A deep dive into Flexbox and Grid

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Screens, screens, screens

Image source: Inch Calculator

## Layout technique: float

<table>
<thead>
<tr>
<th>Item A</th>
<th>Item B</th>
<th>Item C</th>
</tr>
</thead>
</table>

.style_float_item {
  float: left;
  width: calc(100% / 3);
}
## Layout technique: inline-block

<table>
<thead>
<tr>
<th>Item A</th>
<th>Item B</th>
<th>Item C</th>
</tr>
</thead>
</table>

```css
.inline-block__item {
  display: inline-block;
  width: calc(100% / 3);
}
```
The parent-child relationship

Flex/Grid container

## Layout technique: flex

<table>
<thead>
<tr>
<th>A flex item</th>
<th>Another flex item</th>
<th>Flex items are also flex children</th>
</tr>
</thead>
</table>

*All direct children of the flex container become flex children*

```css
.flexbox {
  display: flex;
}
```

Flex formatting context
Flexbox devtools

The **flex** property

```
flex: 0 1 auto;
```
Sizing in flexbox

View demo
Flex directions

View demo

No actual grid
Real two-dimensional awareness
Layout technique: **grid**

<table>
<thead>
<tr>
<th>Item A</th>
<th>Item B</th>
<th>Item C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item D</td>
<td>Item E</td>
<td>Item F</td>
</tr>
</tbody>
</table>

```css
.grid {
  display: grid;
  grid-template-columns: 1fr 1fr 1fr;
  grid-template-rows: 200px 200px;
}
```
A better way of building grids

View demo
The magic sauce

No, just kidding. It's just that alignment really ties it all together.
## Box alignment properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Axis</th>
<th>Aligns</th>
<th>Applies to</th>
</tr>
</thead>
<tbody>
<tr>
<td>justify-content</td>
<td>main/inline</td>
<td>content within element (effectively adjusts padding)</td>
<td>block containers, flex containers and grid containers</td>
</tr>
<tr>
<td>align-content</td>
<td>cross/block</td>
<td></td>
<td></td>
</tr>
<tr>
<td>justify-items</td>
<td>inline</td>
<td>items inside box (controls child items)</td>
<td>block containers and grid containers</td>
</tr>
<tr>
<td>align-items</td>
<td>cross/block</td>
<td></td>
<td>flex-containers and grid-containers</td>
</tr>
<tr>
<td>justify-self</td>
<td>inline</td>
<td>element within parent (effectively adjusts margins)</td>
<td>block-level boxes, absolutely-positioned boxes and grid</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>items</td>
</tr>
<tr>
<td>align-self</td>
<td>cross/block</td>
<td></td>
<td>absolutely-positioned boxes, flex items and grid items</td>
</tr>
</tbody>
</table>
Can we put it all together?

View demo
Thank you!

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