

CSS Layout 2

CISC-2350-R01 | Fall 2017 | Week 10-1

Ruta Kruliauskaite

Today's Agenda

- Attendance
- Review: CSS Positioning
- Homework show & tell
- More positioning examples
- CSS grids
- Web review presentations
- Homework Assignment

Review: CSS Positioning

Normal flow

Normal is the default flow, each block element begins on a new line, causing each item to appear lower down the page than the previous one.

```
body {  
  font-family: 'Proxima Nova', sans-serif;  
  letter-spacing: .075em;  
  width: 800px;  
  padding: 50px;  
  background: #efefef;  
  
  /*use this to center content*/  
  margin: 0 auto;  
}
```

Example

CSS Positioning: Normal Flow

This is a block-level element.

This is a block-level element.

This is a block-level element.

Relative positioning

Relative positioning is based on its parent element, doesn't affect the positioning of other elements. It moves an element from the position it would be in normal flow, shifting it to the top, right, bottom, or left of where it would have been placed.

```
.relative {  
  position: relative;  
  background: yellow;  
  color: black;  
  left: 50px;  
  top: 50px;  
}
```

Example

Relative Positioning

This is a block-level element.

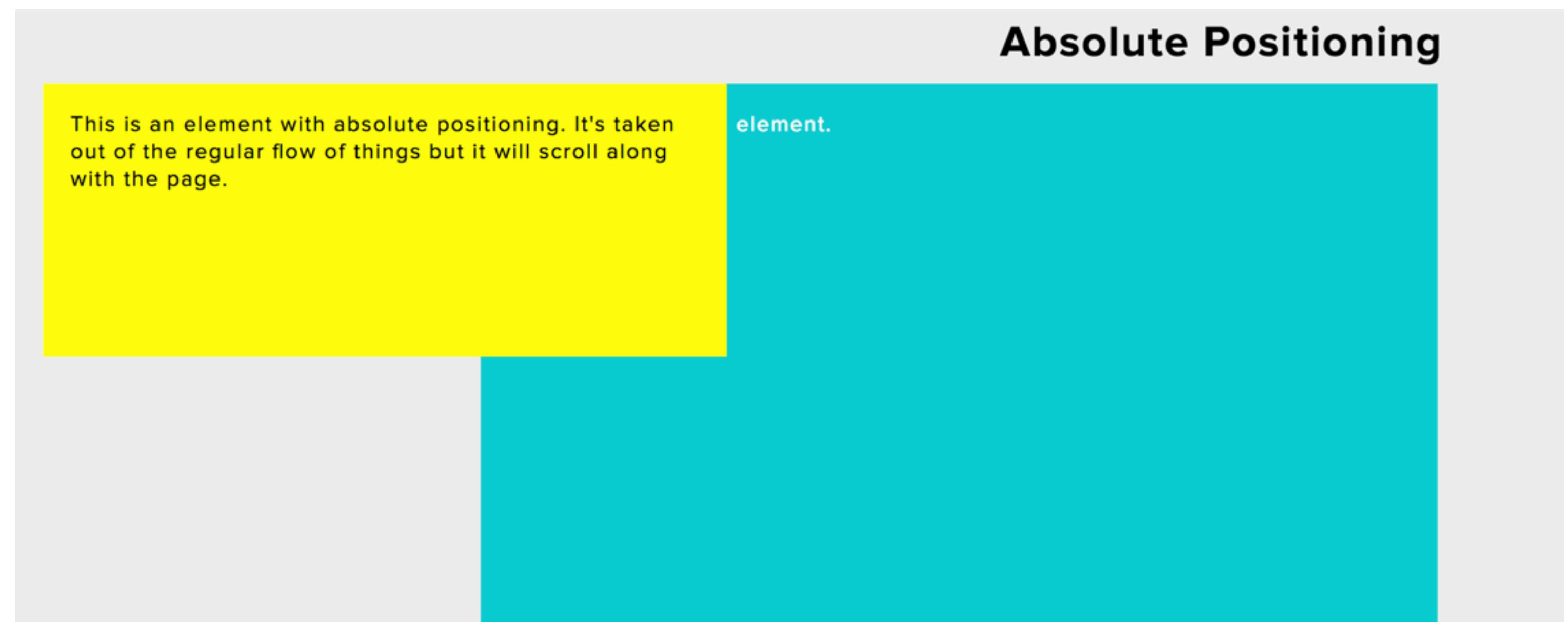
This is an element with relative position.

This

Absolute positioning

Absolute positioning positions the element in relation to its containing element. It doesn't depend on any other elements and scrolls with the page.

```
.absolute {  
  position: absolute;  
  background: yellow;  
  color: black;  
  height: 200px;  
  width: 500px;  
  left: 50px;  
  top: 50px;  
}
```

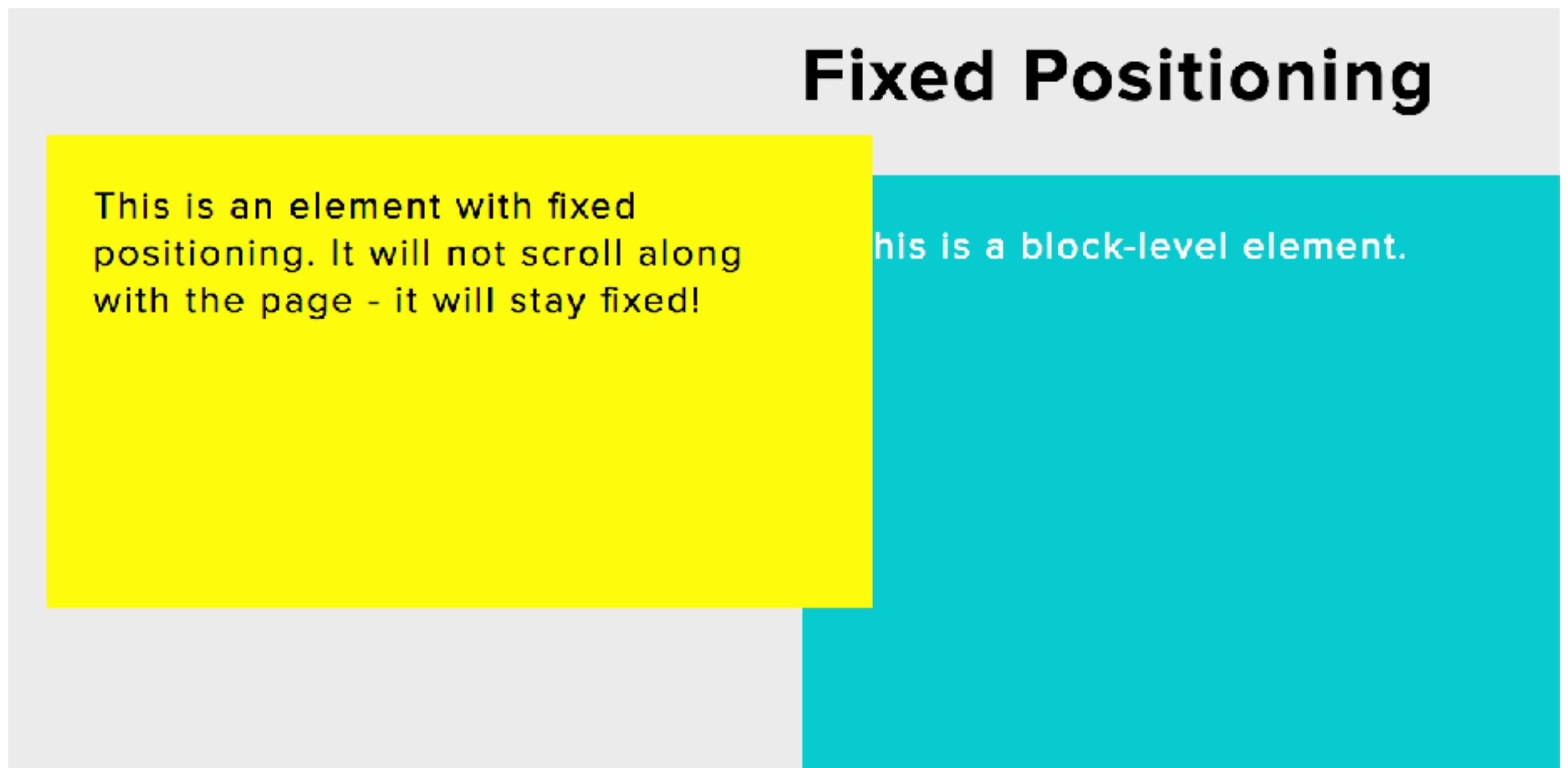


Example

Fixed positioning

Fixed doesn't depend on any other elements but doesn't scroll with a page (i.e. a footer). It positions the element in relation to the browser window: when a user scrolls down the page, it stays in the exact same place.

```
.fixed {  
  position: fixed;  
  background: yellow;  
  color: black;  
  height: 200px;  
  width: 350px;  
  left: 50px;  
  top: 50px;  
}
```



Example

CSS Positioning: Normal Flow

This is a block-level element.

This is a block-level element.

This is a block-level element.

Relative Positioning

This is a block-level element.

This is an element with relative position.

This

Absolute Positioning

This is an element with absolute position.

This is a block-level element.

This is a block-level element.

Fixed Positioning

This is an element with fixed position.

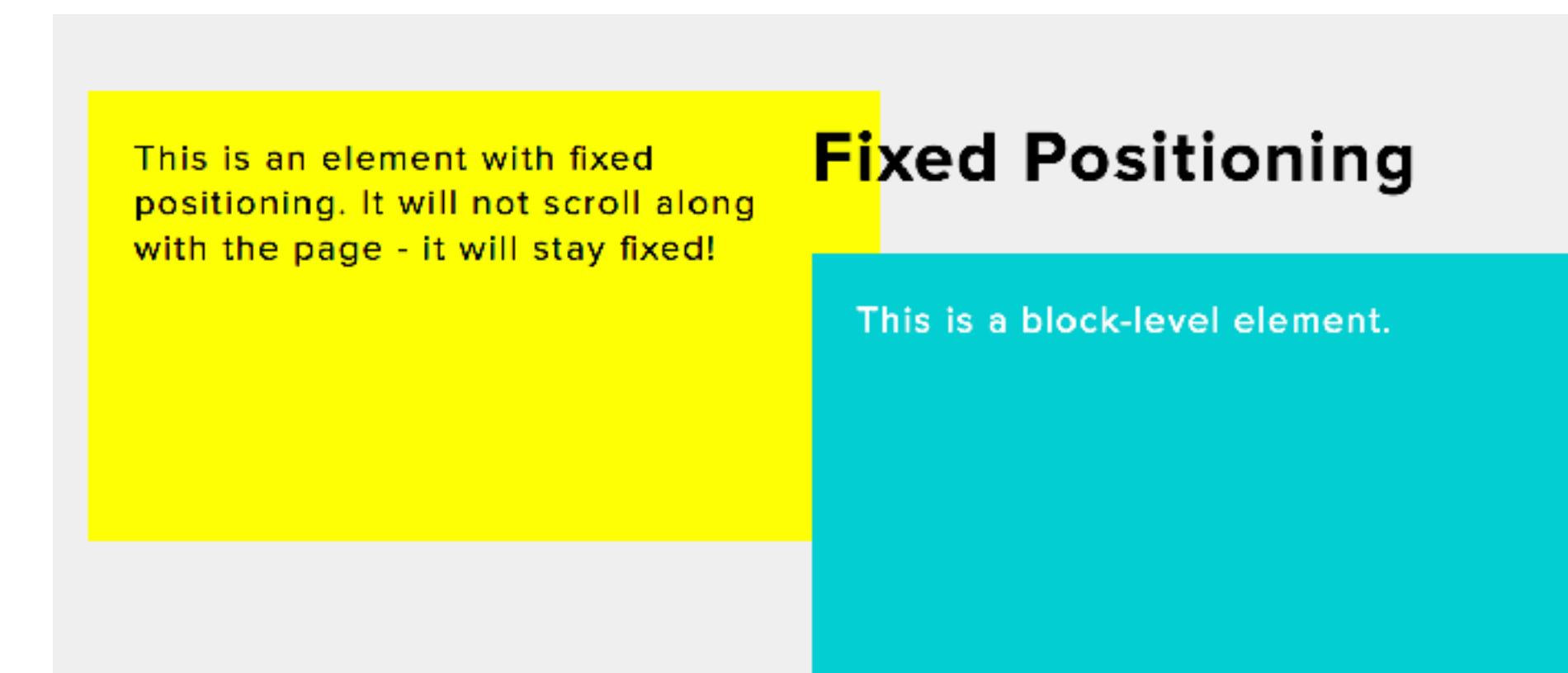
This is a block-level element.

Overlapping elements: z-index

When you use relative, fixed, or absolute positioning, boxes can overlap.

If so, the elements that appear later in the HTML code sit on top of those that are earlier in the page.

You can use z-index to control which of the elements will sit on top of a few elements overlapping (works only on positioned elements). The element that has the greater z-index will be on the top.



Example

Floating elements

- The *float* property lets you take an element in normal flow and place it as far to the left or right of the containing element as possible.
- Anything sitting inside the containing element will flow around the element floated.
- Make sure when you use the float property you use the width property to set how wide the floated element should be.

Float

```
nav {  
  float: right;  
  width: 25%;  
 /* Show how min width creates overlap */  
  min-width: 25%;  
  background-color: #efefef;  
  padding: 10px;  
  list-style-type: none;  
}
```

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Nav Item 1
Nav Item 2
Nav Item 3

Example

Float to place elements side by side

Float property is also used to create a layout where boxes are placed next to each other.

```
/*styling each section div*/
section {
    padding: 40px;
    width: 400px;
    float: left;
    margin: 10px;
    min-height: 600px;
}
```

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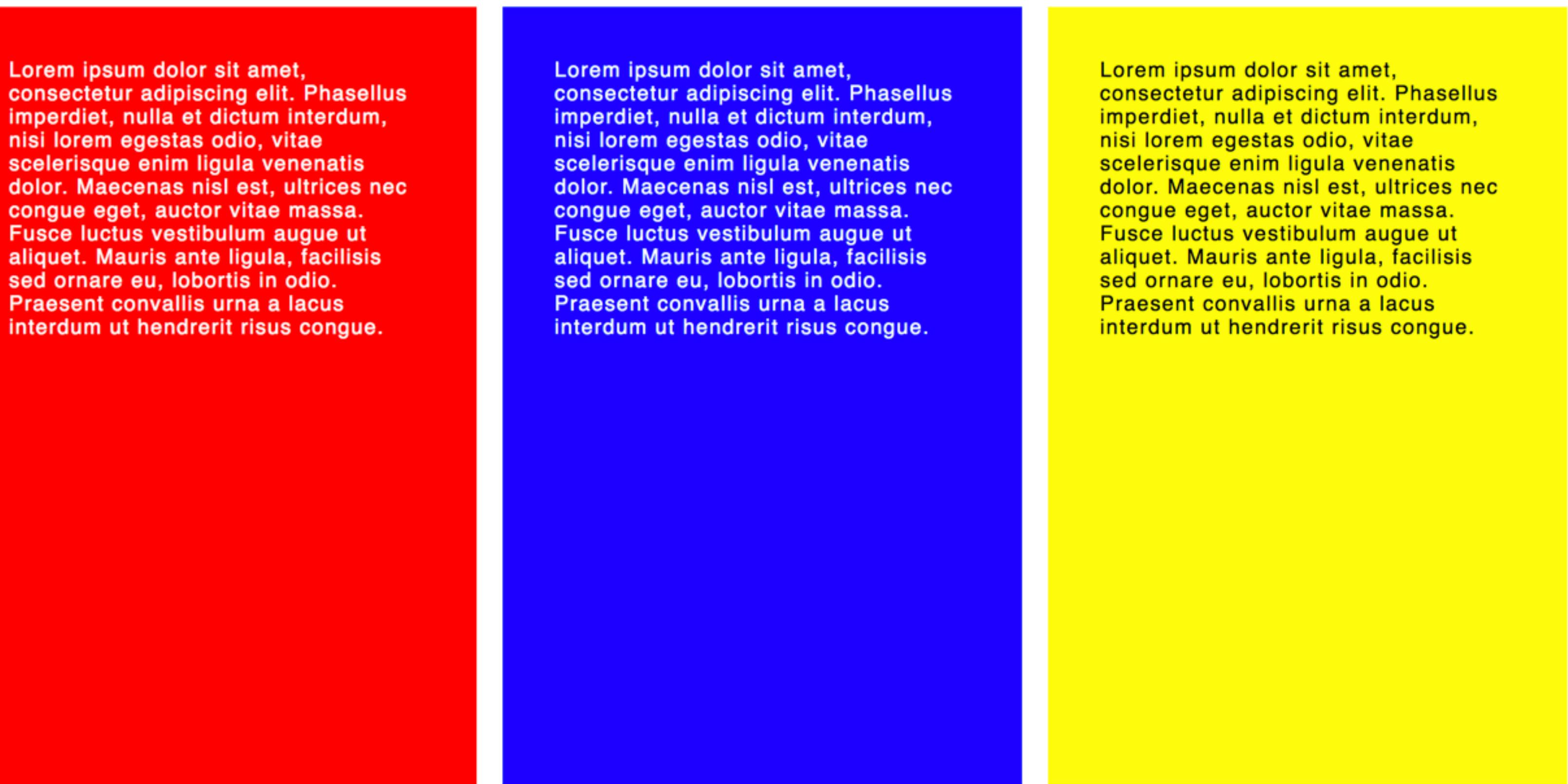
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Example

Using “clear” with float

The ***clear*** property allows you to say that no element (within the same containing element) should float the left or right- hand sides of a box. It can take the values: *left, right, both, none*

```
blockquote {  
background-color: grey;  
clear: left;  
}
```



Example

"This machine kills fascists." - Woodie Guthrie

Questions?

CSS Layout Resources

MDN

https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS_layout

https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS_layout/Positioning

CSS Layout Chapters and Reference

<http://book.mixu.net/css/>

<http://book.mixu.net/css/reference.html>

CSS Page Layouts on Lynda

<https://www.lynda.com/Web-Interactive-CSS-training/CSS-Page-Layouts/86003-2.html>

CSS-Tricks for further resources

<https://css-tricks.com/guides/layout/>

Float Resources

<https://alistapart.com/article/css-floats-101>

<http://learnlayout.com/float.html>

<http://learnlayout.com/clear.html>

<http://learnlayout.com/clearfix.html>

<http://www.smashingmagazine.com/2007/05/01/css-float-theory-things-you-should-know/>

<https://css-tricks.com/all-about-floats/>

<http://css-tricks.com/the-how-and-why-of-clearing-floats/>

Homework show & tell

<http://bit.ly/2xzLHvt>

More positioning examples

Relative positioning: page header

A search bar containing the word "SEARCH" in a small, gray font.[Categories](#)[Deals](#)[Sign In](#)

My page content goes here.

Float: image

Simple float example



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Float: clearfix hack

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Grids

1. Screen sizes and resolution



iPhone 4

Size: 3.5 inches

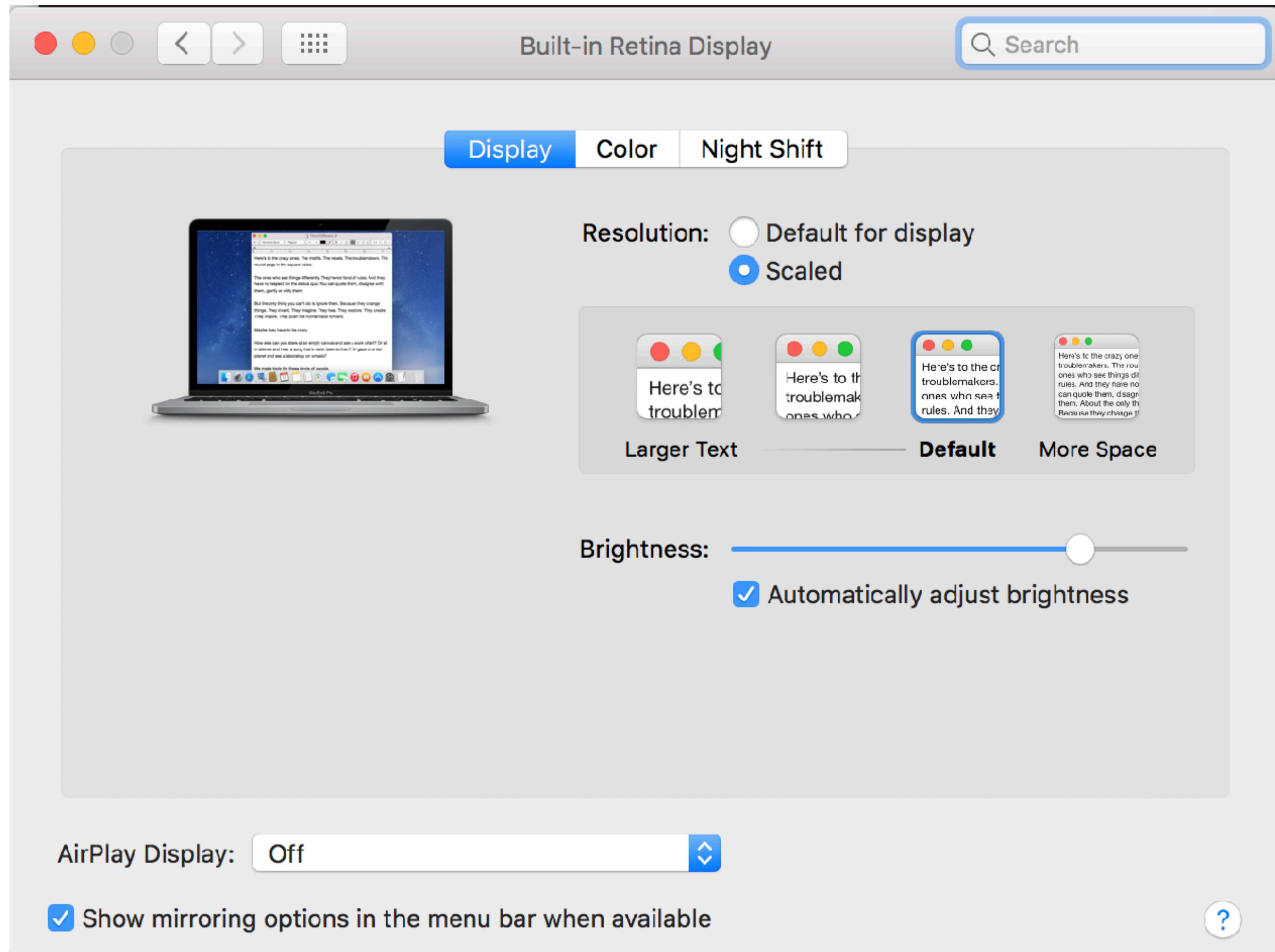
Resolution: 960 x 640 pixels



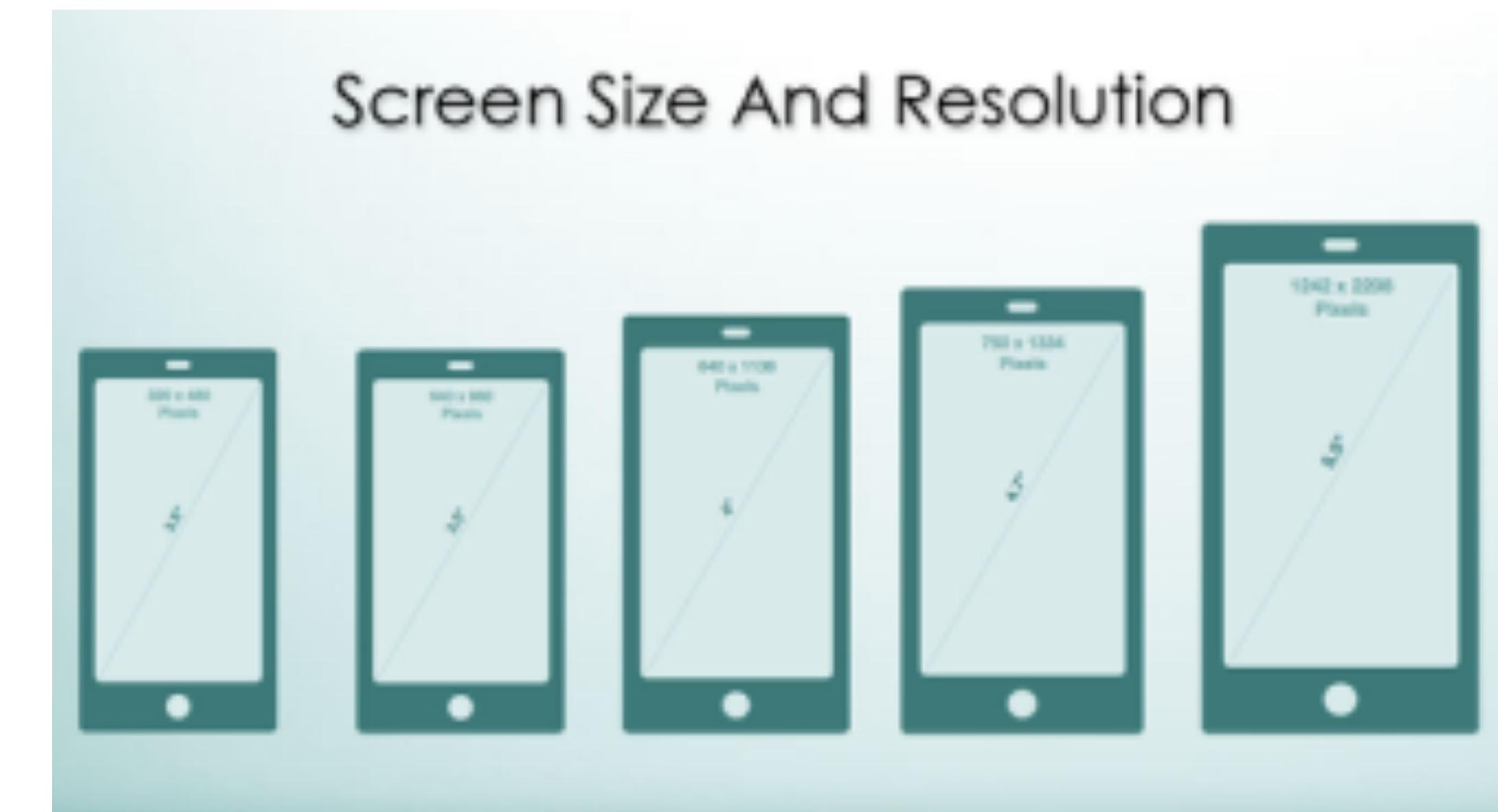
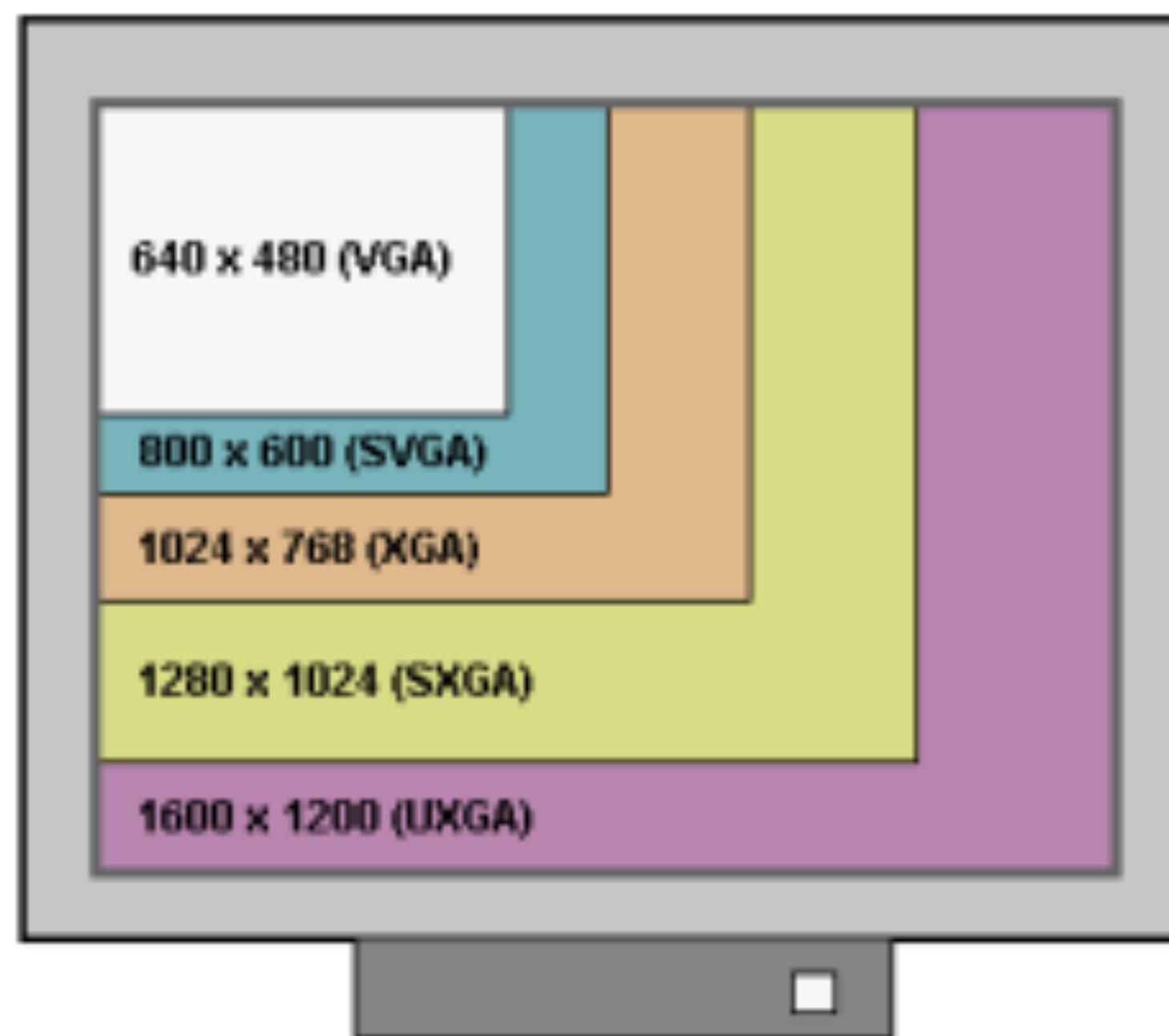
iPad 2

Size: 9.7 inches

Resolution: 1024 x 768 pixels



Web developers aim for 960-1000px width, and consider 600 pixels as ‘above the fold’.



1000 px

flickr from YAHOO!

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Share your life in photos

Sign up now
or login with your ID:

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Upload
More ways to get your photos online.
Multiple ways to upload your photos to Flickr—through the web, your mobile device, email or your favorite photo applications.

Discover
See what's going on in your world.
Keep up with your friends and share your stories with comments & notes. Add rich information like tags, locations & people.

Share
Your photos are everywhere you are.
Upload your photos once to Flickr, then easily and safely share them through Facebook, Twitter, email, blogs and more.

Sign up now

It takes less than a minute to create your free account & start sharing!
 Have a Google or Facebook account? You can use them to sign in!
[or learn more](#)

Community
Flickr is made of people.

Join one of over 10 million active groups to take part in the conversation, learn from our

Privacy
Your photos are safe with us.

Share photos only with the people you want to with our easy privacy settings. Flickr's multiple-

Flickr on the go
Mobile options to keep you going.

Flickr is always in your back pocket with apps for iPhone, Windows 7, and more. Or use

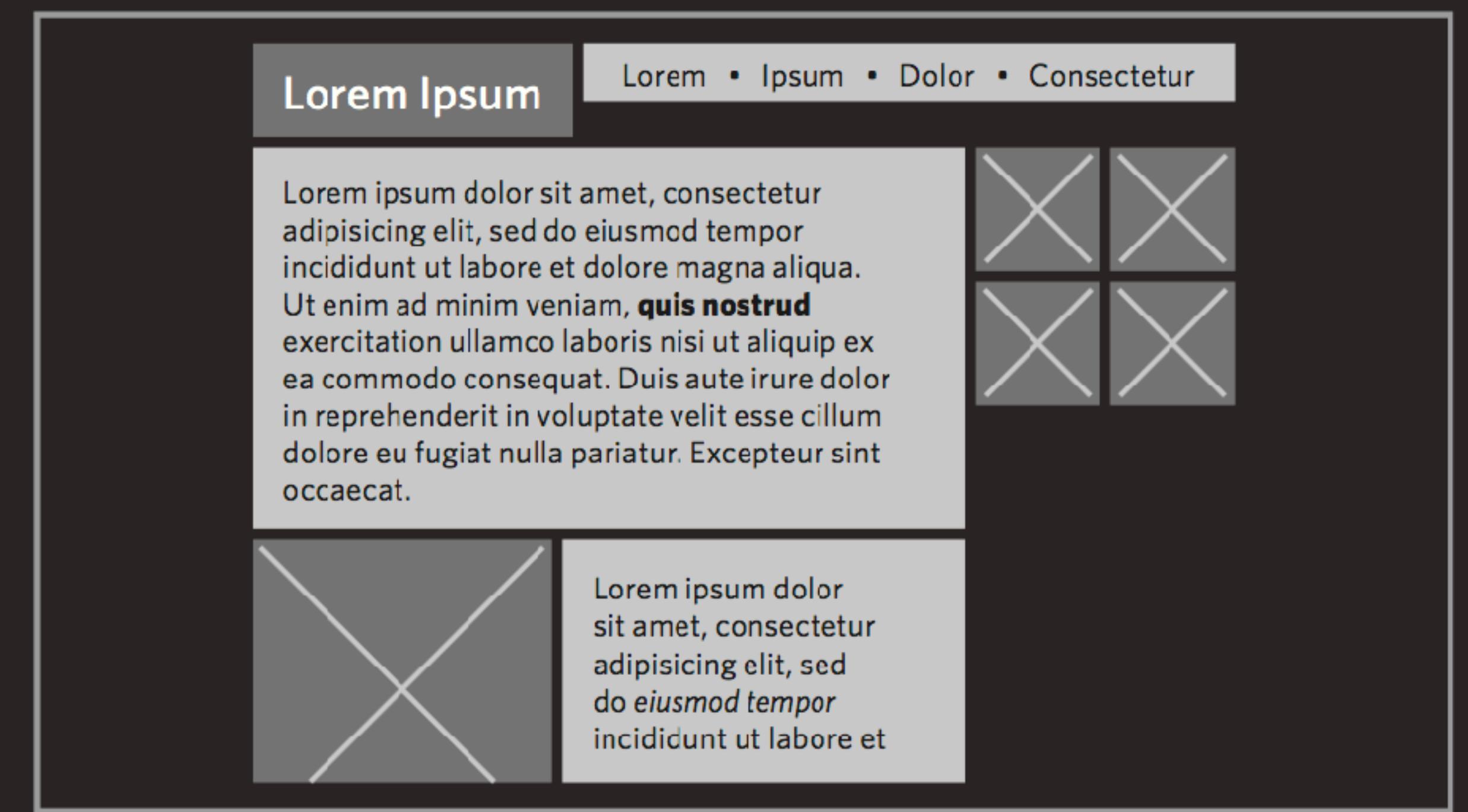
Fixed layouts

Gives greater control over the design

Usually measures all positioning in pixels (fixed)

Disadvantages: won't work for all screens as the sizes are different

Fixed width layout designs do not change size as the user increases or decreases the size of their browser window. Measurements tend to be given in pixels.



Liquid layouts

More tolerant to small screen sizes and user's font size changes
Usually positioned using percentages to fit the size of the screen

The image shows a website layout with a dark background. At the top, there is a navigation bar with the text "Lorem Ipsum" on the left and "Lorem • Ipsum • Dolor • Consectetur" on the right. Below the navigation bar, there is a large text block containing placeholder text in Latin. To the right of this text block is a graphic element consisting of four squares arranged in a 2x2 grid, each containing a large white 'X'. At the bottom of the page, there is another text block with placeholder text.

Liquid layout designs stretch and contract as the user increases or decreases the size of their browser window. They tend to use percentages.

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Editors' picks

Cannes 2011



Film Weekly from Cannes

Podcast: Jason Solomons meets Cannes festival president Gilles Jacob, Palme d'Or juror Mahamat-Saleh Haroun, electro-duo Air and our own Joe Cornish
[Post your comment](#)

Video: Space milkshake anyone?
Tilda Swinton: 'It's bloody having a child'
Diary: Will I ever leave Hotel Cannes-iforia?
[Full coverage: Cannes 2011](#)

Books



Sci-fi is no place for dabblers
Write about what you love, rather than what you have contempt for', says Iain M Banks
[165 comments](#)

Photography



Ng Han Guan
In pictures: Ng Han Guan is a Singaporean photographer based in Beijing. In this set of photographs he captures various facets of daily life

Stage



Pinter in a cell
Video: Can you make five plays by Harold Pinter into a piece of immersive theatre? Andrew Dickson found out

TV and radio



Last night's TV
Review: Inside the Human Body did more to make death less scary than any theologian
[21 comments](#)

Children's books



Mini heroes
[Your next box set](#)

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Composition in any visual art is the placement or arrangement of visual elements – how they are organized on a page.

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Editors' picks

Cannes 2011



Film Weekly from Cannes

Podcast: Jason Solomons meets Cannes festival president Gilles Jacob, Palme d'Or juror Mahamat-Saleh Haroun, electro-duo Air and our own Joe Cornish
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Grids

- Creates a continuity between different pages which may use different designs

Grids

- Creates a continuity between different pages which may use different designs
- **Helps users predict where to find information on various pages**

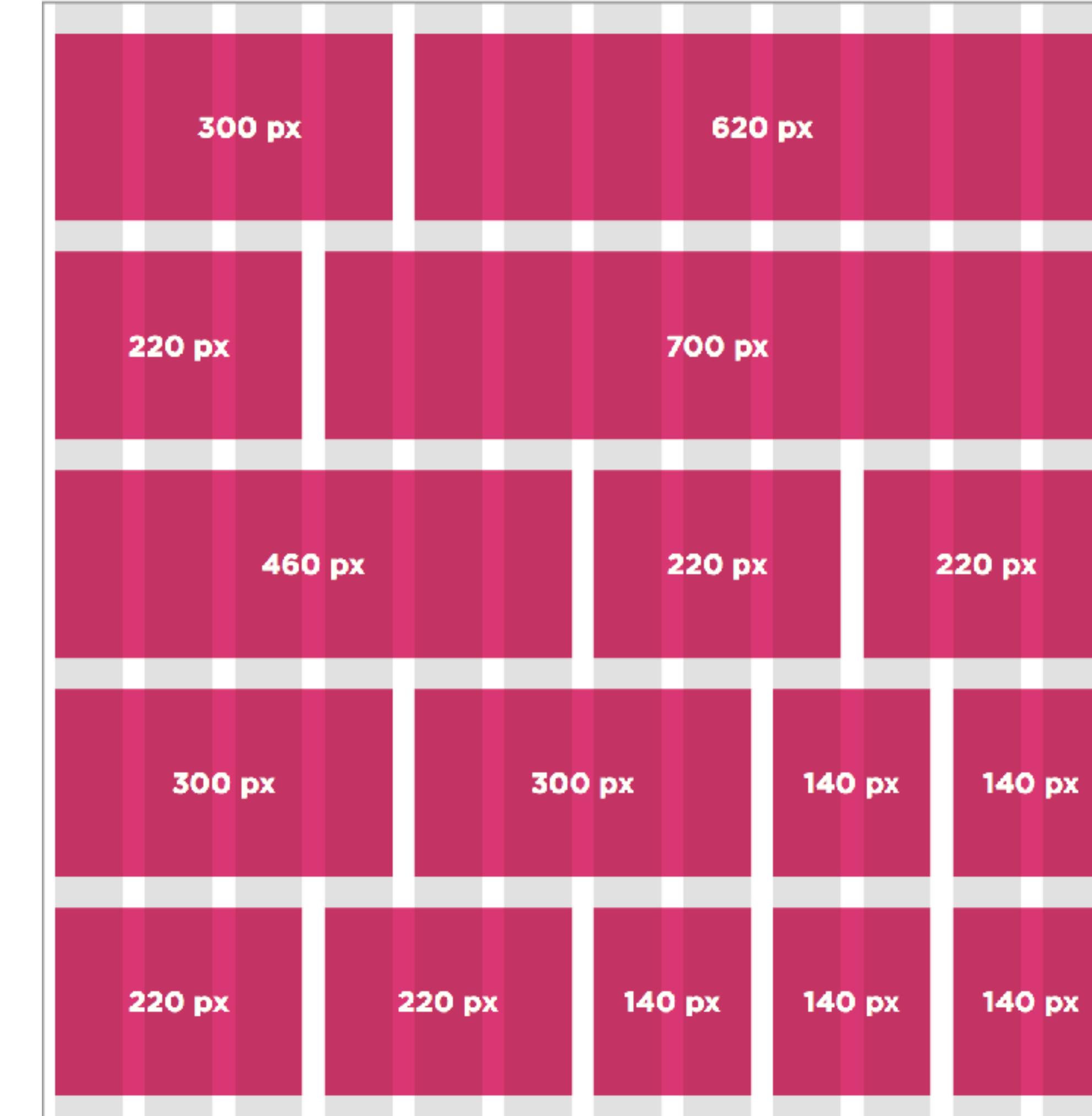
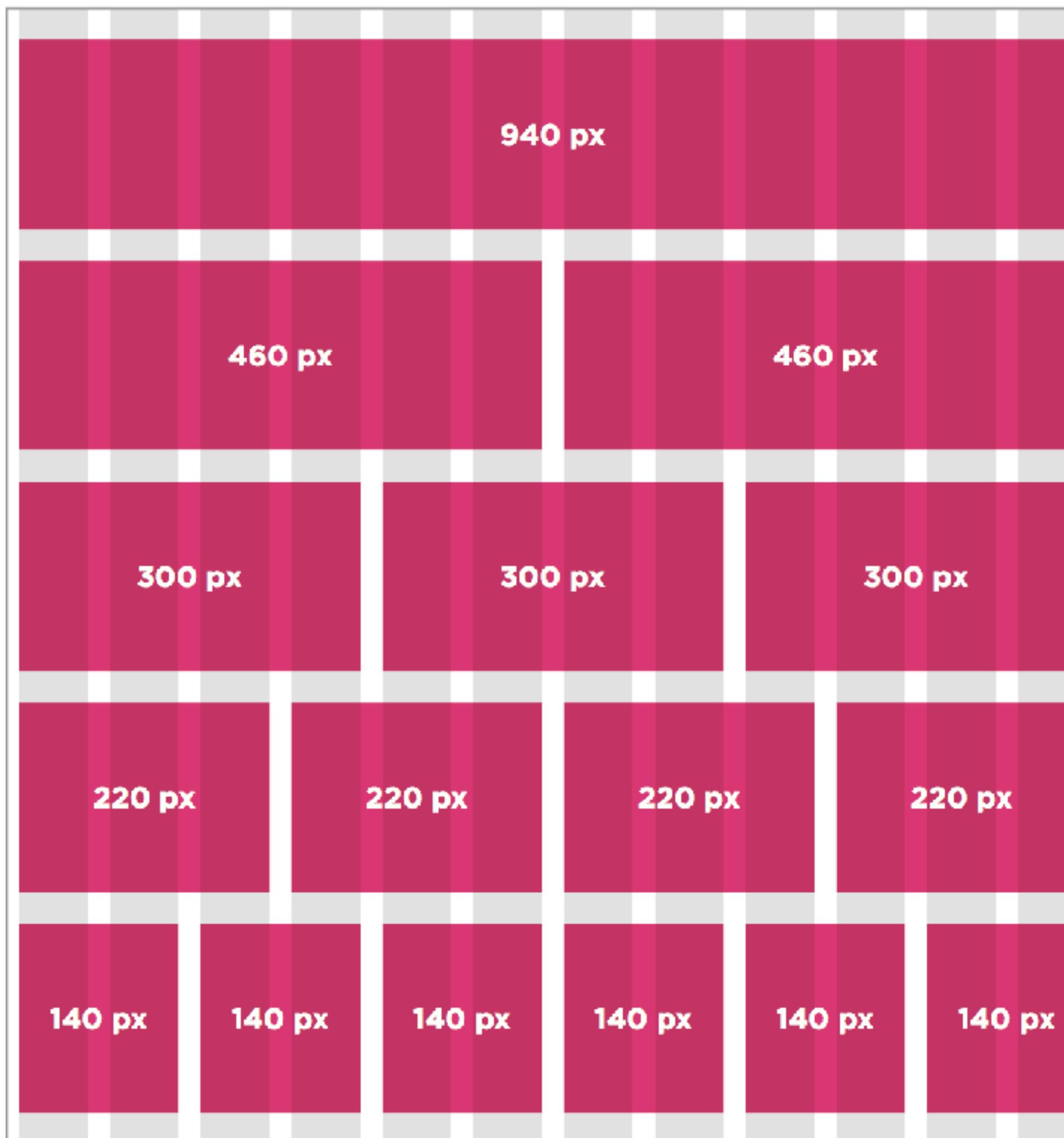
Grids

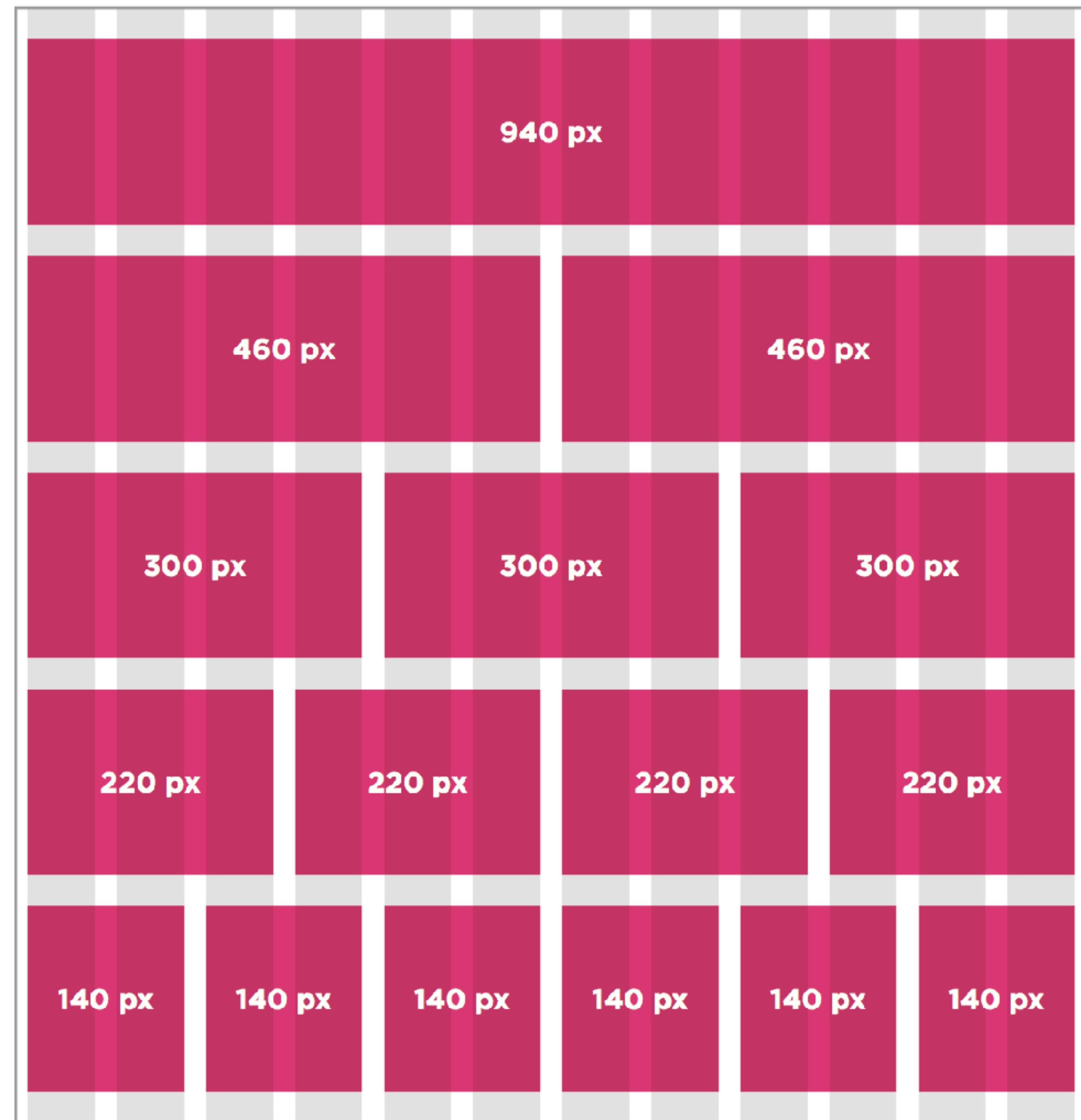
- Creates a continuity between different pages which may use different designs
- Helps users predict where to find information on various pages
- **Makes it easier to add new content to the site in a consistent way**

Grids

- Creates a continuity between different pages which may use different designs
- Helps users predict where to find information on various pages
- Makes it easier to add new content to the site in a consistent way
- **Helps people collaborate on the design of a site in a consistent way**

960 pixel wide 12 column grid





We can build grids from scratch but there are also a lot of CSS frameworks that we can use.

CSS Grid frameworks

- Skeleton
- Flexbox Grid
- Bootstrap (for responsive design)
- Top 21 best free CSS3 Frameworks
- 13 best responsive CSS grid systems

Today we'll talk about 960gs,
CSS framework for grids.

CSS Frameworks

- There are tons of frameworks that are essentially another stylesheet we add to our code (like our style.css)
- They aim to make common tasks in CSS easier
- We are going to use our first one, 960.gs to help with our grid
- To use:
 - Download the library
 - Put it in our CSS folder
 - Reference it in our HTML like we do with our style.css file

```
<href="css/960_12_col.css" type="text/css" link rel="stylesheet" />
```

960gs

- All frameworks will have their own classes that style content for us and indicates to the HTML how wide each section should be.
- Good frameworks help to take care of all scenarios on different browsers.
- Generally they have better documentation than 960.gs, but it's so simple we can check out their stylesheet for the options
- Let's focus on 12-grid system now, even though it could get bigger

960gs classes

container_12 -> Acts as a container for the whole page

grid_12 -> Create a block element that's 12 columns wide

grid_4 -> Create a block element that's 4 columns wide

...And every number between 1 & 12

Multiple stylesheets

- Our code isn't likely to get this big this semester, but eventually web developers split off their CSS into multiple files
- They may have one for fonts, another for positioning, etc
- Link to each other using the same method of linking all of them in your HTML head
- Or you can put them directly into your main style.css file, like how we imported fonts (keeping the code in your HTML a bit simpler)

```
@import url ("typography.css");  
@import url ("colors.css");
```

Example: basic grid with 960gs

Example: advanced grid with 960gs

Questions?

More resources on grids

- 960s documentation: <https://960.gs/>
- More on grids: https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Grid_Layout
- CSS layout tricks: <http://book.mixu.net/css/5-tricks.html>

Web review presentations: Claire & Hayden

Homework assignment

Homework

By Wednesday, October 25, 6pm

1. Read and review the following CSS documentation on grids:

- 960s documentation: <https://960.gs/>
- More on grids: https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Grid_Layout
- CSS layout tricks: <http://book.mixu.net/css/5-tricks.html>

2. Make a single HTML that includes (think of it as an Instagram page):

1. Menu bar (logo + navigation bar) - use relative positioning to position them
2. 12 images (use 960gs grid system to nicely position them)
 1. make sure height for all images is the same - use editing tools to make sure it happens
3. Use other CSS properties, so it looks pretty
4. Upload your code to a new folder on Github and post two links on #general channel on Slack:
 - Link to your project's repository (folder)
 - Working link to the Github page (yourusername.github.io/path to folder)