СSS grid layout

Hello everyone! My name is Vitali and now I will tell you about CSS Grid Layout (Also known as “Grid”). This presentation is a simple demonstration of capability the CSS Grid. This is not a guide. This is just demonstration

Now you can see my presentation plan.

What is the presentation of cool technology without useful links and browser support?

so in the beginning I will give you some useful links, then I will show which browsers support Grid,  
after that, I’ll tell you a little about GRID and at the end we will create a simple template

i will give you some useful links

1. Useful links

2. Browser support

3. What is a Grid?

4. Create simple layout

Useful Links

The first link is of course the specification.

1. Specification (<https://www.w3.org/TR/css-grid-1/>)

The second and third links to very interesting and useful articles on css-tricks and MDN.

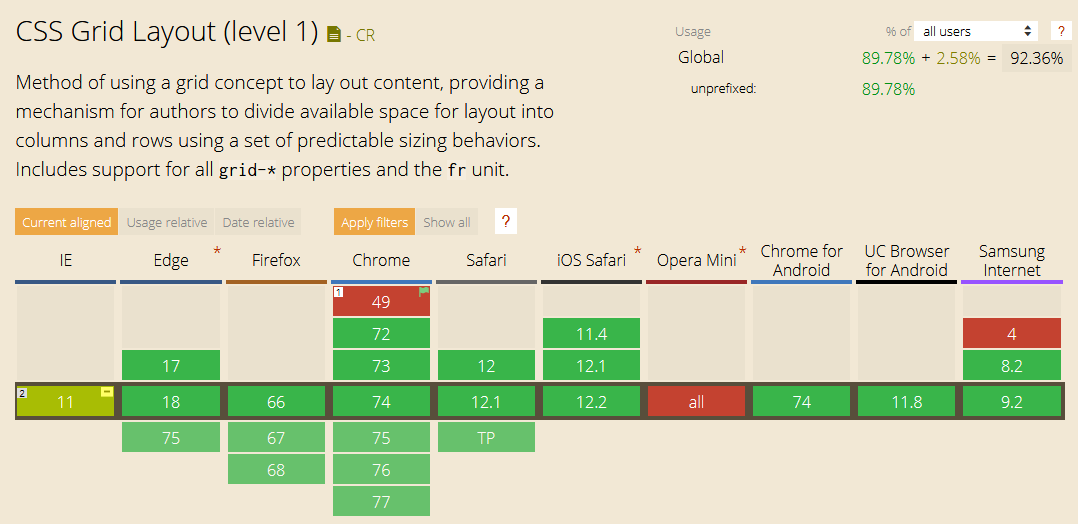
1. CSS tricks(<https://css-tricks.com/snippets/css/complete-guide-grid/#prop-grid-template-areas>)
2. MDN (<https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Grid_Layout>)

And [the last link to a game for learning CSS grid](http://yandex.by/clck/jsredir?bu=h74s&from=yandex.by%3Bsearch%2F%3Bweb%3B%3B&text=&etext=2164.1ygUnDnsrBz0w8csLfUdjNlLGbS51bEm48bNL4-omr9uhJJeWELY6mFJ-lqLFEmo.d612d9e29446c913beb0b53df793ee2a1d3e899a&uuid=&state=PEtFfuTeVD5kpHnK9lio9dFa2ePbDzX7fH_cbK-eu2V8J4cbFpzDXW9rYi7SZhqEJIq8fXhATr5ZDzTC0wt8G5NugjsS9BAsBeCvIwn5QlQ,&&cst=AiuY0DBWFJ5Hyx_fyvalFAMZLrYSK0vZTglc6SDXrCTpvaWXWBLaomg8BTjEbYcly-TVySF8RLno2yXJLw2N7cVx90FVKNd6hDvQP8RIsRdZg5ztU8dkVxTUifkOHkB9lajrcVhBh8PIDWQyFay2eur6WM4AUzIclxiMBR8t3OZmMVS0rjmUfH2kVPonI1J-sVW7t1zrg23fI3Ekz0qCb2veiYxg4KzozCk6kICZs3vQjzUqKjDtaD65V41QcqfxkZtlF-_-ZjafS93IXAbzid04CLvIiX0fI06K1duu0YTcUPyR7jroZsYxUj0XMtDNejZxQxXuGAeLeou6qeXA_uA4jXpYABdk&data=UlNrNmk5WktYejY4cHFySjRXSWhXSlB4SFZjQ3R6V29KT3ZjOTZkdEhlRl9CdmlLRHJvam5xb3dwdVA5eUxSbGtzaVhGbDBKbW8yQ01yUnFXVWdpajhMd25BY1owNEtYLXBId0xFUjlvOVUs&sign=0f1cd87f22ca98f432ec552a828bea88&keyno=0&b64e=2&ref=orjY4mGPRjkHVRqRT7scnl9k3ZfzgjFjPVyepuGQ4zJn3Cld8-md6chxPvsvF7tfESUS-_9Lp4Y,&l10n=ru&rp=1&cts=1558881220460&mc=1.584962500721156&hdtime=1462)

1. Grid Garden (<https://cssgridgarden.com>)

Browser support

As of May 2019 of the most browsers support for CSS Grid: Chrome, Firefox, Safari, and Opera. Internet Explorer 10 and 11 on the other hand support it, but it's an old implementation with an outdated syntax. And mini opera does not support grid at all.  
but Global support is 92.36%, and I think this is a good sign to start using the grid in your work.



What is CSS Grid Layout?

# Что такое CSS Grid Layout?

You can find the following definition on MDN:

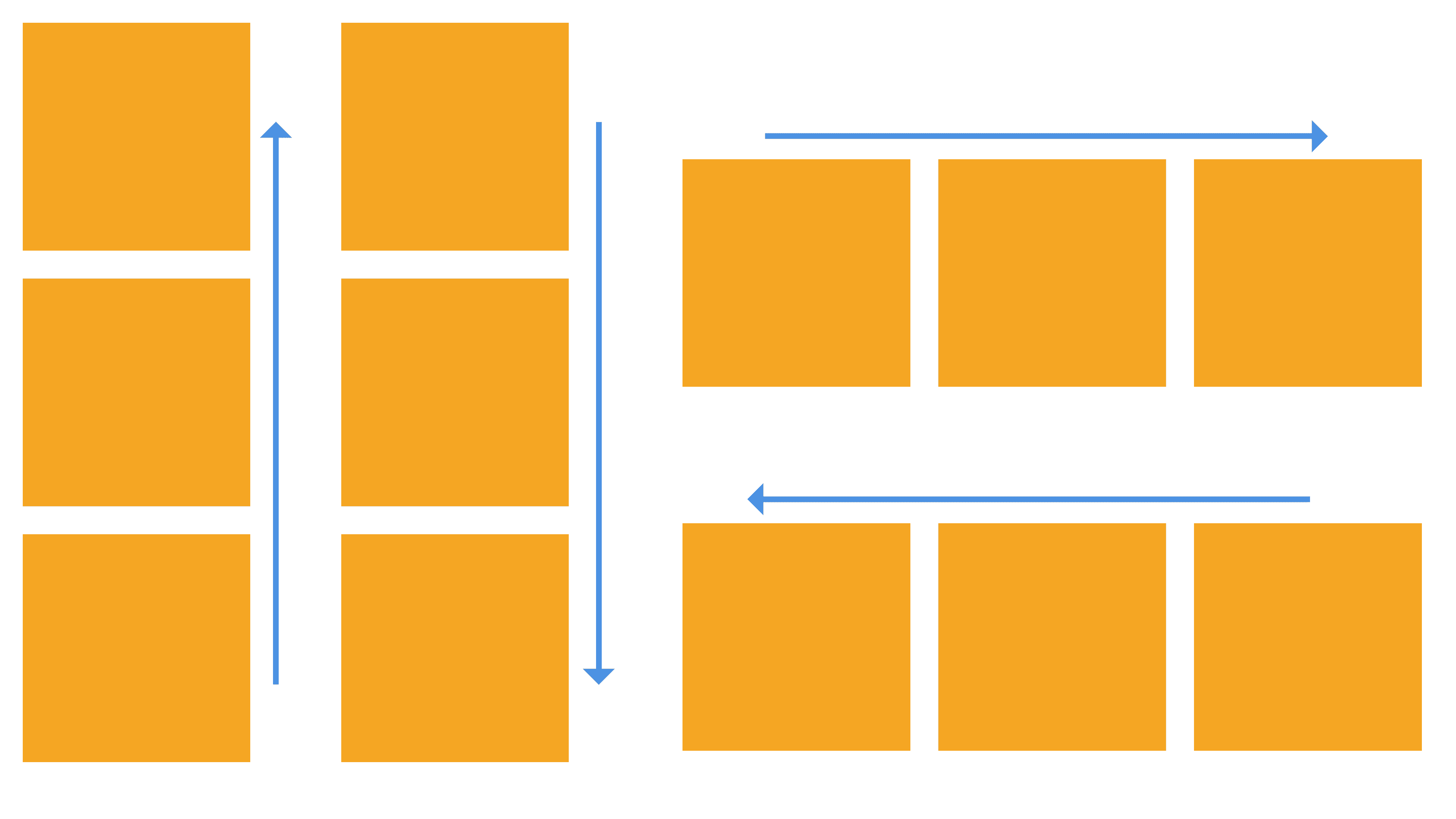
“[CSS Grid](https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Grid_Layout) introduces a two-dimensional grid system to CSS. Grids can be used to lay out major page areas or small user interface elements.”

“a two-dimensional grid” – what is it? What does it mean?

Flexbox Model

I think many web developers already know about flexbox.

In flexbox we can arrange content horizontally or vertically – It is one-dimensional grid system.

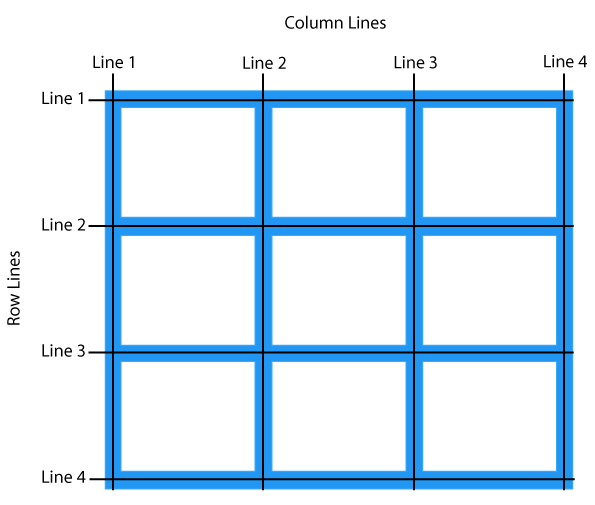


Grid model

But in Grid we can arrange content horizontally and vertically at the same time.

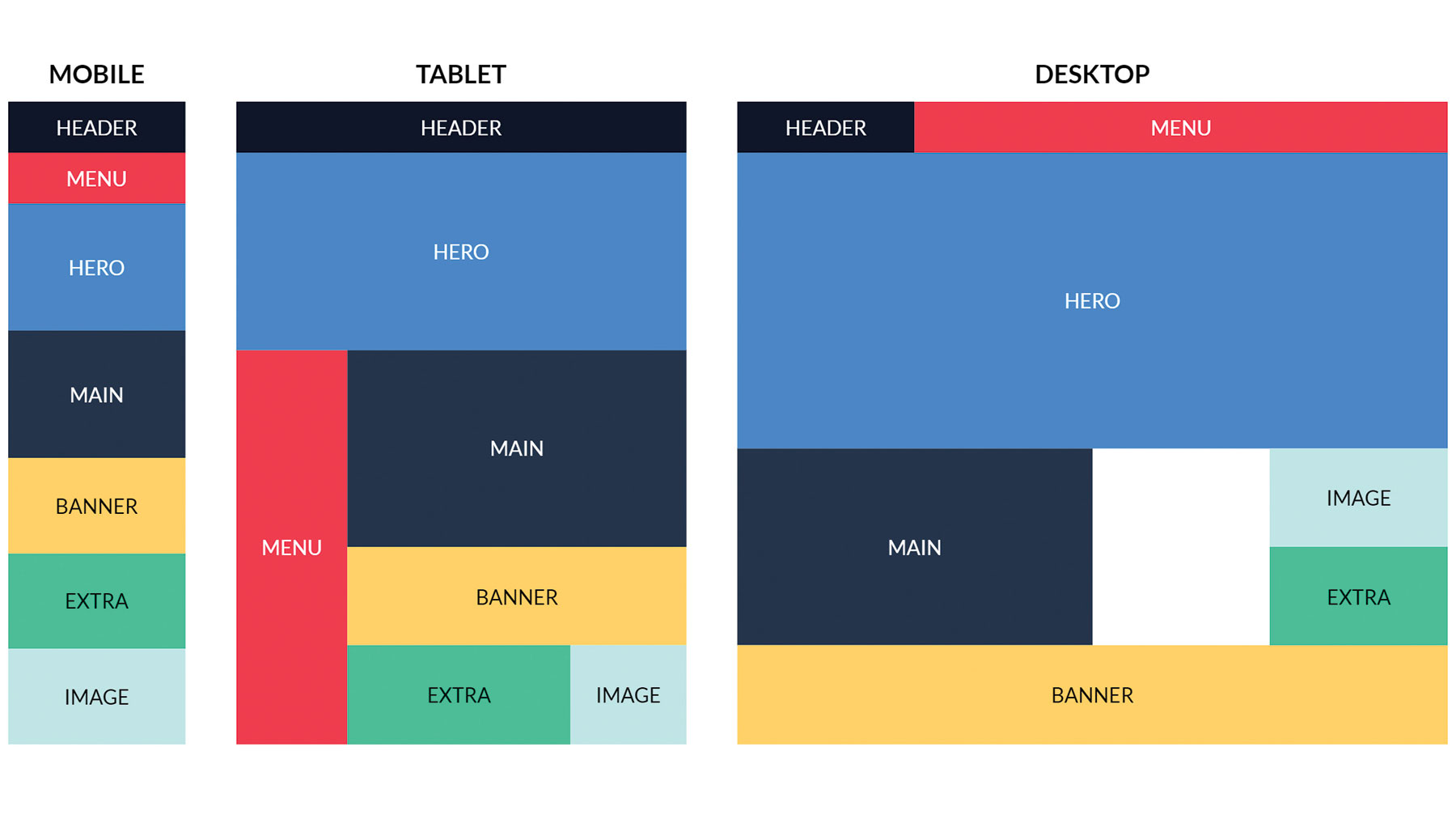
The Grid model consists of intersecting horizontal and vertical lines.

Vertical lines define columns, and horizontal lines define rows.



This allows you to create complex templates faster than using old technologies. And of course an example:

Examples

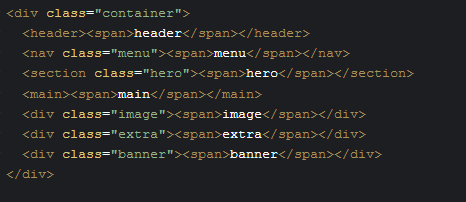
This is an example of a typical web site

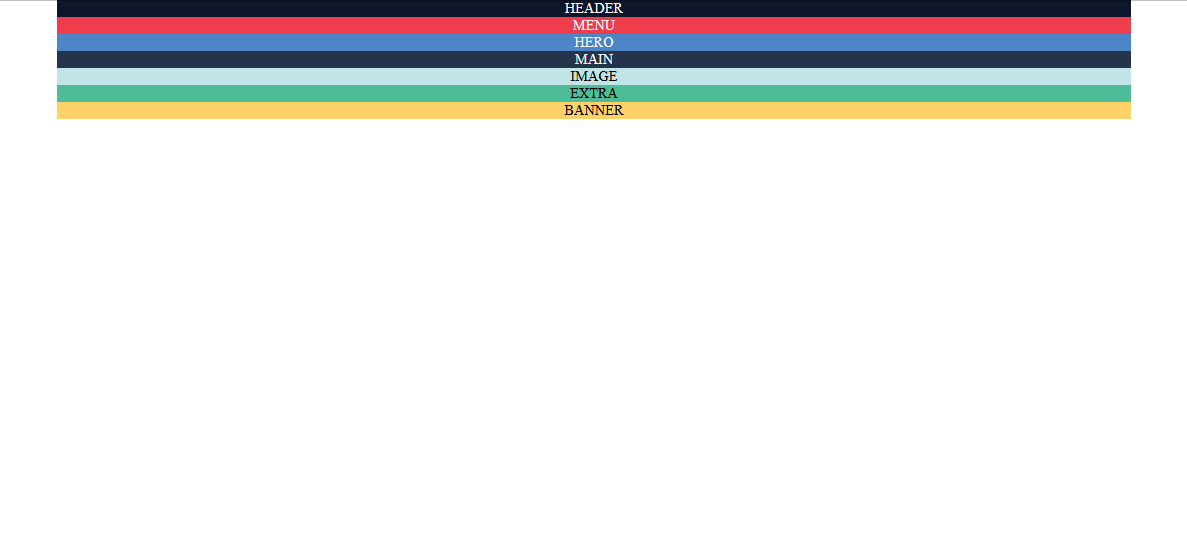
Now I will show you how to quickly and easily create this.

Get started

Step1: create html markup  
In the first, we have to create HTML markup and to define some decoration properties of html elements: max-width, color, background-color, text-align

HTML:



And now let's see how it looks in the browser. Nothing interesting happened.  
In browser:   


Step2: Set CSS properties

To get started we have to define a container element as a grid with [display: grid](https://css-tricks.com/snippets/css/complete-guide-grid/#prop-display), set grid-template-areas property, and then define grid-area its child elements.

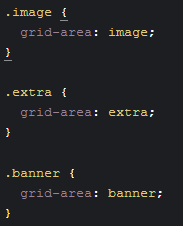
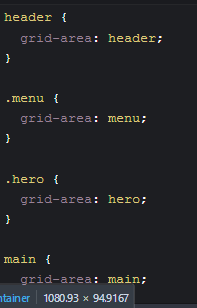
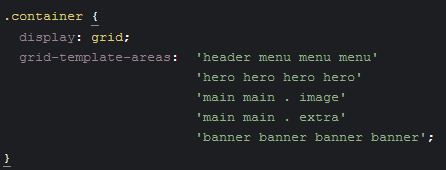
**grid-template-areas**

Defines a grid template by referencing the names of the grid areas which are specified with the [grid-area](https://css-tricks.com/snippets/css/complete-guide-grid/#prop-grid-area) property. Repeating the name of a grid area causes the content to span those cells. A period signifies an empty cell.

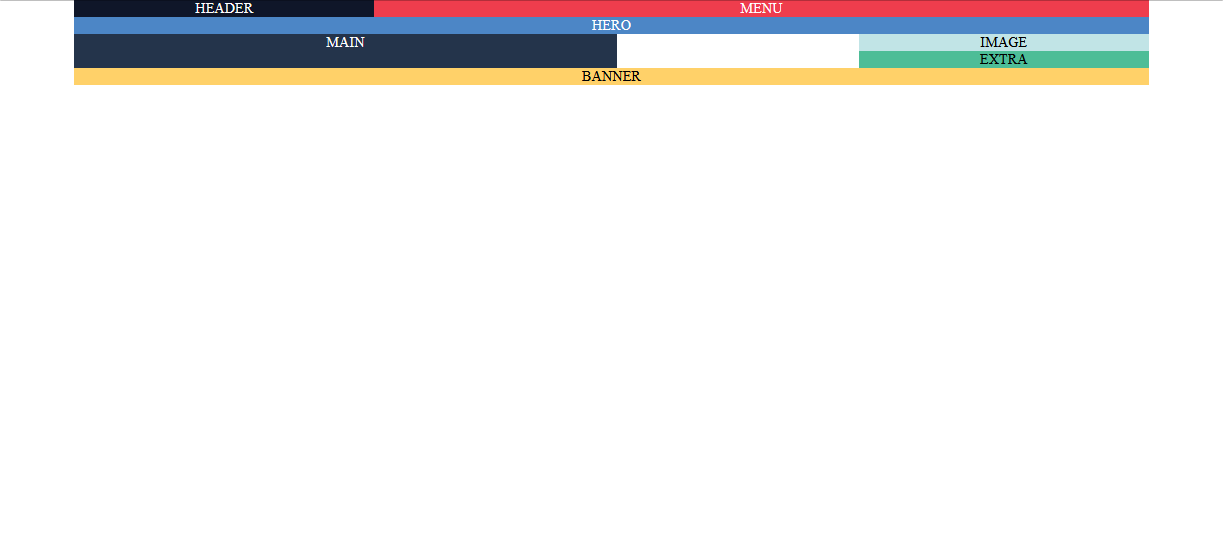
**grid-area**

Gives an item a name so that it can be referenced by a template created with the [grid-template-areas](https://css-tricks.com/snippets/css/complete-guide-grid/#prop-grid-template-areas) property.

CSS:



In Browser:



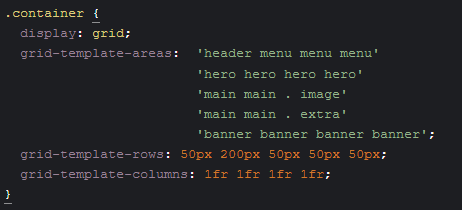
Step3:

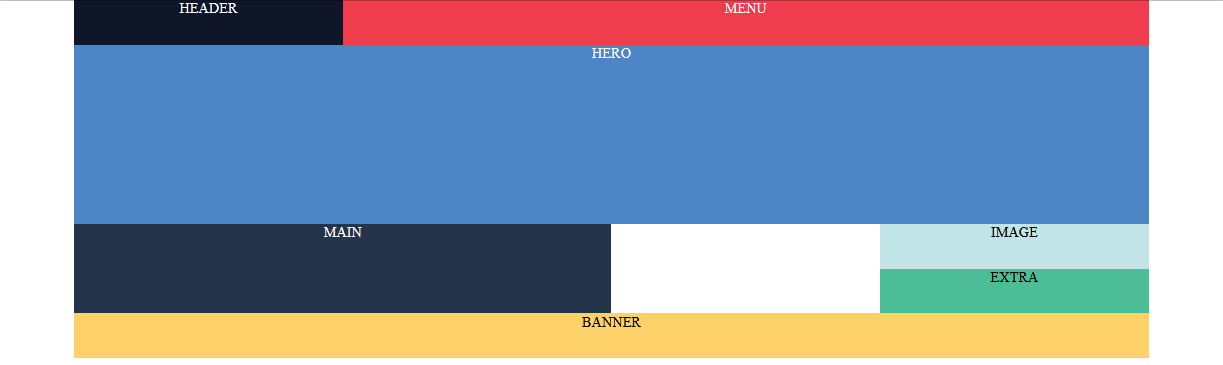
we need to set the container properties of grid-template-rows and grid-template-columns

**grid-template-columns  
grid-template-rows**

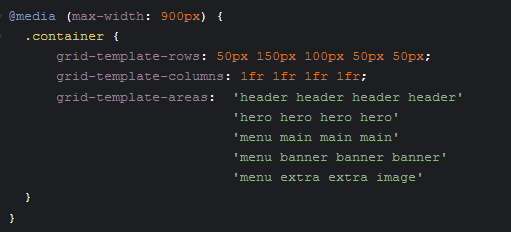
Defines the columns and rows of the grid with a space-separated list of values. The values represent the row or column size, and the space between them represents the grid line.

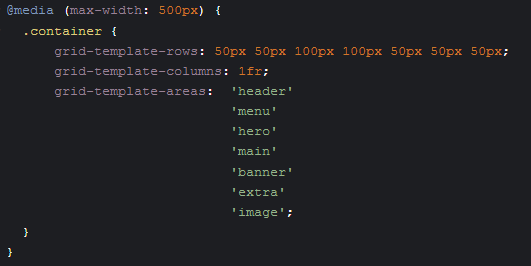
their values can be a length (px), a percentage, or a fraction of the free space in the grid (using the fr unit).

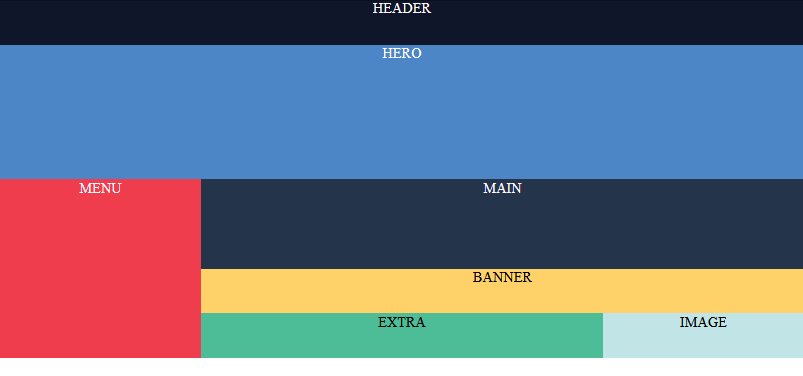
CSS:  


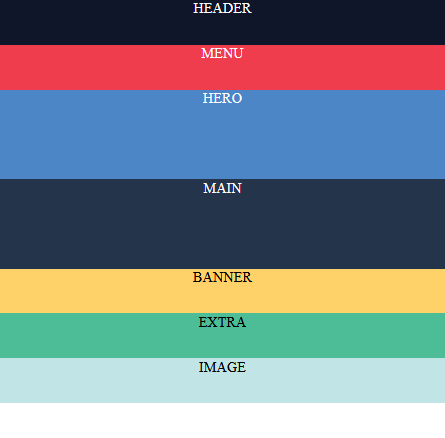
In Browser:   


Step4:

After that we can set media queries for our grid-container:   
  
CSS:  


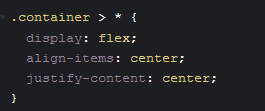


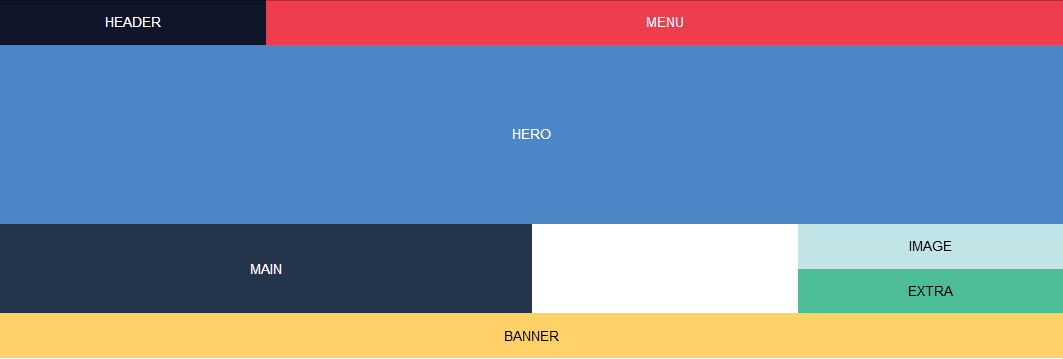
In Browser:   
Window width is 900px:  


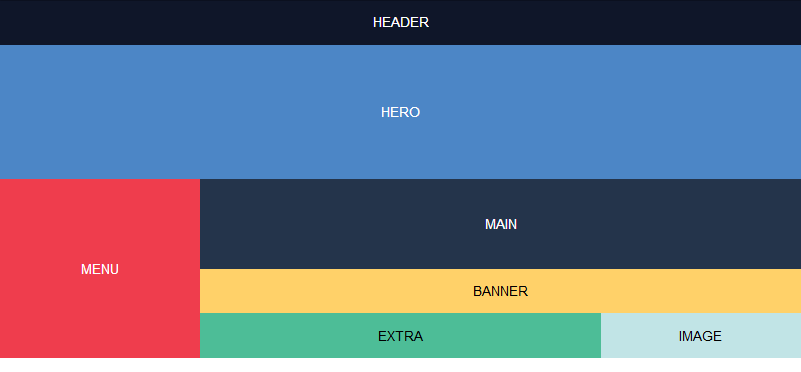
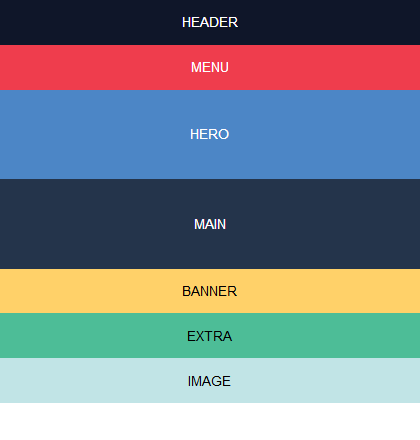
Window width is 500px:  


Final step:

and finally let's define the children following CSS properties: display: flex; align-items: center; justify-content: center;



In browser:   


Link to CodePan (https://codepen.io/vitali\_a/pen/arGaMe)

Last word

Of course, this example was very simple and I did not consider many other useful properties such as: grid-gap, align-content, justify-content and many others. But, as I said at the beginning, this is a demonstration of opportunities, not a guide.

My goal was to show you what happens if you start using the СSS grid right now.

I think you liked his features.  
  
See you next time! Bye bye!