# Web Advanced JavaScript

PGTE: 5505 | Section B | CRN: 7792

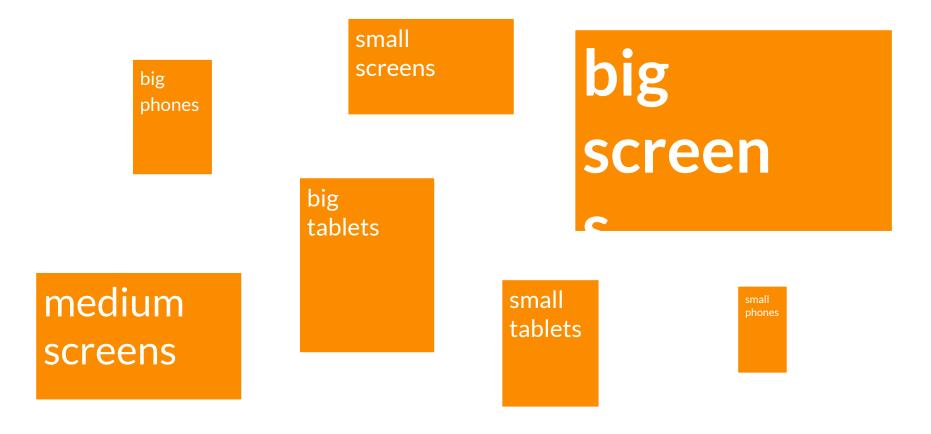
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Week 3: Media Queries

## Responsive Web Design

The article that started it all...

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



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
- Orientationlandscape, 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**.

## **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!