



CSS GRID LAYOUT

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Front-End Design Meetup / Tampa Bay UX Meetup

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AGENDA

- ▶ Intro
- ▶ CSS Grid Layout — what is it?
- ▶ CSS Grid browser support
- ▶ The basics of using CSS Grid
- ▶ CSS Grid & Flexbox together
- ▶ CSS Grid for a basic layout
- ▶ CSS Grid for an advanced layout
- ▶ Moving to CSS Grid (approaches and troubleshooting)
- ▶ Resources & more examples
- ▶ Q&A time

WHO ARE YOU & WHY SHOULD I LISTEN TO YOU?

▶ UX

- Research, strategy, sketches, wireframes, white boarding, paper prototyping, information architecture, content planning, flow diagrams, usability, user testing, accessibility

▶ UI

- Photoshop (Artboards & Generator), Adobe XD, Illustrator, InDesign, Acrobat, Sketch, branding, print

▶ Front End Design & Development

- HTML, CSS, JS, jQuery, Node, ReactJS, Gulp, Webpack, style guides, linting, SonarQube, Selenium & functional testing, browser testing, WordPress/Sitefinity/other CMS's, MVC .NET, PHP, MySQL, SQL, Git

▶ Agile & Scrum

▶ Mentor to 3 other Interface teammates and many more developers

CSS GRID LAYOUT — WHAT IS IT?

▶ CSS Grid Layout / CSS Grid / Grid

- Two-dimensional: Think rows **and** columns
- Sometimes three-dimensional by handling overlapping items (z-index)

▶ vs. Flexbox

- One-dimensional: Think rows **or** columns (flex-direction)
- Focus on space distribution (grow, shrink, basis) and alignment (margin auto)

▶ Not a ___ killer (flexbox, float, absolute positioning, inline-block, table, etc.)

▶ W3C Spec

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

CSS GRID BROWSER SUPPORT

- ▶ As of March 2017, the most modern browsers support it (65%+)

- ▶ Desktop

- Chrome, Firefox, Edge 16+, Safari, Opera

- ▶ Mobile

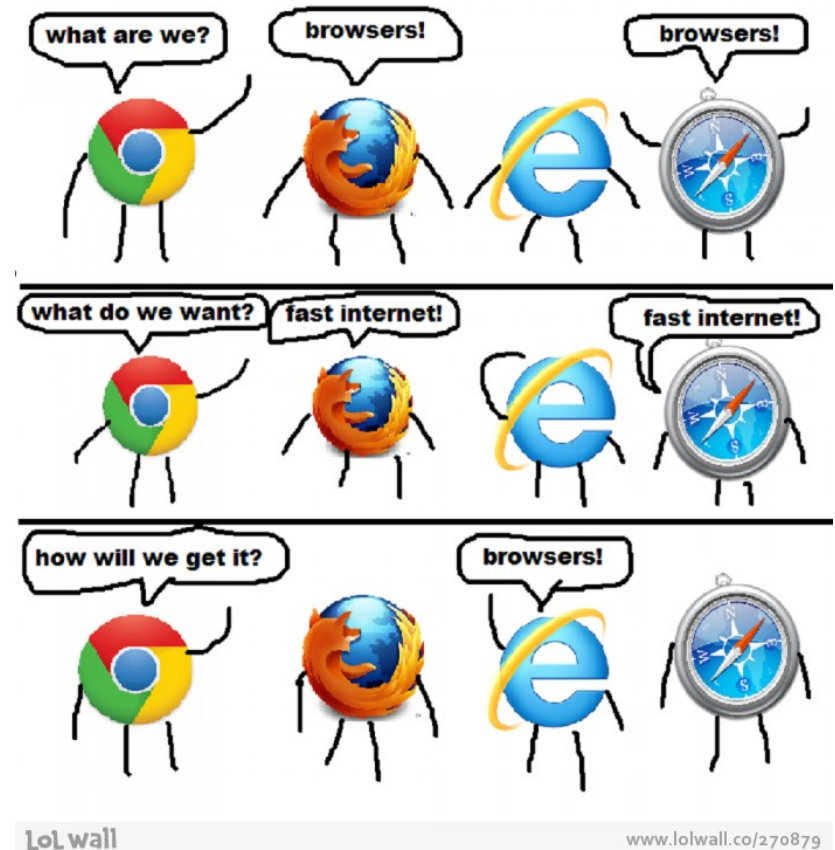
- Safari, Chrome, Android, Android Firefox

- ▶ Missing

- [IE11](#) (older, outdated version of spec)
 - Edge 15 and older
 - Opera Mini

- ▶ Can I Use: [CSS Grid](#) / [CSS Supports](#)

- ▶ [CSS Grid Polyfill](#)



CSS GRID BASICS

▶ Parent (Grid Container)

- display: grid (also inline-grid or subgrid)
- Grid-template (grid-template-columns, grid-template-rows, grid-template-areas)
- Grid-gap (gutter)
- New unit: fr (fraction of free space; 1fr = 1 part of the available space)
- Some familiar properties: justify-items, justify-content, align-items, and align-content

▶ Children (Grid Items)

- Grid-area
- Grid-column
- Grid-row
- Some familiar properties: order, justify-self, align-self

CSS GRID BASICS (CONTINUED)

► Example #1

- <https://codepen.io/mercuryworks/pen/gRjreP?editors=0010>
- <https://codepen.io/mercuryworks/pen/wexNjW?editors=0010> (Shorthand)
- <https://codepen.io/mercuryworks/pen/BZPvxb?editors=0100> (Flexbox)
- Grid Gap: <https://alligator.io/css/grid-gap/>

CSS GRID & FLEXBOX TOGETHER

► Example #2

- <https://codepen.io/mercuryworks/pen/VWGyMM?editors=0100>
- Repeat: <https://alligator.io/css/css-grid-layout-repeat-notation/>
- Minmax: <https://alligator.io/css/css-grid-layout-minmax-function/>

CSS GRID BASIC SKELETON LAYOUT

▶ Example #3

- <https://codepen.io/mercuryworks/pen/VWBqdx?editors=1000>
- <https://codepen.io/mercuryworks/pen/yXqwzR?editors=0100> (Nested grids)

CSS GRID ADVANCED SKELETON LAYOUT

► Example #4

- <https://codepen.io/mercuryworks/pen/owMOwG?editors=1000> (Flexbox only)
- <https://codepen.io/mercuryworks/pen/MoBdPr?editors=0100> (Grid)
- <https://codepen.io/mercuryworks/pen/wexLqP?editors=0100> (Fixed header)
- <https://codepen.io/mercuryworks/pen/JJBQgK?editors=0100> (Related)

MOVING TO CSS GRID

► Practical Applications

- Skeleton (header, main, sidebar, footer)
- Templates (lists)

► Troubleshooting

- Whiteboard or sketch out your grid

► Debugging

- <https://hacks.mozilla.org/2017/06/new-css-grid-layout-panel-in-firefox-nightly/>

► Replacing An Existing Grid System

- Use @supports (<http://caniuse.com/#feat=css-featurequeries>)
- <https://hacks.mozilla.org/2017/04/replace-bootstrap-layouts-with-css-grid/>
- Do you really want to do this?



PARTING WORDS

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- ▶ More about Mercury: <http://www.mercurynewmedia.com/>
- ▶ Join me at Mercury: <http://www.mercurynewmedia.com/careers>
 - [Senior Interface Designer](#)
 - [Account Manager](#)
 - [Senior .NET Application Developer](#)
 - [DevOps Engineer](#)
- ▶ Mercury's Twitter: [@mercurynewmedia](https://twitter.com/mercurynewmedia)
- ▶ Mercury's Blog: <http://www.mercurynewmedia.com/blog>

REFERENCES & MORE EXAMPLES

- ▶ [CSS-Tricks: A Complete Guide To Grid](#)
- ▶ [CSS-Tricks: Does CSS Grid Replace Flexbox?](#)
- ▶ [CSS Tricks: CSS Grid SASS Mixins](#)
- ▶ [CSS Tricks: Explicit and Implicit Grids](#)
- ▶ [CSS Tricks: Interesting CSS Grid Facts](#)
- ▶ [Codrops CSS Reference: Grid](#)
- ▶ [Sitepoint: An Introduction to the CSS Grid Layout Module](#)
- ▶ [Smashing Magazine: Building Production-Ready CSS Grid Layouts Today](#)
- ▶ [A Book Apart: Get Ready For CSS Grid Layout](#)
- ▶ [A List Apart: Practical CSS Grid: Adding Grid to an Existing Design](#)
- ▶ [Mozilla Developer Network \(MDN\): CSS Grid Layout](#)

REFERENCES & MORE EXAMPLES

- ▶ [Grid By Example](#)
- ▶ [CSS Grid Polyfill](#)
- ▶ [CSS Grid Cheat Sheet](#)
- ▶ [Griddy.io](#)
- ▶ [Grid Bugs](#)
- ▶ [CSS Grid Polyfill](#)
- ▶ [Should I try to use the IE implementation of CSS Grid Layout?](#)

QUESTIONS?

