# Similar Sized Responsive Images

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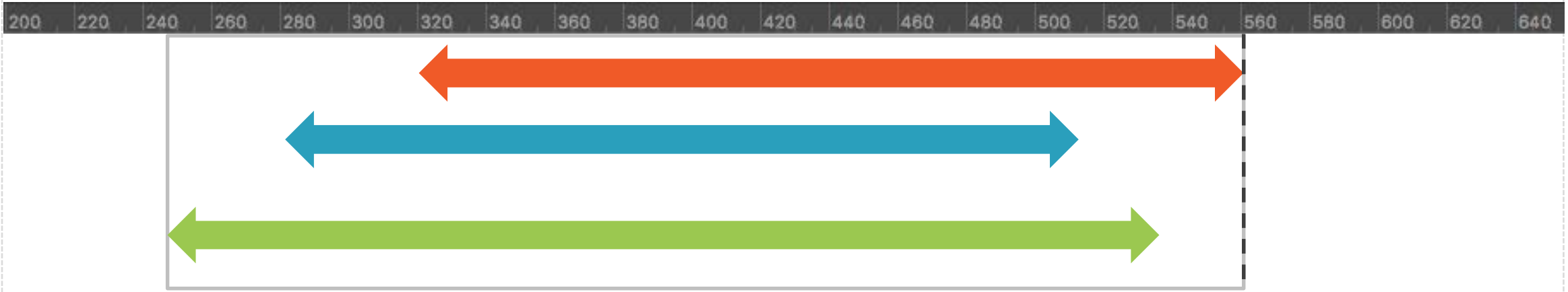
# Agenda

- Determine Sizes
- Create Images
- Build HTML
- Test Our Work

# Image of Beit-Shean

# Three Images




| 320px | 560px | 1024px | 1600px |
|---|---|---|---|
| 20em | 35em | 64em | 100em |

_large.scss

_medium.scss

_small-default.scss

# Pixel Density Images

1x 560 Photoshop Pixels Wide

2x 1120 Photoshop Pixels Wide

3x 1680 Photoshop Pixels Wide

~~4x~~

Lets open Photoshop and build these three different images.
First thing is to make sure the image is at least a big as the largest image we will create.
Our maximum image needed is 1680px wide and this image is 2500 so were in good shape.
Now let's create the three different versions
First we have a 560x336 named shean1x.jpg comma
Then we have 1120x672 named shean2x.jpg comma
then finally we have 1680x1008 named shean3x.jpg.
Turn on Generate Assets and save this file on the desktop.
We now have on the desktop the three different images needed.
Lets move them into the images folder of the start file for this module.
Normally this would be the end of our image creation work, but for the purpose of this tutorial, I am going to add labels to each of these.
In addition, I will duplicate the smallest one and name it shean.jpg.
Then I will open it in Photoshop and convert it to black and white so we can easily identify dumb browsers.
Now were ready to jump into our text editor and build the HTML.

# iPhone 4

## CSS Dimensions
width 320px
height 480px

## Dots of Light
width 640
height 960

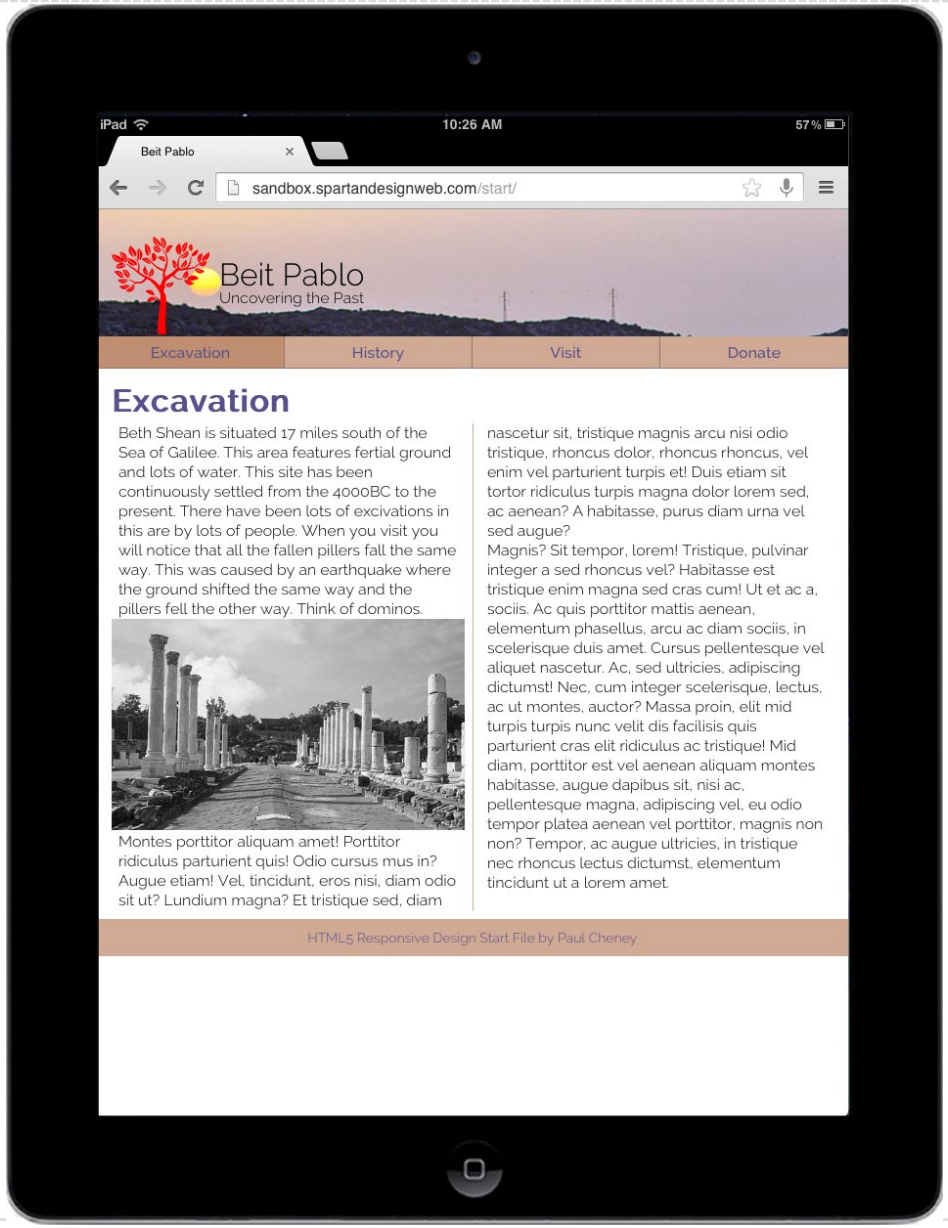
## Pixel Ratio
2

# iPad 1

## CSS Dimensions
width 768px
height 1024px

## Dots of Light
width 768
height 1024

## Pixel Ratio
1



# Internet Explorer

## CSS Dimensions
width variable
height variable

## Dots of Light
width variable
height variable

## Pixel Ratio
1


# IE10

# Modern Desktop

## CSS Dimensions
width variable
height variable

## Dots of Light
width variable
height variable

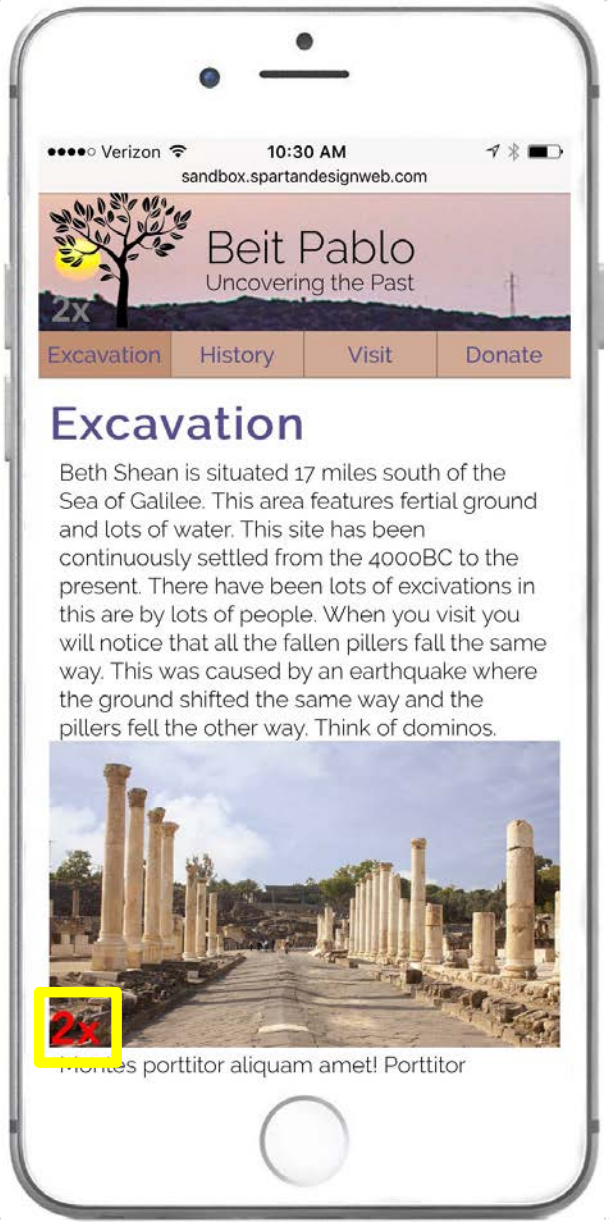
## Pixel Ratio
1


# iPhone 6

## CSS Dimensions
width 375px
height 667px

## Dots of Light
width 750
height 1334

## Pixel Ratio
2

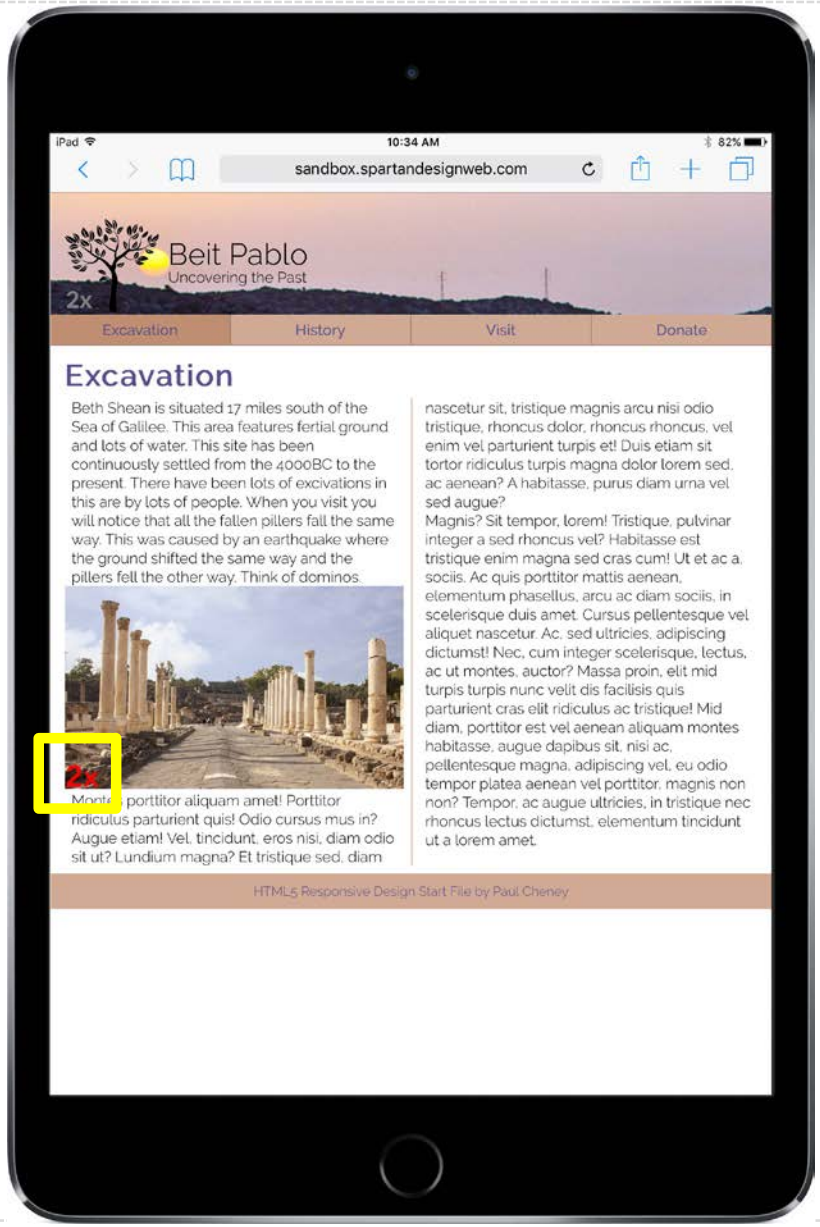


# iPad 4

## CSS Dimensions
width 768px
height 1024px

## Dots of Light
width 1536
height 2048

## Pixel Ratio
2

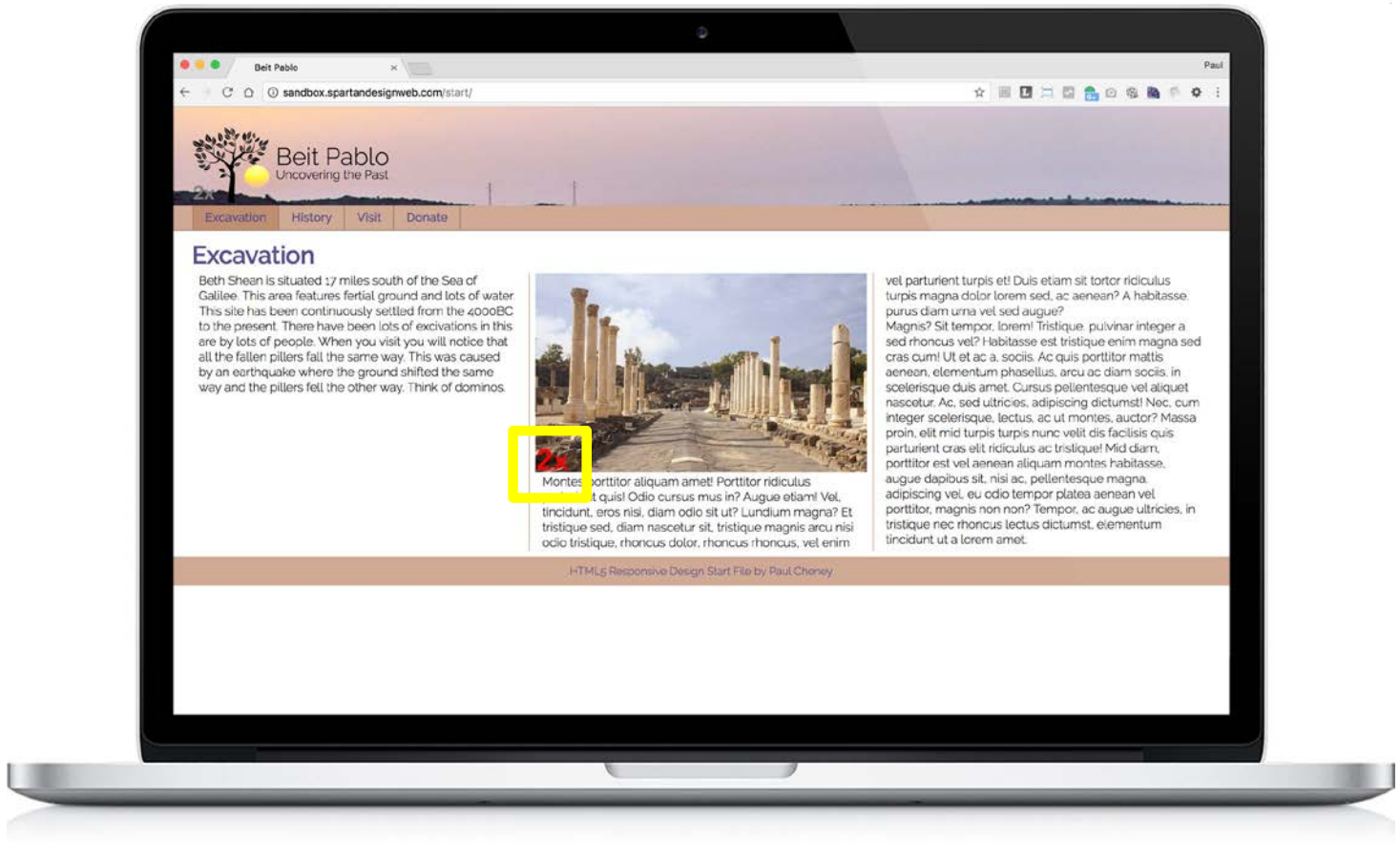


# Laptop

**CSS Dimensions**
width variable
height variable

**Dots of Light**
width variable
height variable

**Pixel Ratio**
2

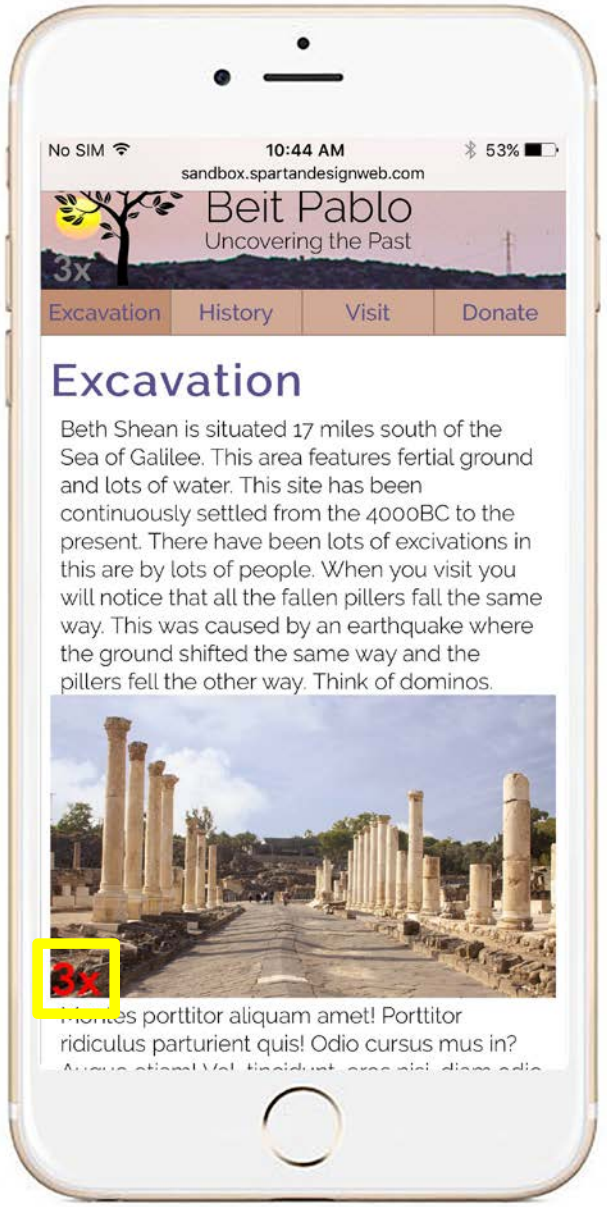


# iPhone 6 Plus

## CSS Dimensions
width 414px
height 736px

## Dots of Light
width 1080
height 1920

## Pixel Ratio
3

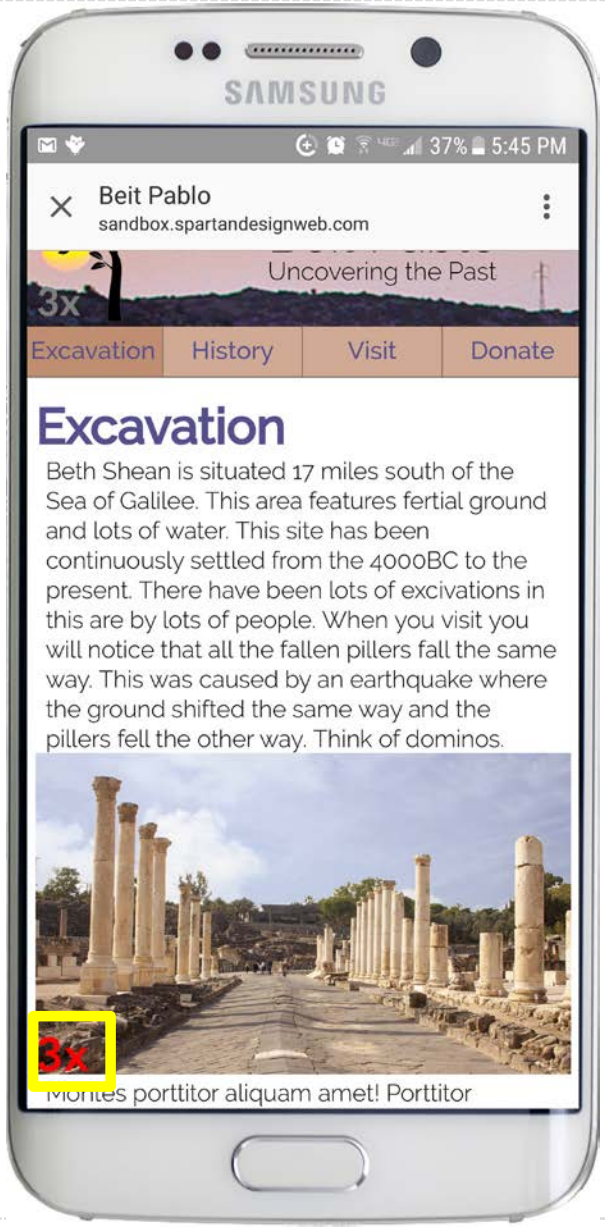


# Samsung Galaxy 6

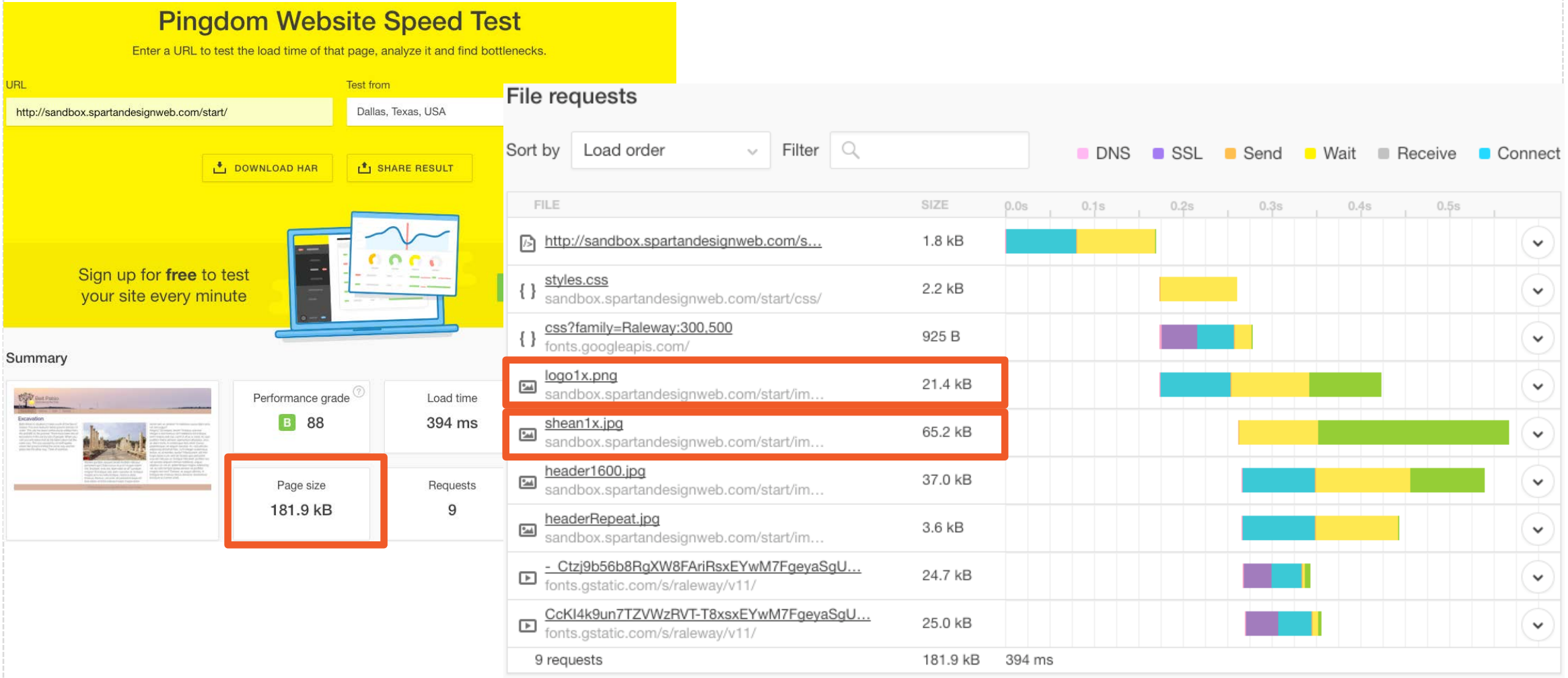
## CSS Dimensions
width 360px
height 640px

## Dots of Light
width 1440
height 2560

## Pixel Ratio
4



# Page Speed


Pingdom Website Speed Test
Enter a URL to test the load time of that page, analyze it and find bottlenecks.
URL
http://sandbox.spartandesignweb.com/start/
Test from
Dallas, Texas, USA
DOWNLOAD HAR
SHARE RESULT
Sign up for free to test your site every minute
Summary
Performance grade
B 88
Load time
394 ms
Page size
181.9 kB
Requests
9
File requests
Sort by
Load order
Filter
DNS
SSL
Send
Wait
Receive
Connect
FILE
SIZE
0.0s
0.1s
0.2s
0.3s
0.4s
0.5s
http://sandbox.spartandesignweb.com/s…
1.8 kB
styles.css
sandbox.spartandesignweb.com/start/css/
2.2 kB
css?family=Raleway:300,500
fonts.googleapis.com/
925 B
logo1x.png
sandbox.spartandesignweb.com/start/im…
21.4 kB
shean1x.jpg
sandbox.spartandesignweb.com/start/im…
65.2 kB
header1600.jpg
sandbox.spartandesignweb.com/start/im…
37.0 kB
headerRepeat.jpg
sandbox.spartandesignweb.com/start/im…
3.6 kB
-_Ctzj9b56b8RgXW8FAriRsxEYwM7FgeyaSgU…
fonts.gstatic.com/s/raleway/v11/
24.7 kB
CcKI4k9un7TZVWzRVT-T8xsxEYwM7FgeyaSgU…
fonts.gstatic.com/s/raleway/v11/
25.0 kB
9 requests
181.9 kB
394 ms

In order to calculate the size of the 2x and 3x versions of our page, we need to get the size of the logo and photograph.
Lets enter the path here for only the 2x logo and we can see the size is 56k
Now lets change this to a 3x version and we can see the size is 93k
Next we switch to the 2x photograph ant it comes in at 201
Finally we change to the 3x photograph and that image is 357.

# Page Speed

181k total size
-21k logo
-65k photo

95k other stuff

95k other stuff
+56k logo
+201 photo

352k total

95k other stuff
+93k logo
+357 photo

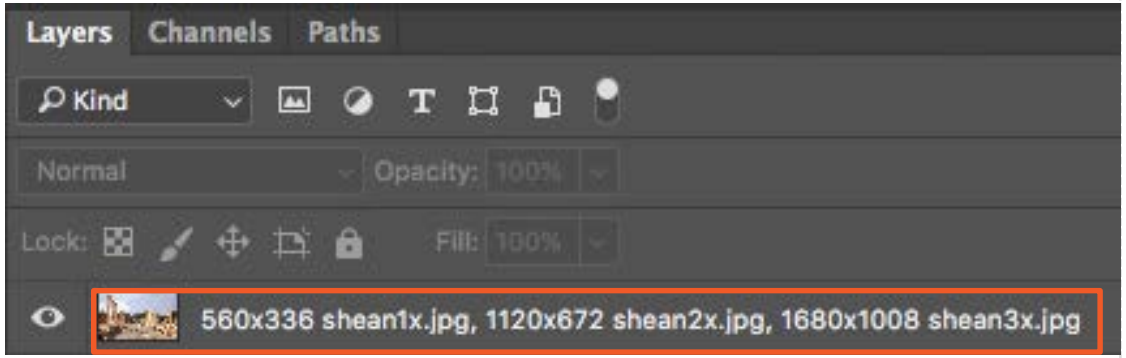
545k total

# Cost/Benefit Analysis

**Benefits**

**Looks Nice**

**Costs**




```
        <figure class="photo-pd">
        <img src="images/shean.jpg" alt="shean" srcset="images/shean1x.jpg 1x,
images/shean2x.jpg 2x, images/shean3x.jpg 3x">
        </figure>
```

**Over Target Page Size**

# Real Code

```
<figure class="logo">
<img src="images/logo.png" srcset="images/logo1x.png 1x, images/logo2x.png 2x, images/logo3x.png 3x">
</figure>
```

```
<figure class="logo">
<img src="images/logo1x.png" srcset="images/logo1x.png 1x, images/logo2x.png 2x, images/logo3x.png 3x">
</figure>
```



# Summary

- Identify Sizes
- Build Graphics
- Add Code
- Test  Logo

Introduction

Background and Scaling Image

Pixel Density Logo

Similar Sized Responsive Images

Different Sized Images

Art Direction

Lazy Load Images

Image Slider