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CSS Variables

https://www.w3schools.com/css/css3_variables.asp

Old way

```
body { background-color: #1e90ff; }

h2 { border-bottom: 2px solid #1e90ff; }

.container {
  color: #1e90ff;
  background-color: #ffffff;
  padding: 15px;
}

button {
  background-color: #ffffff;
  color: #1e90ff;
  border: 1px solid #1e90ff;
  padding: 5px;
}
```

Old way

```
body { background-color: #1e90ff; }

h2 { border-bottom: 2px solid #1e90ff; }

.container {
  color: #1e90ff;
  background-color: #ffffff;
  padding: 15px;
}

button {
  background-color: #ffffff;
  color: #1e90ff;
  border: 1px solid #1e90ff;
  padding: 5px;
}
```

Custom Properties

```
:root {
  --blue: #1e90ff;
  --white: #ffffff;
}

body { background-color: var(--blue); }

h2 { border-bottom: 2px solid var(--blue); }

.container {
  color: var(--blue);
  background-color: var(--white);
  padding: 15px;
}

button {
  background-color: var(--white);
  color: var(--blue);
  border: 1px solid var(--blue);
  padding: 5px;
}
```

Custom Properties

```
:root {
  --blue: #1e90ff;
  --white: #ffffff;
}

body { background-color: var(--blue); }

h2 { border-bottom: 2px solid var(--blue); }

.container {
  color: var(--blue);
  background-color: var(--white);
  padding: 15px;
}

button {
  background-color: var(--white);
  color: var(--blue);
  border: 1px solid var(--blue);
  padding: 5px;
}
```

Custom Properties

```
:root {
  --blue: #1e90ff;
  --white: #ffffff;
}

body { background-color: var(--blue); }

h2 { border-bottom: 2px solid var(--blue); }

.container {
  color: var(--blue);
  background-color: var(--white);
  padding: 15px;
}

button {
  background-color: var(--white);
  color: var(--blue);
  border: 1px solid var(--blue);
  padding: 5px;
}
```

var()

var(<custom-property-name> , <declaration-value>?)

```
:root {
  --main-bg-color: pink;
}

body {
  background-color: var(--main-bg-color);
}
```


https://developer.mozilla.org/en-US/docs/Web/CSS/var()

var()

var(<custom-property-name> , <declaration-value>?)

```
:root {
  --main-bg-color: pink;
}

body {
  background-color: var(--main-bg-color);
}
```

```
/* Fallback */
/* In the component's style: */
.component .header {
  color: var(--header-color, blue); /* heade
}

.component .text {
  color: var(--text-color, black);
}
```


https://developer.mozilla.org/en-US/docs/Web/CSS/var()

Global Variables

- Definite nell'elemento root

```
:root {
  --blue: #6495ed;
  --white: #faf0e6;
}
```

Local Variables

```
.alert {
  --alert-color: #ff6f69;
}
```

La dichiaro in un selettore

```
.alert p {
  color: var(--alert-color);
  border: 1px solid var(--alert-color);
}
```

La posso usare nei descendant

Variabili e media query

- Posso riscrivere il valore di una variabile

```
:root {
  --main-font-size: 16px;
}

media all and (max-width: 600px) {
  :root {
    --main-font-size: 12px;
  }
}
```

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Grid Layout e Bootstrap

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SECTIONS SEARCH LOG IN

U.S. INTERNATIONAL 中文

The New York Times

Monday, April 13, 2015 | Today's Paper | Video | 81°F | Dow -0.45%

World U.S. Politics New York Business Opinion Technology Science Health Sports Arts Style Food Home Travel Magazine Real Estate ALL

4 Ex-Employees of Blackwater Get Long Terms in Iraq Killings

By MATT APUZZO 59 minutes ago

One former Blackwater security contractor received a life sentence on Monday and three others received 30-year sentences for a shooting in Baghdad's Nisour Square in 2007, which left 17 dead.

Putin Lifts Ban on Sale of Air Defense Missiles to Iran

By NEIL MacFARQUHAR 36 minutes ago

President Vladimir V. Putin moved swiftly to take advantage of a possible thaw in relations due to a potential deal curbing Iran's nuclear ambitions.

Group Concludes U.S. Isn't Following Its Own Drone Rules

By SCOTT SHANE 4:03 PM ET

A study of drone strikes in Yemen concludes that the Obama administration has not followed its own rules to avoid civilian casualties.

Immelt Is Putting His Own Stamp on Jack Welch's G.E.

Senator Marco Rubio of Florida will make a formal announcement Monday evening in Miami. Joe Buglewicz for The New York Times

Rubio Announces Presidential Bid

By ASHLEY PARKER

Senator Marco Rubio of Florida told his top donors Monday that he is running for president in 2016, becoming the third Republican to officially enter the contest.

MORE ON MARCO RUBIO

- **The Upshot: Political Skill May Not Be Enough for Rubio**
- **Path to the Presidency | On the Issues | Things You May Not Know**

MORE ON ELECTION 2016

- **From the Magazine: It's Big Announcement Season**

Volunteer Deputy Charged With Manslaughter in Tulsa

By RICHARD PÉREZ-PEÑA 31 minutes ago

Robert Charles Bates, 73, a reserve deputy with the Tulsa County Sheriff's Department in Oklahoma, fatally shot a suspect.

GÜNTER GRASS | 1927-2015

Writer Pried Open Germany's Past but Hid His Own

By STEPHEN KINZER

Mr. Grass was called Germany's moral conscience by many, but he stunned Europe when he revealed in 2006 that he had been a member of the Waffen-SS during World War II.

173 Comments

- **ArtsBeat: Looking Back at Günter Grass's Life and Work**

The Opinion Pages

New York's Leaky Public Pension Funds

By THE EDITORIAL BOARD

The city's comptroller needs to come up with better ways to protect taxpayer funds.

- **Editorial: 152 Innocents, Marked for Death**
- **Blow: Walter Scott Is Not on Trial**
- **Krugman: It Takes a Party**
- **Room for Debate: Bringing Up Baby on the iPhone?**
- ***Opinion on Facebook »***

MENAGERIE | PAMELA GWYN KRIPKE

The Power of Light

He lowered the magnifying glass over the ant, intensifying the assault, cornering his prey.

THE STONE | CRISPIN SARTWELL

Philosophy Returns to the Real World

I ran out of interest in my own consciousness, but there's no reason ever to run out of interest in the world.

Watching

33m The F.B.I. is investigating accusations that San Francisco County deputies forced inmates to **engage in gladiator-style fights** for gambling and entertainment purposes.
The Los Angeles Times ↗

40m **SpaceX** @SpaceX — Follow
Launch scrubbed today for weather, next opportunity tomorrow 4/14 at 4:10pm EDT.
SpaceX, on the delay of its third attempt to land a used rocket on a barge in the ocean, via Twitter ↗

1h A white reserve sheriff's deputy who fatally shot a black man during an arrest was **charged with manslaughter** in Oklahoma. The officer said he had meant to use his Taser.
Tulsa World ↗

1h Two former **egg industry executives,** a father and son, were sentenced to three months in jail after a nationwide salmonella outbreak in 2010 caused by contaminated eggs.
The Associated Press ↗

1h New measurements by NASA's Curiosity rover have led scientists to believe they have found

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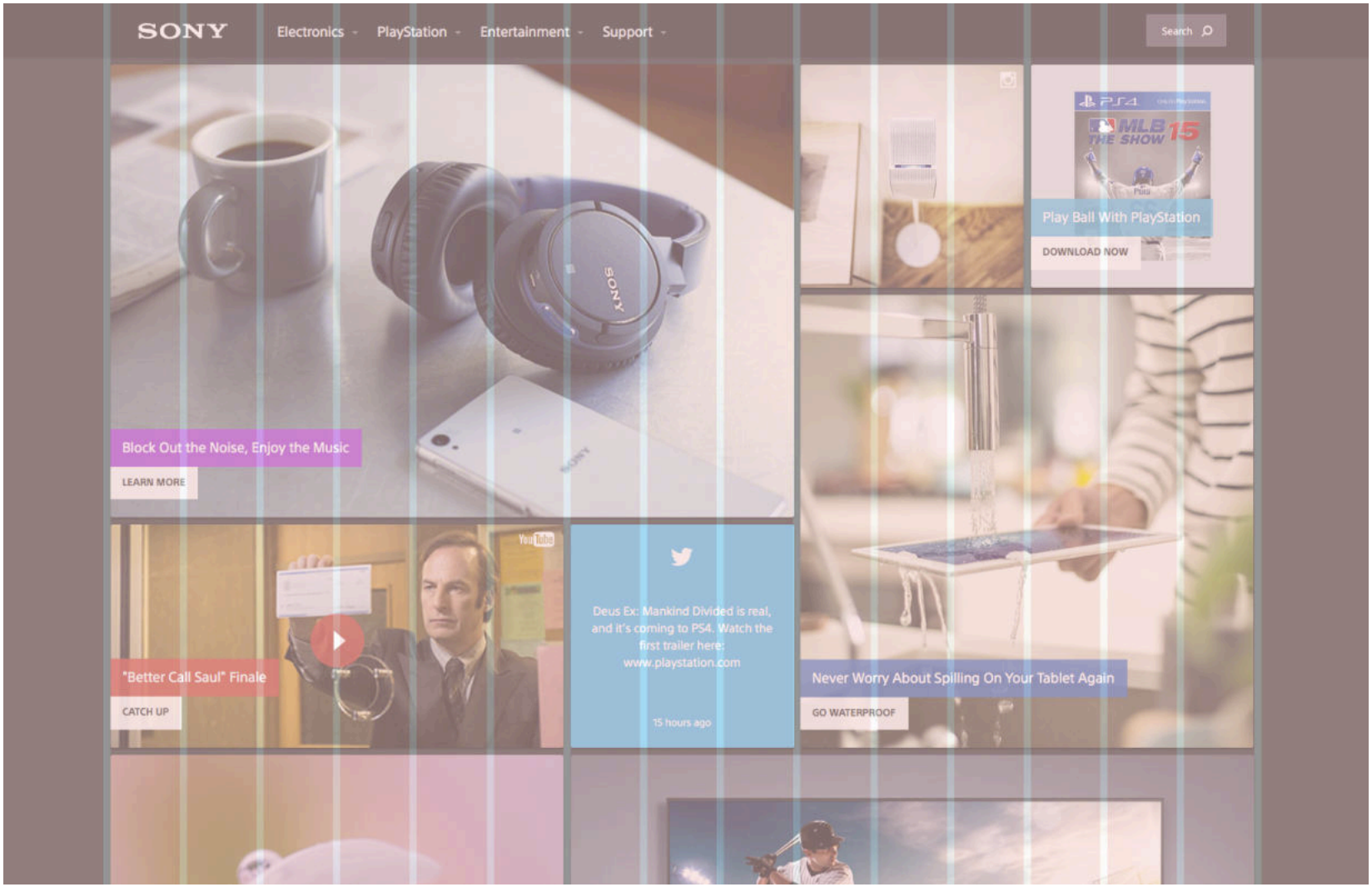
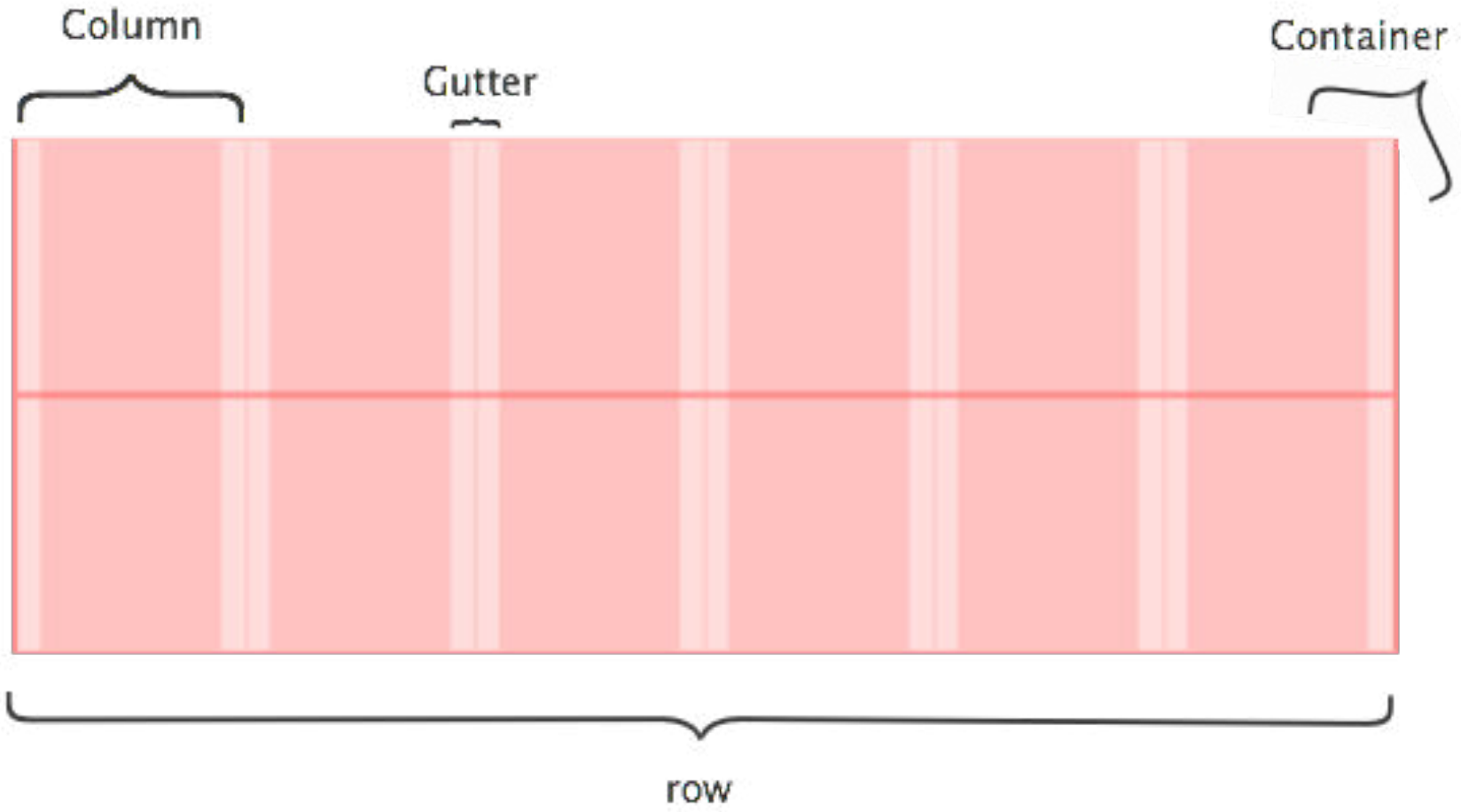
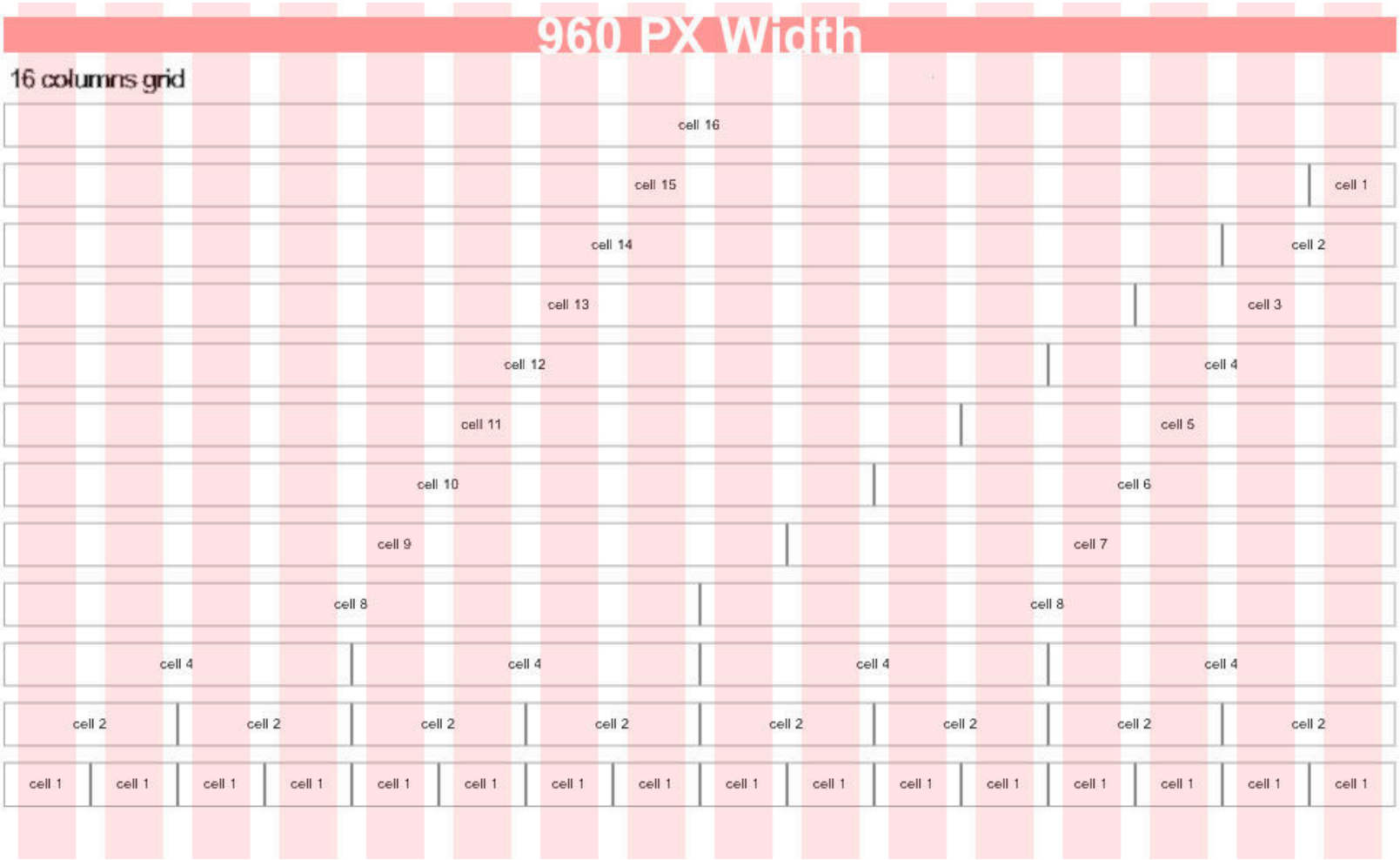


Struttura



Grid system


960 PX Width
16 columns grid
cell 16
cell 15
cell 1
cell 14
cell 2
cell 13
cell 3
cell 12
cell 4
cell 11
cell 5
cell 10
cell 6
cell 9
cell 7
cell 8
cell 8
cell 4
cell 4
cell 4
cell 4
cell 2
cell 2
cell 2
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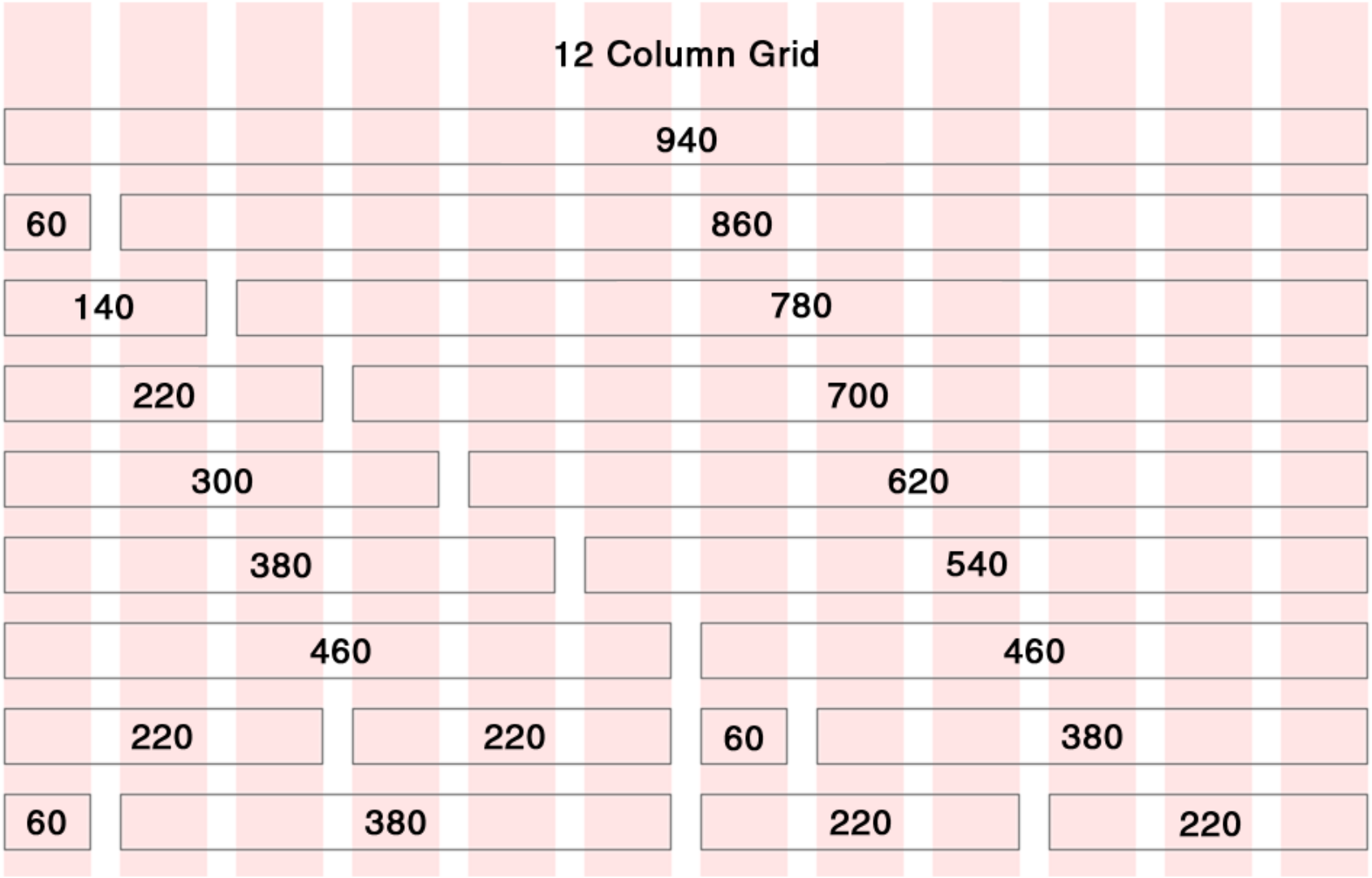
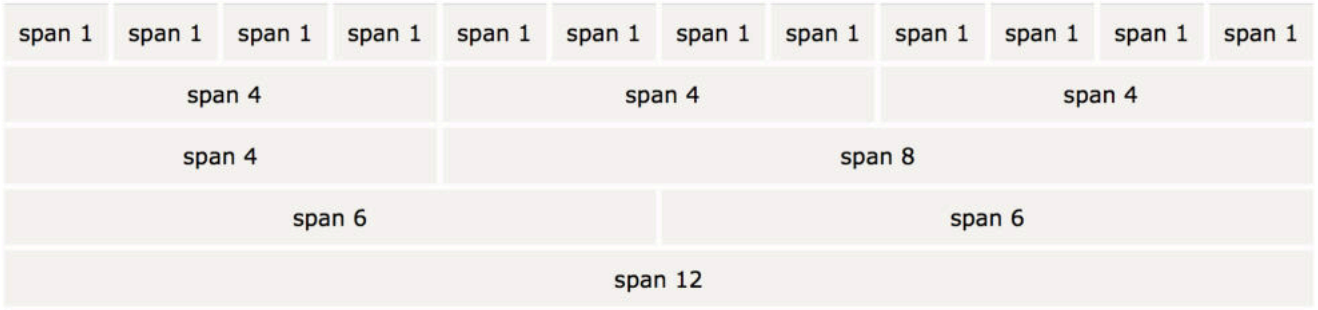
960 gs


12 Column Grid
940
60
860
140
780
220
700
300
620
380
540
460
460
220
220
60
380
60
380
220
220

Framework Responsive

- Bootstrap



- W3.CSS

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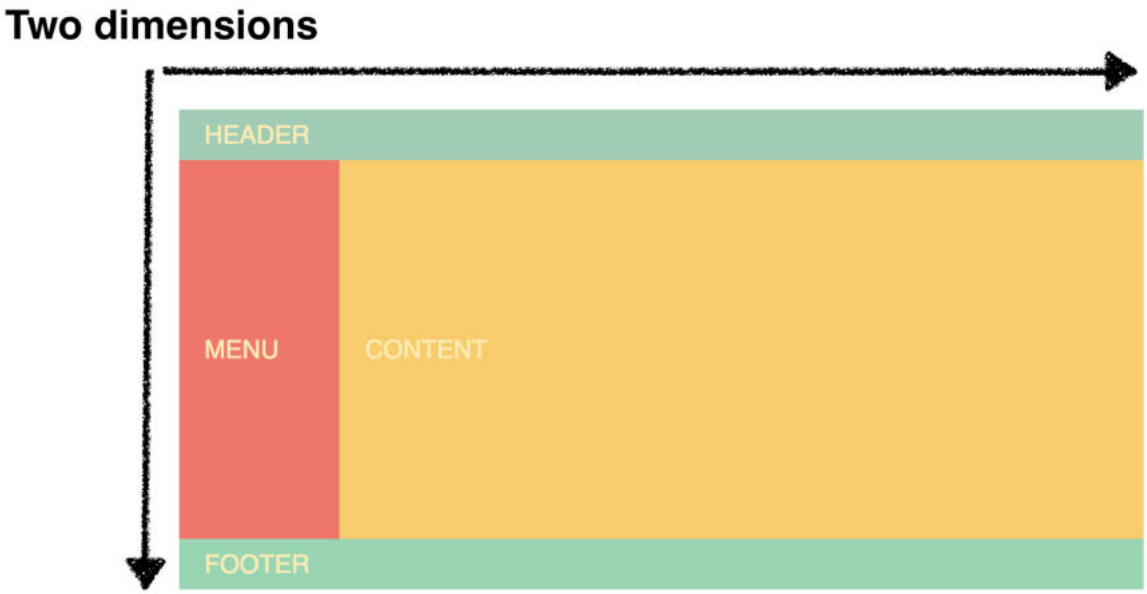
GRID SYSTEM

CSS grid

- **Grid** is a two-dimensional system,
  - handle columns and rows,
  - **flexbox** a one-dimensional system



[can i use grid?](https://caniuse.com/)
https://caniuse.com/

grid lines

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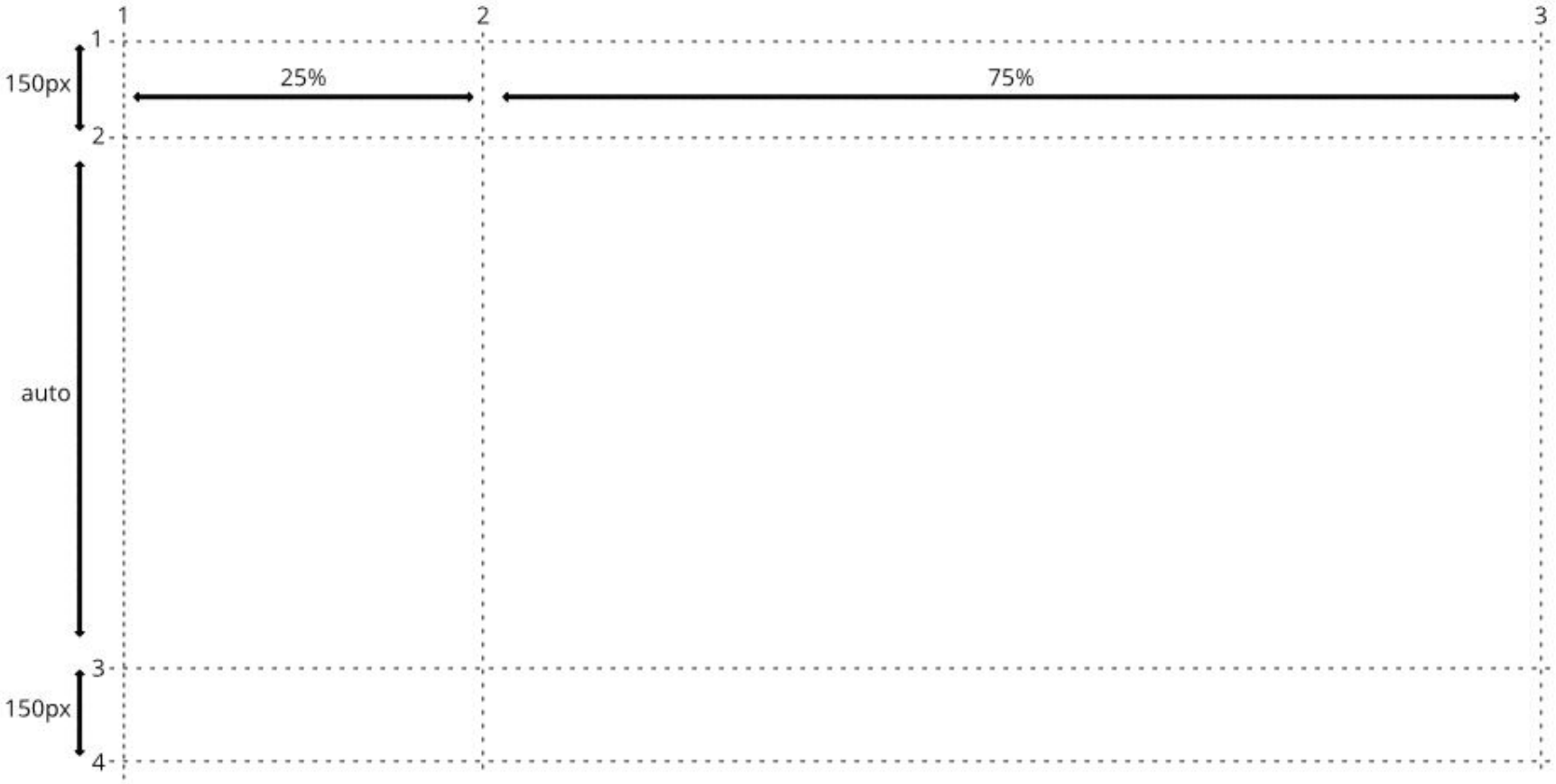
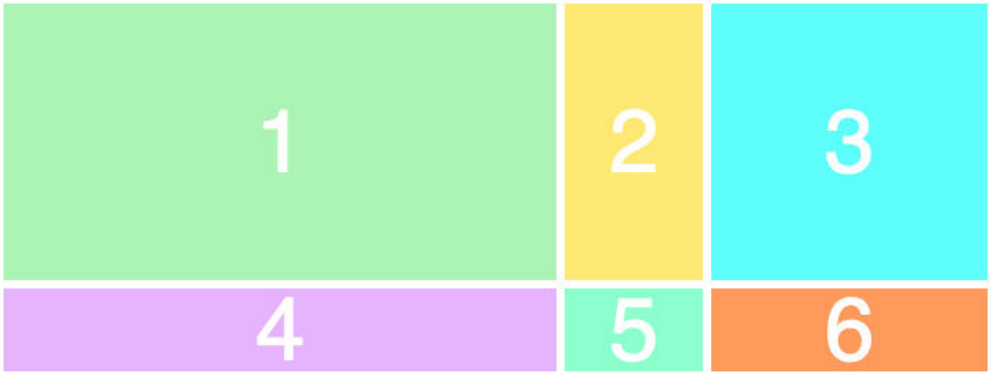


grid template

```
.wrapper {
   display: grid;
   grid-template-columns: 200px 50px 100px;
   grid-template-rows: 100px 30px;
}
```

```
<div class="wrapper">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```



https://www.freecodecamp.org/news/learn-css-grid-in-5-minutes-f582e87b1228/

Esempi di grid template

grid-template-rows: 320px auto 320px;

grid-template-rows: 250px 800px 400px;

grid-template-rows: repeat(3, 275px);

grid-template-rows: 1fr 2fr 1fr;

grid-template-columns: 25% 75%;

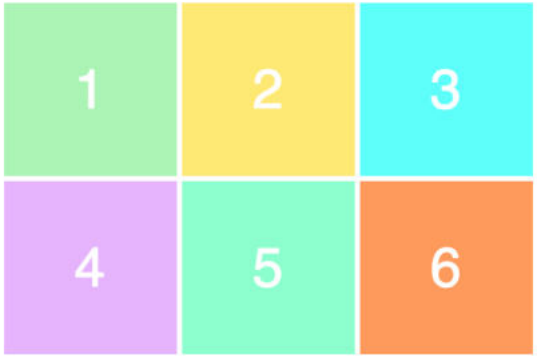
grid-template-columns: 100px 100px 100px 100px;

grid-template-columns: repeat(4, 100px);

grid-template-columns: 200px auto minmax(80px,auto)

Posizionamento item

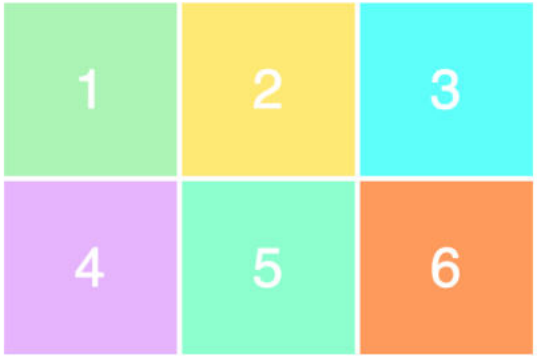
```
.wrapper {
    display: grid;
    grid-template-columns: 100px 100px 100px;
    grid-template-rows: 100px 100px 100px;
}
```



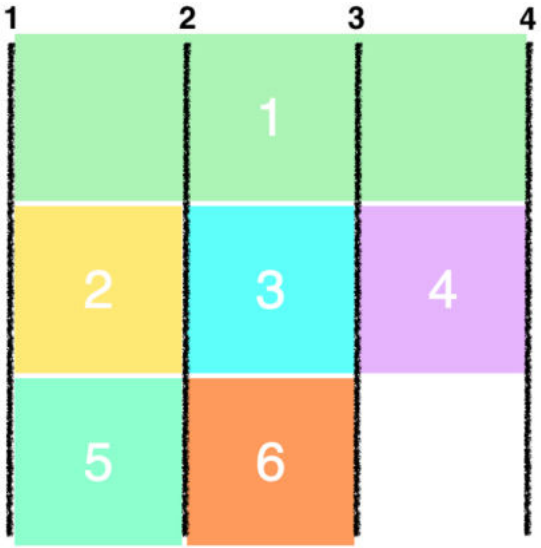

```
.item1 {
        grid-column-start: 1;
        grid-column-end: 4;
}
```

Posizionamento item

```
.wrapper {
    display: grid;
    grid-template-columns: 100px 100px 100px;
    grid-template-rows: 100px 100px 100px;
}
```

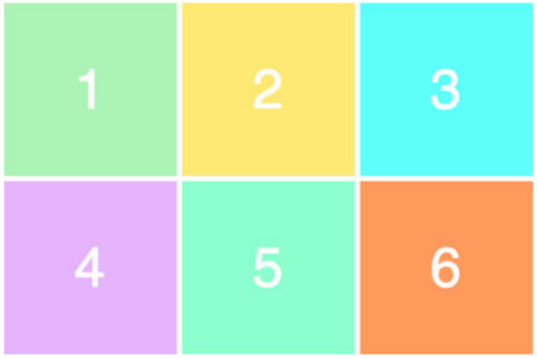


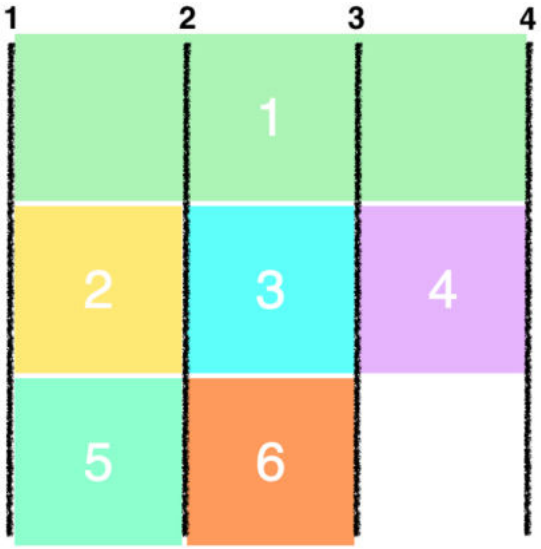

```
.item1 {
        grid-column-start: 1;
        grid-column-end: 4;
}
```



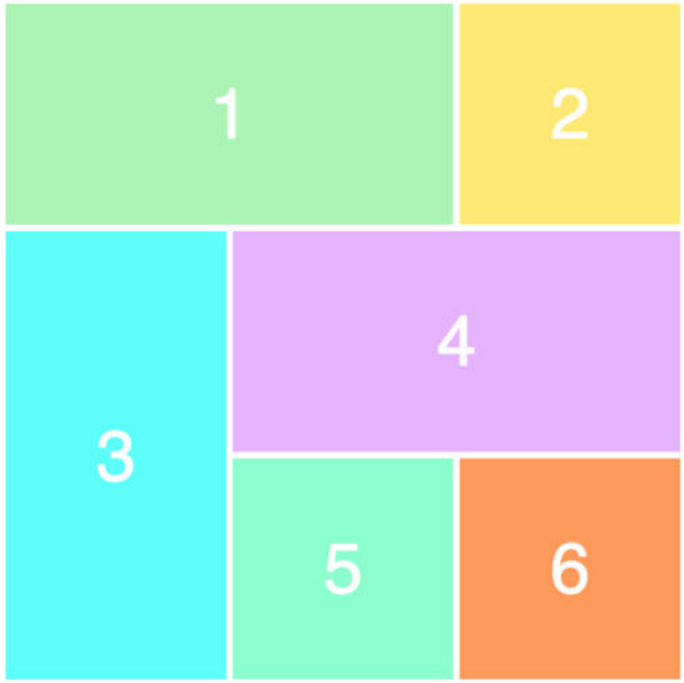
Posizionamento item

```
.wrapper {
    display: grid;
    grid-template-columns: 100px 100px 100px;
    grid-template-rows: 100px 100px 100px;
}


.item1 {
        grid-column:  1/4;
}
```





```
.item1 {
        grid-column-start: 1;
        grid-column-end: 3;
}

.item3 {
        grid-row-start: 2;
        grid-row-end: 4;
}
.item4 {
        grid-column-start: 2;
        grid-column-end: 4;
}
```



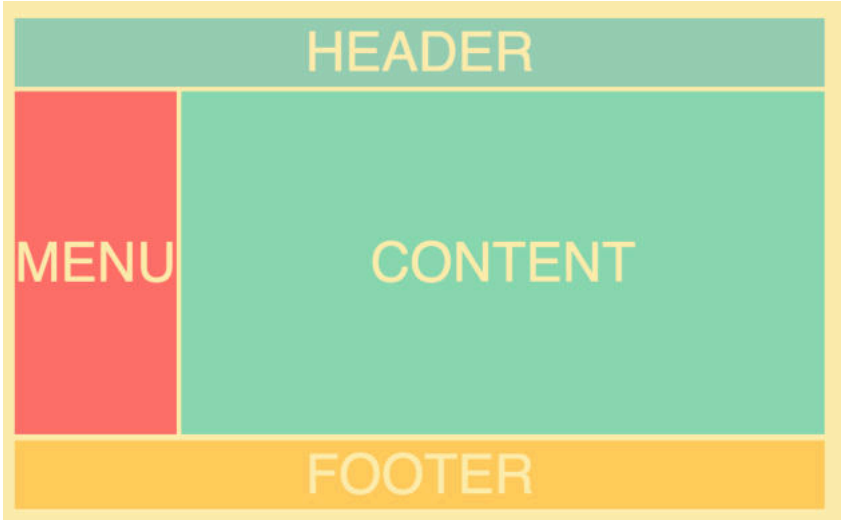
Page Layout

```
<div class=”wrapper">
    <header>HEADER</header>
    <nav>MENU</nav>
    <main>CONTENT</main>
    <footer>FOOTER</footer>
</div>
```

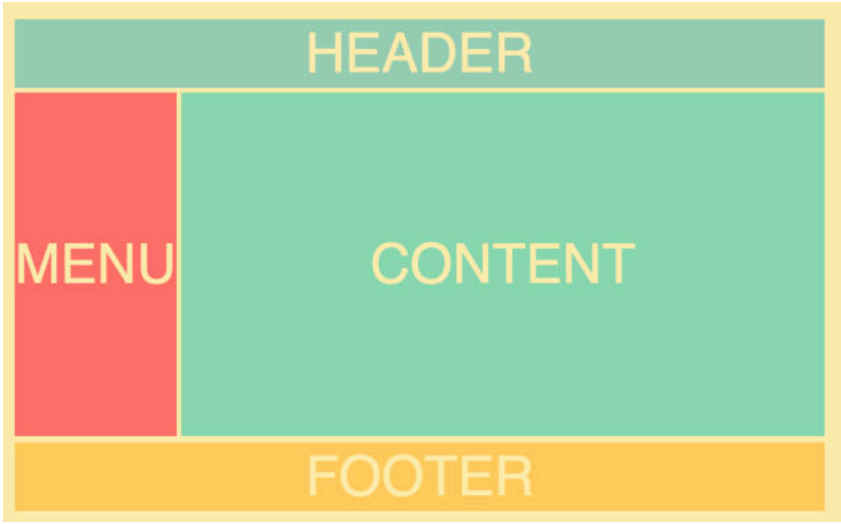
```
.wrapper{
    display: grid;
    grid-gap: 3px;
    grid-template-columns: repeat(12, 1fr);
    grid-template-rows: 40px 200px 40px;
}
```

https://scrimba.com/g/gR8PTE

```
.wrapper{
    display: grid;
    grid-gap: 3px;
    grid-template-columns: repeat(12, 1fr);
    grid-template-rows: 40px 200px 40px;
}

header{ grid-column:  1/  -1;}
nav{ }
main{     grid-column:  2/  -1;}
footer{    grid-column:  1  /  -1;}
```



```
.wrapper{
    display: grid;
    grid-gap: 3px;
    grid-template-columns: repeat(12, 1fr);
    grid-template-rows: 40px 200px 40px;
   grid-template-areas:   "h h h h h h h h h h h h"
                          "m c c c c c c c c c c c"
                          "f f f f f f f f f f f f";

}

header{   grid-area: h;}
nav{      grid-area: m;}
main{     grid-area: c;}
footer{   grid-area: f;}
```



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GRID FRAMEWORKS

Bootstrap

- **Easy to use**
  - Anybody with just basic knowledge of HTML and CSS can start using Bootstrap
- **Responsive features**
  - Bootstrap's responsive CSS adjusts to phones, tablets, and desktops
- **Mobile-first approach**
  - In Bootstrap 3, mobile-first styles are part of the core framework
- **Browser compatibility**
  - Bootstrap is compatible with all modern browsers (Chrome, Firefox, Internet Explorer, Safari, and Opera)

Bootstrap grid

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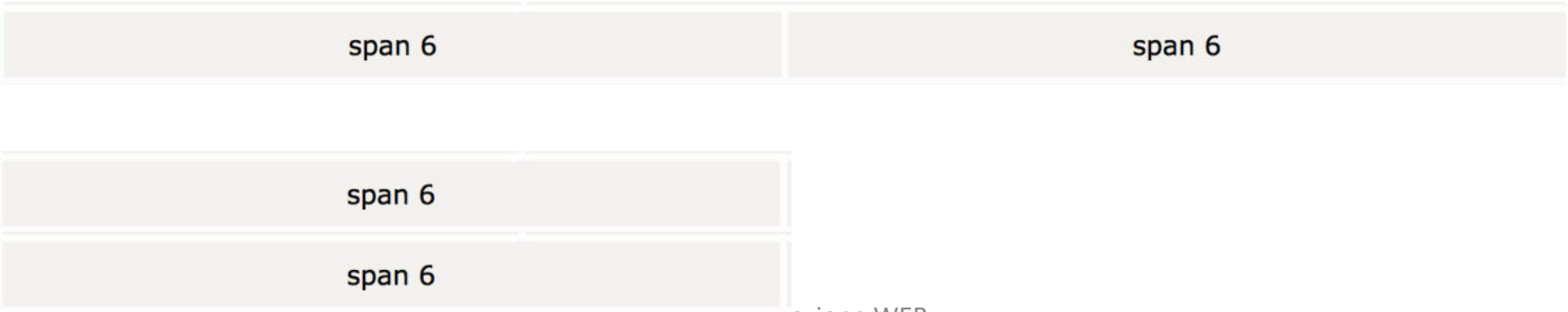
	Extra small devices Phones (<768px)	Small devices Tablets (≥768px)	Medium devices Desktops (≥992px)	Large devices Desktops (≥1200px)
Grid behavior	Horizontal at all times	Collapsed to start, horizontal above breakpoints		
Container width	None (auto)	750px	970px	1170px
Class prefix	`.col-xs-`	`.col-sm-`	`.col-md-`	`.col-lg-`
# of columns	12			
Column width	Auto	~62px	~81px	~97px
Gutter width	30px (15px on each side of a column)			
Nestable	Yes			
Offsets	Yes			
Column ordering	Yes			

Esempio grid 1

```
<div class="container">
  <h1>Hello World!</h1>
  <div class="row">
    <div class="col-sm-6" style="background-color:yellow;">
      <p>Lorem ipsum...</p>
    </div>
    <div class="col-sm-6" style="background-color:pink;">
      <p>Sed ut perspiciatis...</p>
    </div>
  </div>
</div>
```

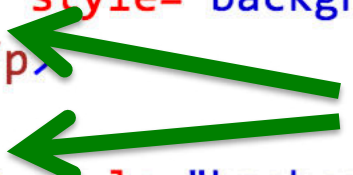


Esempio grid 2

```
<div class="container-fluid">
  <h1>Hello World!</h1>
  <div class="row">
    <div class="col-sm-6" style="background-color:yellow;">
      <p>Lorem ipsum...</p>
    </div>
    <div class="col-sm-6" style="background-color:pink;">
      <p>Sed ut perspiciatis...</p>
    </div>
  </div>
</div>
```

Esempio grid 3

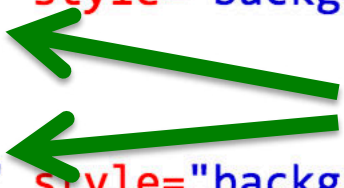
```
<div class="container-fluid">
  <h1>Hello World!</h1>
  <div class="row">
    <div class="col-sm-3" style="background-color:yellow;">
      <p>Lorem ipsum...</p>
    </div>
    <div class="col-sm-9" style="background-color:pink;">
      <p>Sed ut perspiciatis...</p>
    </div>
  </div>
</div>
```



http://www.w3schools.com/bootstrap/tryit.asp?filename=trybs_grid_small&stacked=h

Esempio grid 4

```
<div class="container-fluid">
  <h1>Hello World!</h1>
  <div class="row">
    <div class="col-sm-3 col-md-6" style="background-color:yellow;">
      <p>Lorem ipsum...</p>
    </div>
    <div class="col-sm-9 col-md-6" style="background-color:pink;">
      <p>Sed ut perspiciatis...</p>
    </div>
  </div>
</div>
```



- Esempi Bootstrap

- http://startbootstrap.com