

# HTML5 & CSS3



What's new?

# New elements

Element	Description
<code>&lt;header&gt;</code>	The HTML <b>&lt;header&gt;</b> element represents a group of introductory or navigational aids. It may contain some heading elements but also other elements like a logo, wrapped section's header, a search form, and so on.
<code>&lt;h1&gt;</code> , <code>&lt;h2&gt;</code> , <code>&lt;h3&gt;</code> , <code>&lt;h4&gt;</code> , <code>&lt;h5&gt;</code> , <code>&lt;h6&gt;</code>	<b>Heading</b> elements implement six levels of document headings, <code>&lt;h1&gt;</code> is the most important and <code>&lt;h6&gt;</code> is the least. A heading element briefly describes the topic of the section it introduces. Heading information may be used by user agents, for example, to construct a table of contents for a document automatically.
<code>&lt;hgroup&gt;</code>	The HTML <b>&lt;hgroup&gt;</b> Element ( <i>HTML Headings Group Element</i> ) represents the heading of a section. It defines a single title that participates in <a href="#">the outline of the document</a> as the heading of the implicit or explicit section that it belongs to.
<code>&lt;nav&gt;</code>	The HTML <b>&lt;nav&gt;</b> element ( <i>HTML Navigation Element</i> ) represents a section of a page that links to other pages or to parts within the page: a section with navigation links.
<code>&lt;section&gt;</code>	The HTML <b>&lt;section&gt;</b> element represents a generic section of a document, i.e., a thematic grouping of content, typically with a heading. Each <code>&lt;section&gt;</code> should be identified, typically by including a heading ( <code>&lt;h1&gt;</code> - <code>&lt;h6&gt;</code> element) as a child of the <code>&lt;section&gt;</code> element.

# Resources

[More new stuff in HTML5](#)

[New elements](#)

[Cool new stuff](#)

[HTML5 Boilerplate](#)

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# CSS



Selectors, Layout & Animation

# Basic selectors

```
1 * {  
2   margin: 0;  
3   padding: 0;  
4 }
```

```
1 #container * {  
2   border: 1px solid black;  
3 }
```

```
1 .error {  
2   color: red;  
3 }
```

```
1 li a {  
2   text-decoration: none;  
3 }
```

```
1 a { color: red; }  
2 ul { margin-left: 0; }
```

```
1 a:link { color: red; }  
2 a:visited { color: purple; }
```

```
1 ul + p {  
2   color: red;  
3 }
```

```
1 div#container > ul {  
2   border: 1px solid black;  
3 }
```



```
01 <div id="container">
02   <ul>
03     <li> List Item
04       <ul>
05         <li> Child </li>
06       </ul>
07     </li>
08     <li> List Item </li>
09     <li> List Item </li>
10     <li> List Item </li>
11   </ul>
12 </div>
```

```
1 a[href="http://google.com"] {  
2   color: #1f6053; /* green */  
3 }
```

```
1 input[type=radio]:checked {  
2   border: 1px solid black;  
3 }
```

```
1 div:hover {  
2   background: #e3e3e3;  
3 }
```

```
1 li:nth-child(3) {  
2   color: red;  
3 }
```

```
1 ul li:first-child {  
2   border-top: none;  
3 }
```

[In-depth explanations are here](#)

# Layout

In the past:

`float: left`

Today:

`display: flex`



# Flexbox

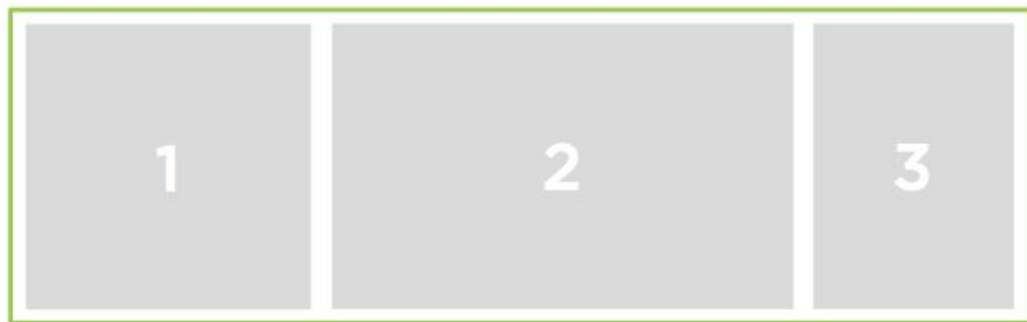
A Set of CSS  
Properties

Creating  
Flexible  
Layouts

Distributing  
Extra Space

Aligning  
Content

# Flex Container



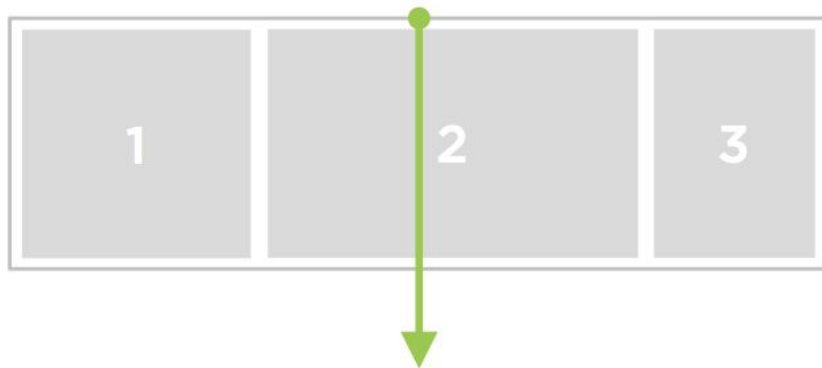
# Flex Items



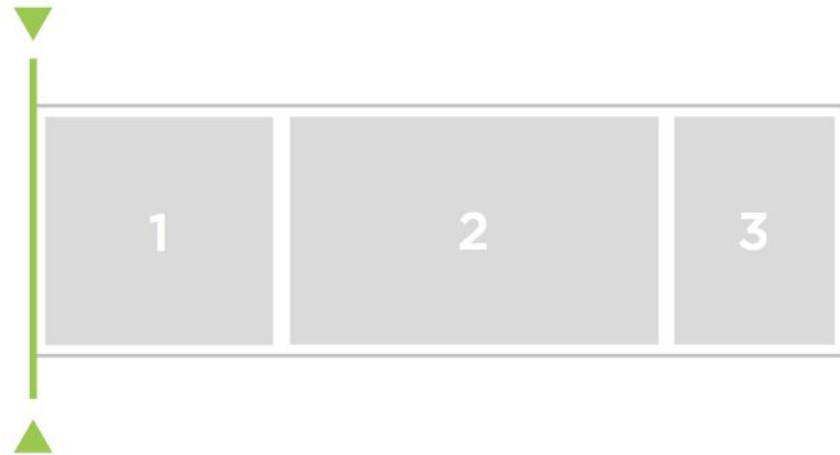
# Main Axis



## Cross Axis



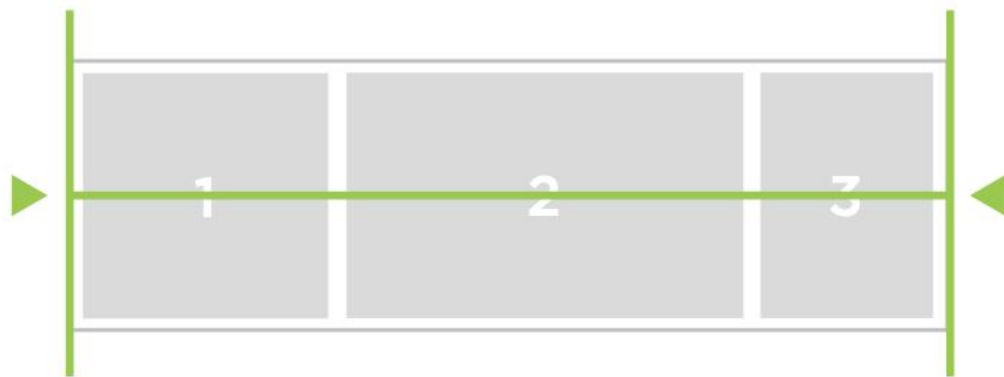
Main Start



Main End

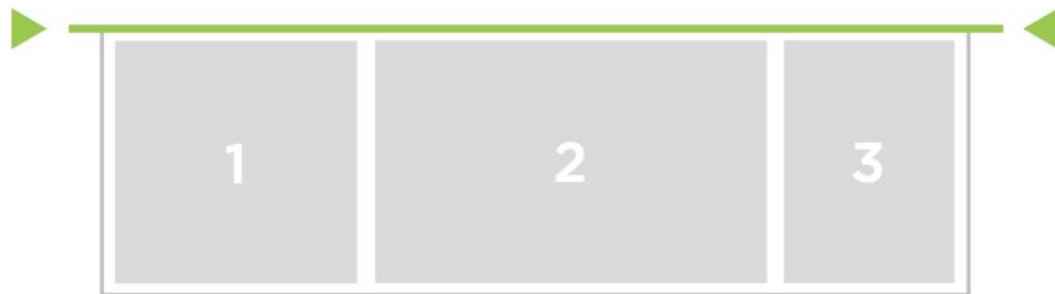


Main Size





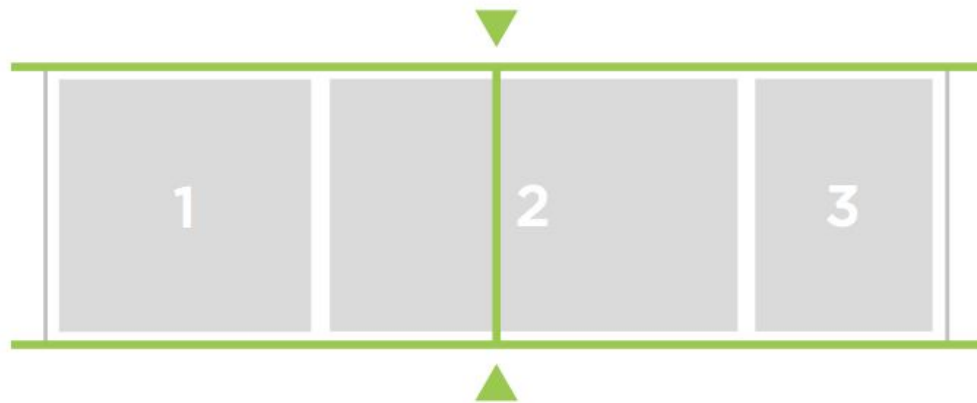
# Cross Start



## Cross End



# Cross Size



# Examples

Flexbox in action

# Resources

[Flexbox cheatsheet](#)

[Flexfroggy](#)

[Some real-world examples](#)

[More real-world examples](#)

Also don't miss the [bugs](#), [grids](#) and a [nice gallery example](#)

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