Web Advanced JavaScript

PGTE: 5505 | Section B | CRN: 7792

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Week 3: Media Queries

Responsive Web Design

The article that started it all…

http://alistapart.com/article/responsive-web-design

big phones

small screens

big screens

big tablets

medium screens

small tablets

small phones

Why this is important?

Three components we can use

Flexible Layout (Flexible Grid)

Media Queries

Flexible Media

Some CSS relative units

- **vw**
  Viewports width

- **vh**
  Viewports height

- **vmin**
  Minimum of the viewport height and width

- **vmax**
  Maximum of the viewport height and width

Media Types in Media Queries

Available types:
all, screen, print, tv, braille, and 3d-glasses.

Default: screen

Logical Operators in Media Queries

Available operators:
 and, not, only

@media all and (min-width: 800px) and (max-width: 1024px) {...}

Media Features in Media Queries

- Height & width
  min-width, max-width, min-device-width, max-device-width

- Orientation
  landscape, portrait

- Aspect Ratio
  aspect-ratio, device-aspect-ratio

- Resolution
  min-resolution, max-resolution

Identifying breakpoints

320px, 480px, 640px, 768px, 960px, 1024px, 1200px ????

Viewport Meta Tag

- Height & width
  min-width, max-width, min-device-width, max-device-width

- Orientation
  landscape, portrait

- Aspect Ratio
  aspect-ratio, device-aspect-ratio

- Resolution
  min-resolution, max-resolution

Think Mobile First

"...**using styles targeted at smaller viewports as the default styles for a website, then use media queries to add styles as the viewport grows**.

[...] a user on a mobile device, commonly using a smaller viewport, shouldn't have to load the styles [and assets] for a desktop computer only to have them over written with mobile styles later. **Doing so is a waste of bandwidth**.

http://learn.shayhowe.com/advanced-html-css/responsive-web-design
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CSS Rules Depending On

- Screen size & Device size

- Device orientation

- Display density

- Aspect ratio

- Pixel ratio

- Resolution

Displaying Different Content

- Redirect to different html files depending on browser

- Use JavaScript for agent detection

Hey,
I am a
Phone
.

Hello,
I am
Desktop
Computer.

Development Tips

Run local server

    _open Terminal and navigate to your project folder. **cd path/of/your/folder** and press enter

    _type **python -m SimpleHTTPServer** and press enter

    _go to browser and type in **localhost:8000**

To see your index.html on a different device,

    _go to **System Preferences > Network** and find your ip address*

    _type your ip address in the browser on your phone and add :8000 at the end

Let's Code

Homework

1. Design the way you want your website to look (Sketch / Illustrator / Hand Drawing ...)

2. Create the structure (HTML / CSS) for your final project. Make sure that it's responsive!