

# Web Advanced: Javascript



# 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  
phone  
s

**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`
- 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/>

# 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.**