for items that aren't placed
	<pre> .parent { column-gap: 10px; } </pre>	
	<pre> .parent { gap: 10px 10px; } </pre>	

container alignment

align-content
vertical alignment for whole grid
`start` / `end` / `center` / `stretch` / `space-around` / `space-between` / `space-evenly`

justify-content
horizontal alignment for whole grid
`start` / `end` / `center` / `stretch` / `space-around` / `space-between` / `space-evenly`

place-content
baseline for `align-content` and `justify-content`

align-items
vertical alignment for items in their cells
`start` / `end` / `center` / `stretch`

justify-items
horizontal alignment for items in their cells
`start` / `end` / `center` / `stretch`

place-items
baseline for `align-items` and `justify-items`

placing items

grid-row-start <code>row</code> / <code>line</code> / <code>name</code> / <code>line</code> / <code>number</code>	grid-row-end <code>row</code> / <code>line</code> / <code>name</code> / <code>line</code> / <code>number</code>	grid-row shortcut for <code>grid-row-start</code> / <code>grid-row-end</code>
grid-column-start <code>col</code> / <code>line</code> / <code>name</code> / <code>line</code> / <code>number</code>	grid-column-end <code>col</code> / <code>line</code> / <code>name</code> / <code>line</code> / <code>number</code>	grid-column shortcut for <code>grid-column-start</code> / <code>grid-column-end</code>

grid-area shortcut for ... everything

span / keyword for row or column spanning

<pre> .two { gridrow-start: 1; gridrow-end: 2; } </pre>	<pre> .two { gridrow: 1 / 2; } </pre>	<pre> .two { gridrow: 1 / span 2; } </pre>	<pre> .four { gridarea: 2 / 2 / 3 / 3; } </pre>
---	---	--	---

item alignment

justify-self
horizontal alignment for specific item in its cell
`start` / `end` / `center` / `stretch`

align-self
vertical alignment for specific item in its cell
`start` / `end` / `center` / `stretch`

place-self
baseline for `align-self` and `justify-self`

patterns

<pre> .parent { align-content: center; justify-content: center; } </pre>	<pre> .parent { grid-template-columns: auto 1fr auto; } </pre>	<pre> .parent { grid-template-columns: repeat(2, 100px 1fr); } </pre>	<pre> .parent { grid-template-columns: repeat(4, 1fr); justify-content: space-between; } </pre>
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resources

websites

- Gridify: <http://gridify.lucasantos.com/>
- Learn CSS Grid: <http://ata.duncanmcp.com/>
- CSS Grid free videos: <http://kiwi.gg/grid/>
- CSS Grid Garden: <http://cssgridgarden.com/>

frameworks

- CSS Grid for Vue: <https://github.com/kiwi-gg/vuex-grid>
- Svelte powered grid: <https://github.com/kiwi-gg/svelte-grid>

grid examples

Grid Examples

Get inspired by real and live sites collected from bloggers, designers and developers that are using CSS Grid Layout.

Are you a designer or an agency and have you been working on a CSS Grid site recently? Then add yours by submitting your work [here!](#)



wedding-invite.gitcs.me



sex.davidlochead.xyz



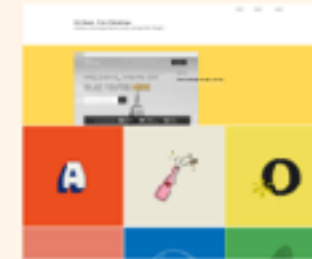
lucasmonnier.com



lynandtonic.com



enemohrt.me



christinaallar.com

<http://www.gridexamples.com/>

Gridbugs

The screenshot shows the GitHub repository page for `rachelandrew/gridbugs`. The repository has 67 watchers, 636 stars, and 8 forks. It contains 19 issues, 2 pull requests, 0 projects, and 0 Wikis. The repository is licensed under MIT and has 23 commits, 1 branch, and 0 releases. The latest commit is by rachelandrew on 21 Sep 2017, updating issue 14. The repository contains files `.gitignore`, `LICENSE`, and `README.md`. The `README.md` file is selected and displays the following content:

GridBugs

Inspired by [Flexbugs](#) this list aims to be a community curated list of CSS Grid Layout bugs, incomplete implementations and interop issues. [Grid shipped into browsers](#) in a highly interoperable state, however there are a few issues - let's document any we find here.

<https://github.com/rachelandrew/gridbugs>

Grid vs IE

CR Level 1 Property	IE10 Implementation	Autoprefixer	Note
grid-template-columns	-ms-grid-columns	Yes	
grid-template-rows	-ms-grid-rows	Yes	
grid-template-areas	-	No	
grid-template	-	No	Shorthand
grid-auto-columns	-	No	
grid-auto-rows	-	No	
grid-auto-flow	-	No	
grid	-	No	Shorthand
grid-row-start	-ms-grid-row	Yes	
grid-column-start	-ms-grid-column	Yes	
grid-row-end	-	No	Defined by the -ms-grid-row-span property
grid-column-end	-	No	Defined by the -ms-grid-column-span property

CSS grid garden

GRID GARDEN

Level 11 of 24

Try using `grid-column` to water these carrots. The `span` keyword also works with this shorthand property so give it a try!

```
1 #garden {  
2   display: grid;  
3   grid-template-columns: 20% 20% 20% 20% 20%;  
4   grid-template-rows: 20% 20% 20% 20% 20%;  
5 }  
6  
7 #water {  
8  
9 }  
10  
11  
12  
13  
14
```

Next



merci !

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