

Hands-on Responsive Web Design 2: Responsive Images and Sliders

INTRODUCTION



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Agenda



Audience & Prerequisites

Archaeology Template

Browsers and Devices

Page Size

CSS Pixels & Dots of Light



Target Audience & Prerequisites

Using Multiple Images

HTML5/CSS3

Pixel Density

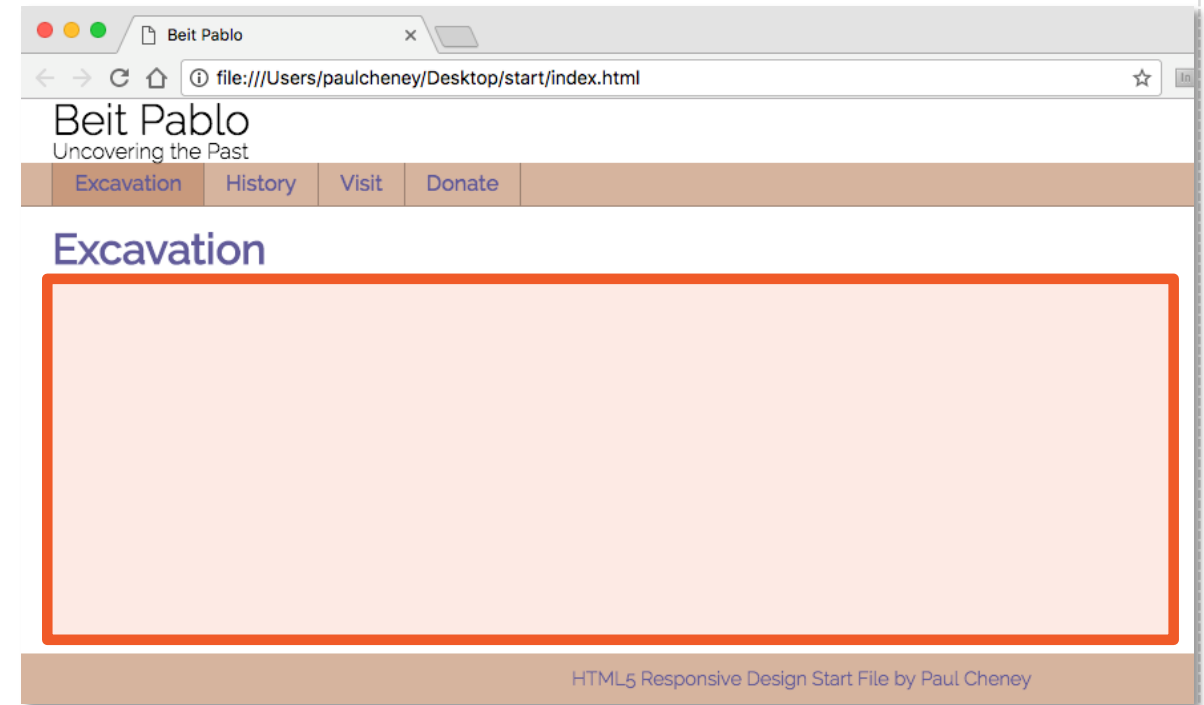
Photoshop

Pixel Density Images

Mobile Devices



Template



SASS



Browsers and Devices

Smart

iPhone 6

iPad

Chrome

Firefox

Safari

Opera

Internet Explorer 10 (sometimes)

Dumb

iPhone 4

Old Android Tablet

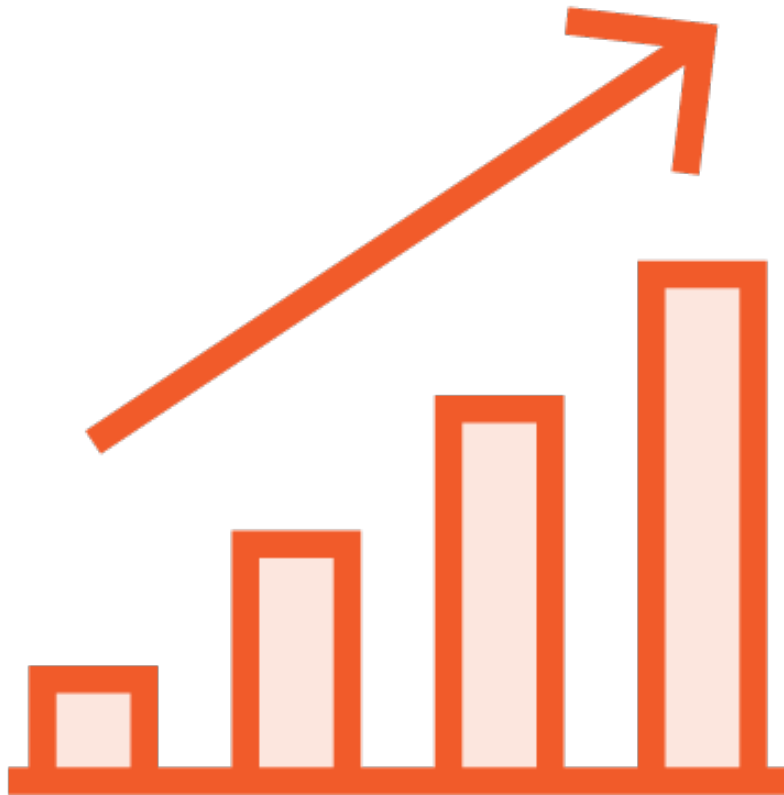
Internet Explorer 7, 8, 9, 10

iPad 1st generation

graceful
degradation



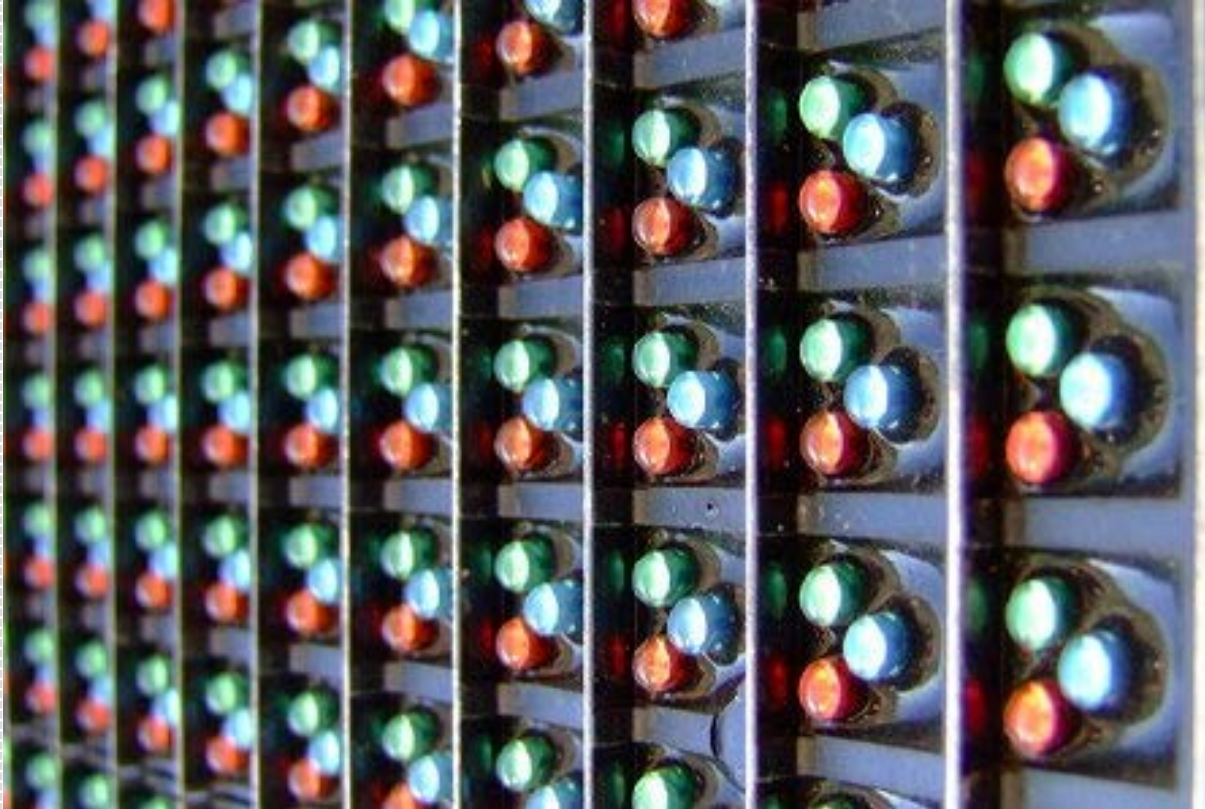
Page Size



500k



CSS Pixels & Dots of Light



CSS Pixels

Screen Width

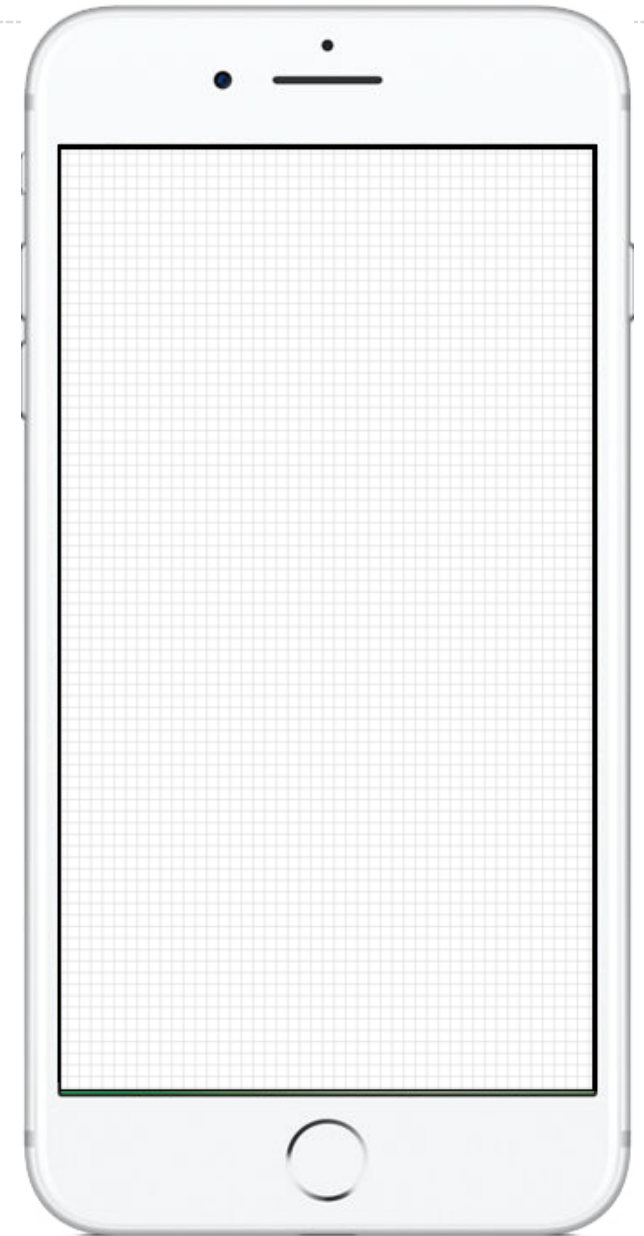
Pixels Ratio



LCD



#fec1d6



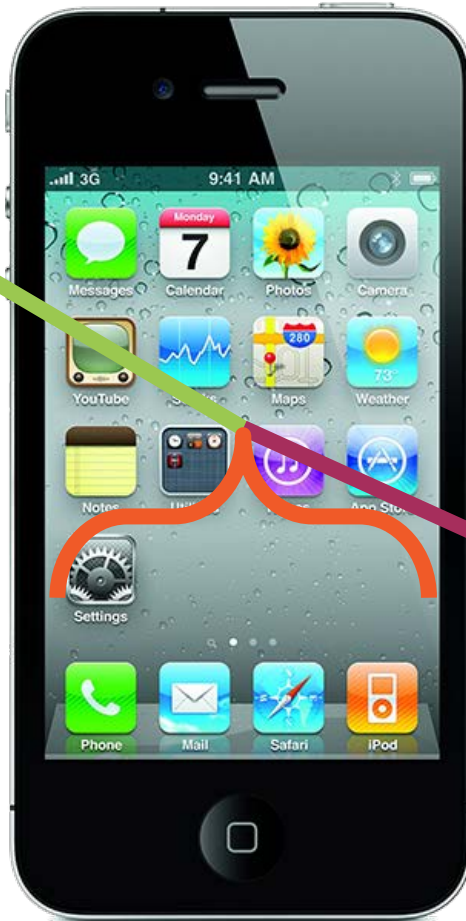
CSS Pixels

~~Device Pixels~~

Dots of Light

320pixels

```
<meta  
name="viewport"  
content="width=device  
-width">
```



640 dots of light



Pixel Ratio

iPad 2

1x



768 pixels

768 dots of light



768 pixels

1536 dots of light

iPad 4

2x

$$\frac{1536}{768} = 2$$



Pixel Ratio

iPhone 6 Plus

3x



414 pixels

1080 dots of light

$$\frac{1080}{414} = 2.608$$



Your Device

The screenshot shows the mydevice.io website in a browser window. The page displays various device metrics and browser features. Key elements include:

- Viewport Information:** "my viewport is: 1077px 67em"
- Screen metrics table:**

Sizes	Pixel ratio	Density	Misc
JS screen.width : 1920px	CSS pixel-ratio : 1	Resolution (dpi) : 96.00dpi	Root font size : 16px
JS screen.height : 1080px	JS pixel-ratio : 1.0000	Resolution (dppx) : 1.00dppx	Orientation : landscape
@media (device-width) : 1920px+		Resolution (dpcm) : 37.80dpcm	Device Aspect-Ratio : 1.78
@media (device-height) : 1080px+			
- My browser features:** CSS3, HTML5 / JS

The footer section of the mydevice.io website includes:

- A link: [show me other devices ?](#)
- Copyright notice: "mydevice.io made with love by @goetter, with Modernizr and help from @eQRoeil and @nhoizey"





Common Smartphones values

dots of
light

↕ name		↕ phys. height	↕ CSS width	↕ CSS height	↕ pixel ratio	↕ phys. ppi	↕ CSS ppi
Apple iPhone 7	750	1334	375	667	2	326	192
Apple iPhone 6 Plus, 6s Plus	1080	1920	414	736	3	401	249
Apple iPhone 6, 6s	750	1334	375	667	2	326	192
Apple iPhone 5	640	1136	320	568	2	326	192
Apple iPhone 4	640	960	320	480	2	326	192
Apple iPhone 3	320	480	320	480	1	163	96
Apple iPod Touch	640	1136	320	568	2	326	192
LG G5	1440	2560	360	640	4	538	384
LG G4	1440	2560	360	640	4	538	384
LG G3	1440	2560	360	640	4	538	384
LG Optimus G	768	1280	384	640	2	318	192
Samsung Galaxy S7, S7 edge	1440	2560	360	640	4	534	384
Samsung Galaxy S6	1440	2560	360	640	4	577	384
Samsung Galaxy S5	1080	1920	360	640	3	441	288
Samsung Galaxy S4	1080	1920	360	640	3	441	288
Samsung Galaxy S4 mini	540	960	360	640	1.5	256	144



Dumb

1x

2x

3x

iPad 1

Desktop

iPod Touch

iPhone 6 Plus

iPhone 4

iPhone 6

IE

JPG

JPG

JPG

JPG



Summary



Audience & Prerequisites

Archaeology Template

Browsers and Devices

Page Size

CSS Pixels & Dots of Light





Introduction

Background and Scaling Image

Pixel Density Logo

Similar Sized Responsive Images

Different Sized Responsive Images

Combination Responsive Image

Full Width Image

Lazy Load Images

Image Sliders

