

Evolution of CSS Layout Through CSS3 and Beyond

Hi! I'm Elika J. Etemad, otherwise known as

fantasai

I work on the CSS standards at W3C.





Geocities Retro CSS Spec

```
<FONT face=Arial color=#0000FF size=6>
    <BR>
    <CENTER>
<H1>Big Font<H1>
    <TABLE width=200 height=300 border=5
        bordercolor=navy bgcolor=lightblue>
        <TD background=clouds.jpg>
            <IMG src=spacer.gif width=4 height=20>
<IMG align=left border=2>
    <BR clear=left>
```

CSS Level 1

width & height

float & clear

margins & padding

backgrounds & borders

fonts

list styles

alignment & white-space

CSS Level 2

```
.sidebar, .main { display: table-cell; }
```

CSS Level 2

float: left

.clearfix

position: absolute

CSS2.1 Era

Browser Wars I: Netscape vs. Microsoft

mid 1990s HTML for formatting

late 1990s CSS1 catches on

IE6 Monopoly

early 2000s Web Standards Campaign FTW

Browser Wars II: Phoenix Rising

mid 2000s Quest for Interoperability

Balance of Powers

late 2000s Have interop, will build features.

Browser Wars III: Mobile Edition

early 2010s HTML5 + CSS3 take off

CSS Level 3

Processing Power

Decoration

Typography & Internationalization

Layout

Layout for the Web

Web vs. Print

CSS3 Layout

Principles of Design

Flexible

Powerful

Robust

Understandable

Performant

CSS Layout for the Web

Flexible
Powerful
Robust
Understandable
Performant

CSS3 Layout Modules

Multi-column Layout

Flexible Box Layout

Grid Template Layout

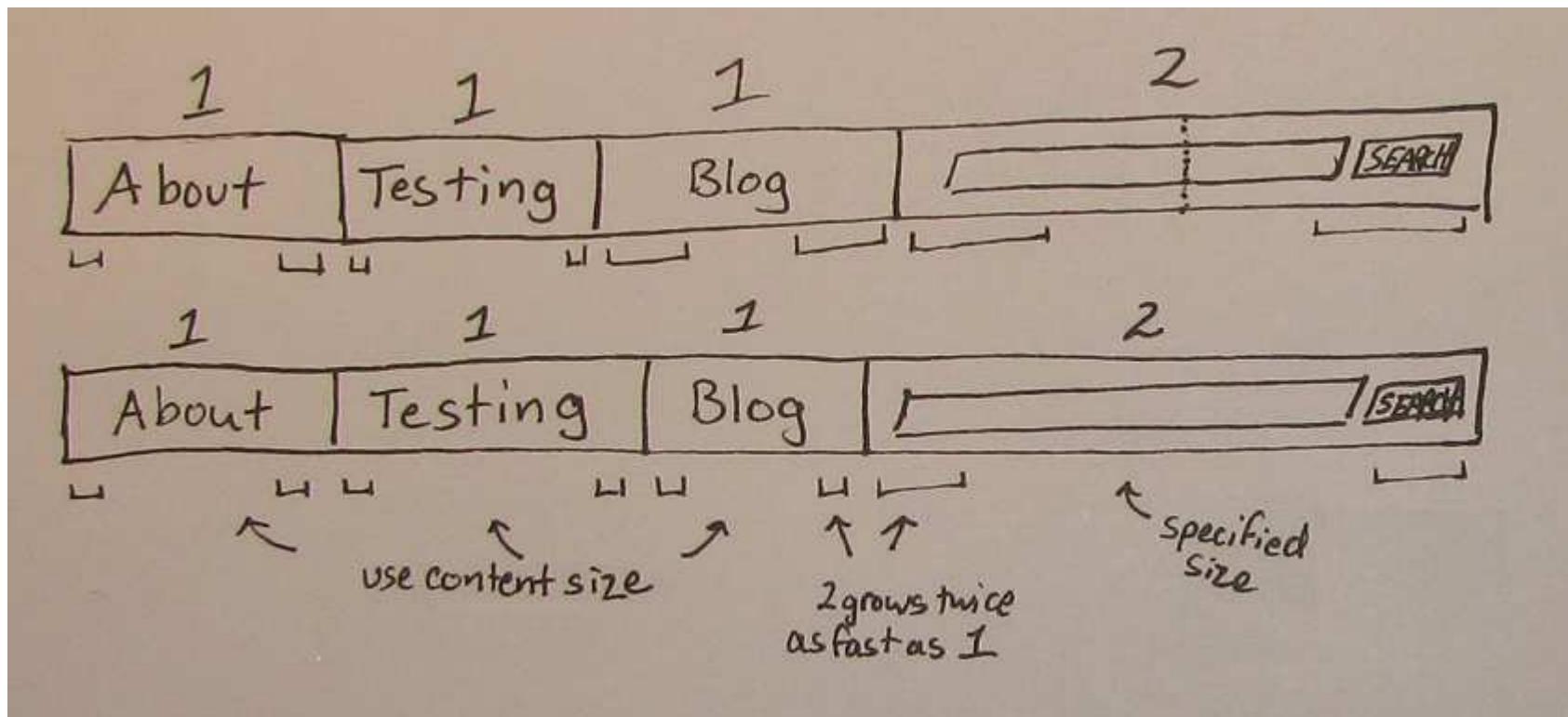
Media Queries

CSS Multi-column Layout

```
article { columns: 30em; }
```

```
article { columns: 30em 4; }
```

CSS Flexible Box Layout



Grid Template Layout

```
#main {  
    display: grid;  
    grid-columns: 5em auto 20%;  
    grid-rows: 3em auto 5em;  
    grid-template: "abb"  
                  "LMR"  
                  "fff";  
}
```

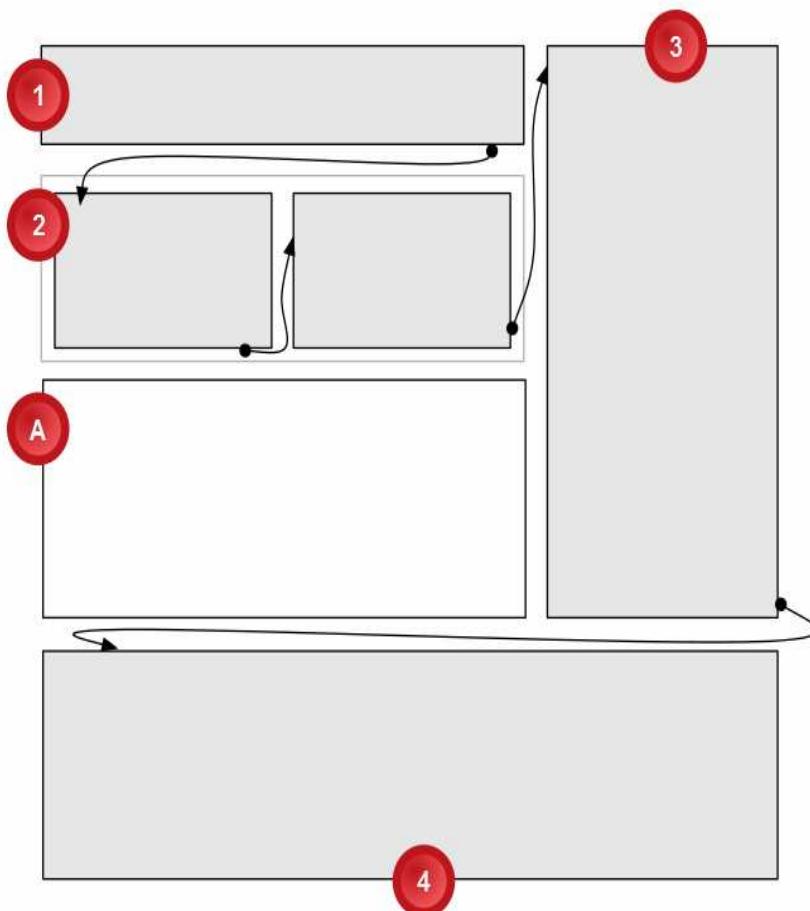
Grid Template Layout

```
#main {  
  grid-template:  
    "aaaaaa"  
    "bcccdd";  
}
```



Regions & Exclusions

CSS Regions



Introduction This is an example that shows how content can be made to flow between multiple regions. The image is displayed in box 'A'. The

of regions and effectively getting that content to be threaded from one region to the next.

'article' is flowed from region '1', to region '2', to region '3' and finally to region '4'. Note how the content that is laid out in 'region 1' can be subject to a different style.

More Details

This illustrates some of the features of CSS Regions. First, the ability to associate a flow of content to a set

Then, the example illustrates the concept of 'region styling', where the content that falls into a specific region is subject to additional style rule, in the same spirit as inline content falling in the 'first line' can be subject to additional styling as defined by the ::first-line pseudo element selector.

Finally, this initial example shows that the concept of region is orthogonal to the layout

of regions. This means that regions can be created and positioned using existing CSS and HTML layout (such as multi-column, flex box or grid layout). The CSS Regions specification defines how these regions can be the recipients of a 'named flow'.



CSS Exclusions

Lore ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. Lore ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. Lore ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis

nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure

nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure

Media Queries

http://www.w3.org/blog/CSS/2011/06/08/csswg_redesign/

CSS3 Layout Modules

Multi-column Layout

Flexible Box Layout

Grid Template Layout

Media Queries

W3C Process

CSSWG Edition

How CSS Specs Grow Up

CSSWG

W3C

Exploring

FPWD / WD

Revising

WD

Refining

WD / LC

Testing

CR

Stable

CR / PR

Finished

REC

Sources of Innovation

implementations lead

Rounded corners

designers lead

Image borders

specs lead

Multiple backgrounds

Sources of Innovation

implementations lead

Transitions, Animations, and Transforms

specs lead

Selectors, Multi-col Layout, Media Queries, Color

total mashup

Basic UI, Flexbox Layout, Text, Conditional Rules

Review & Revision

Getting and responding to feedback
from a variety of sources

Getting Involved

Follow our progress:

w3.org/blog/CSS

@csswg

w3.org/Style/CSS/current-work

Discuss and send feedback:

www-style mailing list

Demand correctness! Write testcases!

csswg.org/test

about:csswg

fantasai.inkedblade.net/weblog/2011/inside-csswg