1. Defining the Viewport

How to choose the right sizes for elements.

The viewport defines the area of the screen that the browser can render content to.

Pixel density plays a factor in web development as well. Pixels are not always pixels in this case.

1. Pixels, pixels and moar pixels!

Physical hardware pixels are different than dips or device independent pixels. Chromebook pixel has a viewport of 1280 dips, this gets scaled up to 2560 hardware pixels. No meta viewport, it assumes there is a screen that’s 980 pixels wide on the phone. Font-boosting changes things as well.

1. Quiz: Pixelation
2. Quiz: Calculating DPR

DPR on 2 = 4 hardware pixels to one rendered pixel.

1. Quiz: What's the difference?

Set viewport and avoid DPR issues.

1. Quiz: Calculating CSS Pixels
2. Quiz: How wide is the viewport?
3. Setting the Viewport

<meta name=”viewport” content=”width=device-width”, initial-scale=1”>

This sets a 1:1 ratio of device pixels to rendered pixels.

1. Large Fixed Width Elements

CSS pixels vary between devices. Use relative positions like width = 100%.

1. Max-width on elements

CSS is awesome, and allows the overflowing of content unless specified not to.

img, embed, object, video {

max-width: 100%;

}

Recommended adding a catch-all for everything in main CSS file.

1. Quiz: Relative Sizes

320 px is as small as devices usually come.

1. Tap Target Sizes

Tap targets = anything a user might touch or try to use as an input, need to be big enough to be easy to hit.

Mouse = precision instrument.

Fingers are about 40 px big.

Make buttons and clickable links 48 px \* 48 px.

nav a, button {

min-height: 48px;

min-width: 48px;

}

1. Quiz: Tap Targets
2. Start Small

Prioritizing content and work up.

1. Quiz: Project Part 1

<meta name="viewport" content="width=device-width, initial-scale=1.0">

1. Project Solution – Long

Added the viewport setting.

Adjusted CSS widths to 100%.

Made all anchor elements have 1.5 em padding.

Shrunk browser window to small to view the changes at different resolutions.

1. Lesson Summary

We did it!