

Responsive Layout & Grid



Placing things exactly where you want them with the **12 Column Grid**

Objectives

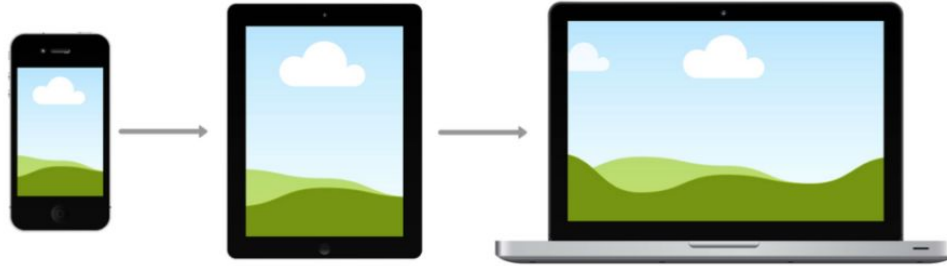
Teacher Talk

Tutorial Work Time

1. Explain what “responsive grids” are and front-end engineers use them.
2. Be able to deploy the most common multi-column responsive grid pattern.

Mobile First Design

Mobile First Design Approach



MOBILE FIRST DESIGN



Why Do Mobile First Design?

- 1.

Why Do Mobile First Design?

1. Most web traffic will be from mobile devices
2. Easier than desktop-first design
3. Simplifies design choices

Responsive Grid Layouts



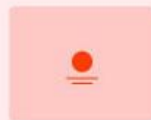
Split-screen

Create a split-screen layout in seconds.



Sidebar

Stick your sidebar in place alongside scrolling content.



Centering

Vertically center content with a couple clicks.



Equal-height modules

No matter how many Really Long Headlines you write.



Sticky footer

Keep your footer in its place — at the bottom of the page.



Hero cover

Create a fullscreen hero cover page.



Collection grid

Highlight a key element in a collection or gallery.



Feature lists

Bang out those ubiquitous feature list designs in no time.



Holy grail

Create a fully responsive layout with a header, footer, and a 3-column body.



Fluid grid

Build a beautifully reflowing grid in a matter of minutes.



Pricing table

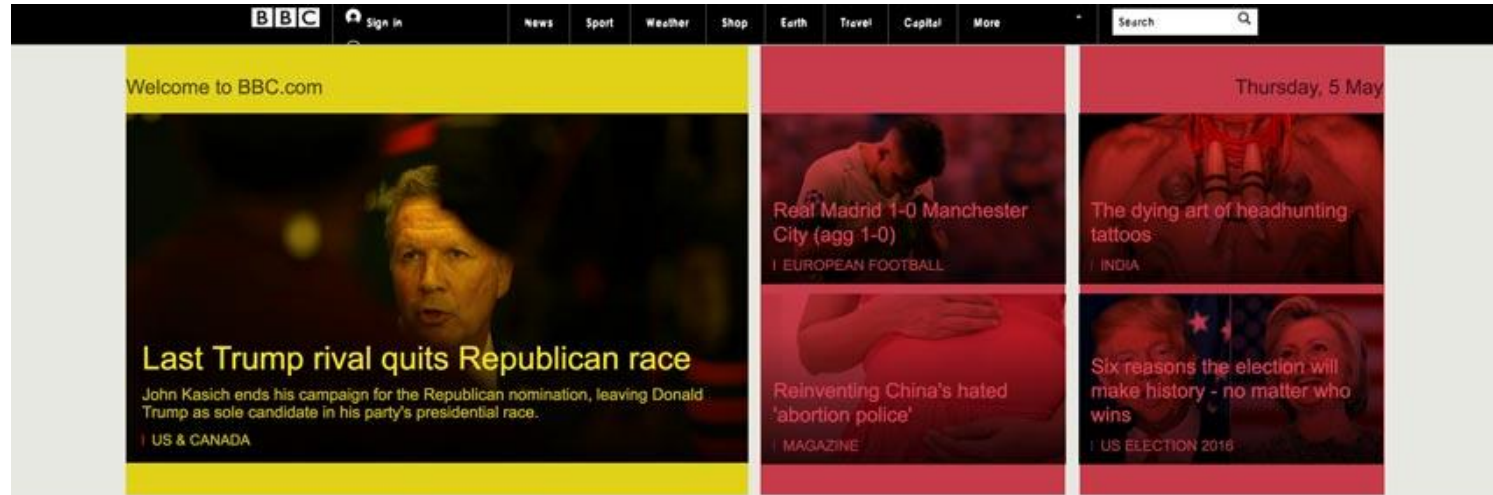
Build a pricing table. Without using any tables.



Simple grids

Easily create a beautiful grid to guide your designs.

Responsive 12 Column Grid



News



Canada wildfire threatens entire city

A "catastrophic" wildfire that has forced the evacuation of all 88,000 people from Fort McMurray could destroy



Addiction doctor made Prince 911 call

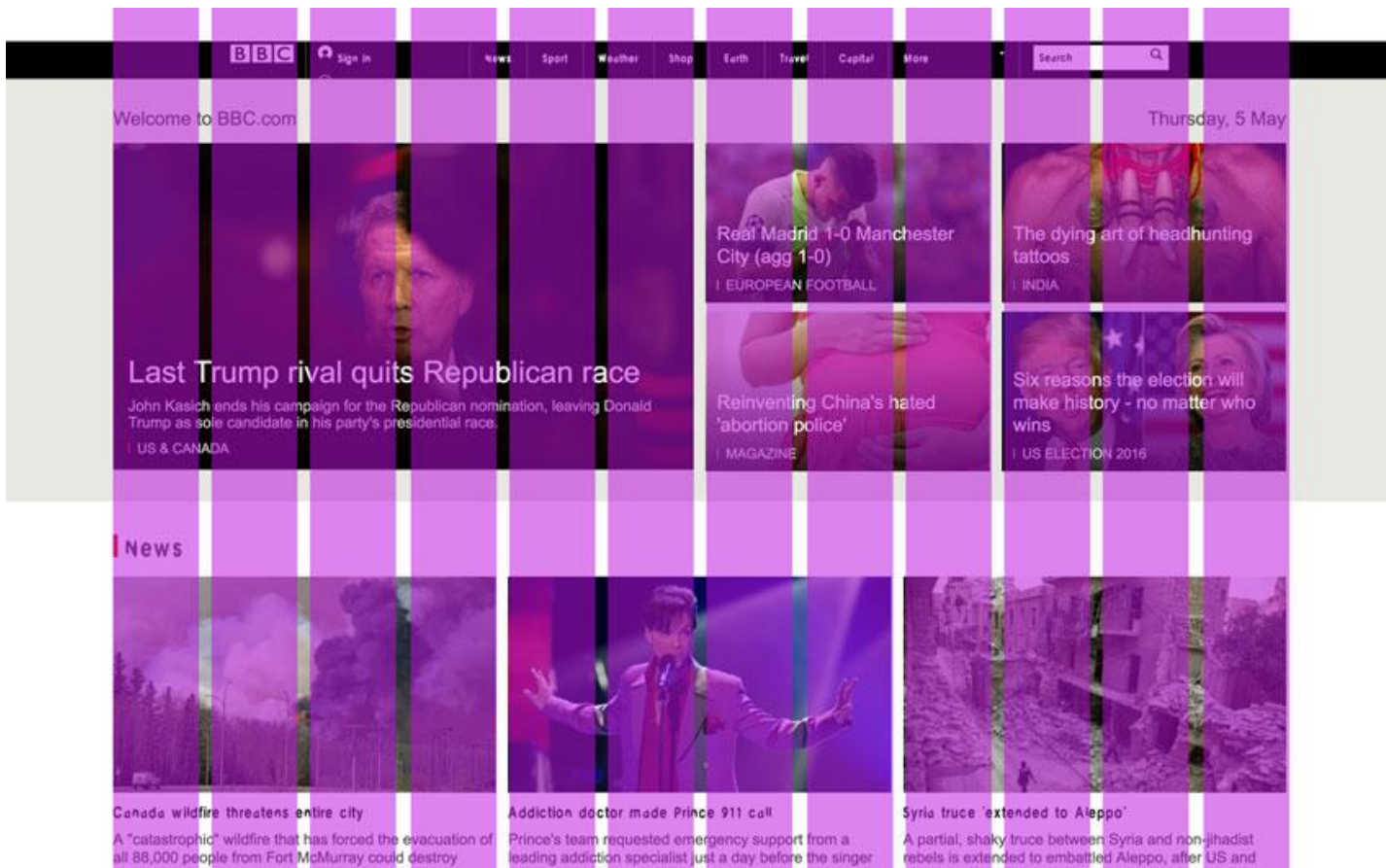
Prince's team requested emergency support from a leading addiction specialist just a day before the singer



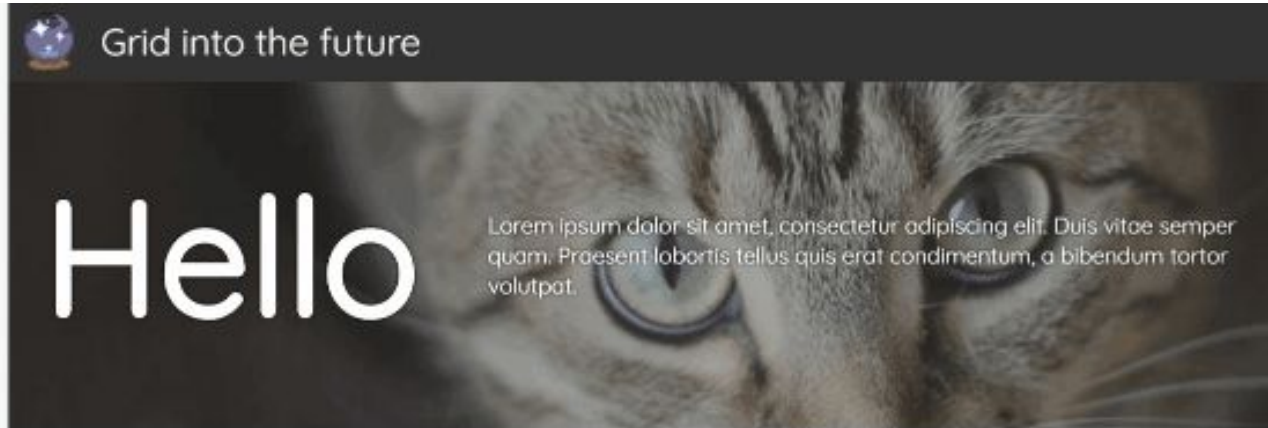
Syria truce 'extended to Aleppo'

A partial, shaky truce between Syria and non-jihadist rebels is extended to embattled Aleppo, after US and

Responsive 12 Column Grid



Responsive 12 Column Grid



Pricing

Quickly build an effective pricing table for your potential customers with this Bootstrap example. It's built with default Bootstrap components and utilities with little customization.

Free	Pro	Enterprise
\$0 / mo 10 users included 2 GB of storage Email support Help center access Sign up for free	\$15 / mo 20 users included 10 GB of storage Priority email support Help center access Get started	\$29 / mo 30 users included 15 GB of storage Phone and email support Help center access Contact us



Features

Cool stuff
Random feature
Team feature

Resources

Resource
Resource name
Another resource

About

Team
Locations
Privacy

Pricing

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10 GB of storage
Priority email support
Help center access

[Get started](#)

Enterprise

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class="container"



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class="col-md-4"

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Bootstrap Responsive Grid Utility Classes

container = defines side gutters that disappear responsively.

row = defines a row in the grid

col-*-12 = defines a column that takes up 12 units of the 12 column grid

col-*-4 = defines a column that takes up 4 units of the 12 column grid

offset-*-2 = offsets a column by 2 units

col-4 = Extra Small (portrait phone)

col-sm-4 = Small (landscape phone)

col-md-4 = Medium (tablet screen)

col-lg-4 = Large (desktop browser)

col-xl-4 = X-Large (monitor browser)

Conditionally apply styles based on browser window size.

```
@media (min-width: 576px) {  
  .container {  
    max-width: 540px;  
  }  
}
```

Bootstrap’s “.container” Queries

Bootstrap Responsive Grid Utility Classes

E.g. col-md-4

col/offset — Column or Offset

sm/md/lg/xl/xxl — minimum size of window

1-12 — number of columns (out of 12 total columns)

col-8	8 column out of 12 on all sizes
col-sm-2	2 columns on a window larger than portrait mobile
offset-md-6	6 column offset on a window larger than landscape mobile/portrait tablet
col-lg-4	4 columns on a window larger than landscape tablet
offset-xl-2	2 column offset (from the left) on a window larger than desktop

.container

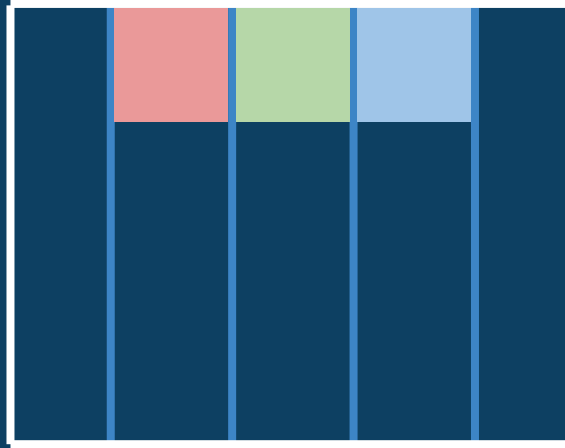
.row

.col-lg-4

.col-lg-4

.col-lg-4

Desktop



Three columns

**Tablet/
Mobile**



One column

Responsive Grid Demo

10 min

1. container
2. row
3. col-*-4
4. offset-*-3 col-*-6
5. Nested grid elements

Grid Challenges

15 min

*Fill each container with lorem ipsum text

Make a container row with:

1. 6 columns on a desktop browser
2. 2 columns on a portrait mobile browser
3. 2 columns in the middle half of a container on a 5-7 column ratio and split the col-7 in half

Homework

- Clone Webpage