Web Advanced: Javascript

PGTE 5505. Section B. CRN 5264. Fall 2016. Umi Syam

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github.com/umisyam/ WebAdvJS_Fall2016_StudentsHW

Week 1+2 Recap

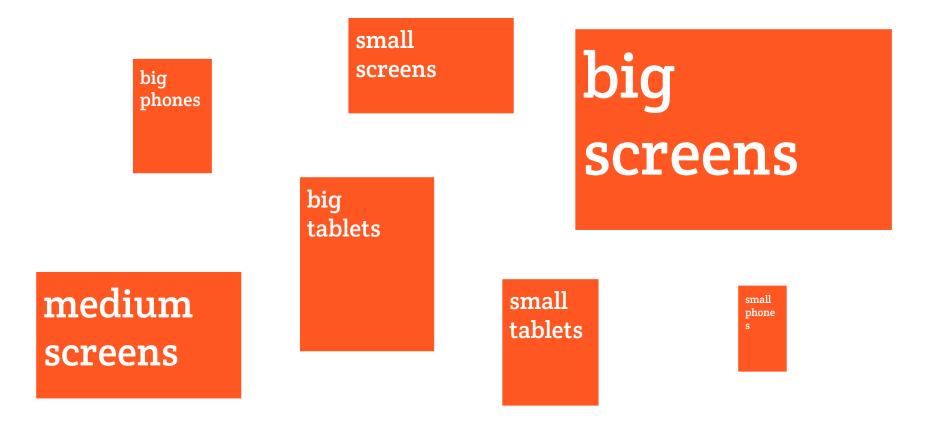
- JS definitions and characteristics
- Variable and data types
- Bad arrays vs good arrays; looping array with forEach, manipulate array
- Iteration and Conditionals (for loops, if-else, switch-case)
- Anonymous functions vs named functions
- Function as Object, class-based vs prototype-based
- Intro to Scopes and Closures
- Immediately-Invoked Function Expression
- Module pattern
- Namespacing your app
- Programming patterns and paradigms
- Public? Private?

Week 3 Recap

- Single Page Application
- Handlebars templating
- window.location.hash routing and rendering
- jQuery 'hashchange'
- Checkbox filtering

Responsive Web Design

The article that started it all... http://alistapart.com/article/responsive-web-design



Why this is important.

3 components that we need to do:

- Flexible Layouts (flexible grid)
- Media Queries
- Flexible Media

Some new CSS3 relative length units

VW

Viewports width

vh

Viewports height

vmin

Minimum of the viewport's height and width

vmax

Maximum of the viewport's 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
- Orientationlandscape, portrait
- Aspect Ratio
 aspect-ratio, device-aspect-ratio
- Resolutionmin-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/

CSS Rules depending on

- Screen size & Device size
- Device orientation
- Display density
- Aspect ratio
- Pixel ratio
- Resolution

For displaying completely different contents:

- 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

NOTE: Your computer and your phone have to be on the same wifi.

LET'S CODE.