Responsive Web Design

“The control which designers know in the print medium, and often desire in the web medium, is simply a function of the limitation of the printed page. We should embrace the fact that the web doesn’t have the same constraints, and design for this flexibility. But first, we must ‘accept the ebb and flow of things.’”

– John Allsopp, “A Dao of Web Design”
Responsive Web Design

Mobile traffic is as relevant as desktop traffic now

We should build for the type of screens that will be used to access our sites

One way to do this is with alternate style sheets

Responsive web design uses “media queries” to figure out what resolution of device it’s being served on

Flexible images and fluid grids size correctly to fit the screen

Design for flexibility
Media Queries

Features you can include in a query:
- width
- height
- device-width
- device-height
- orientation
- aspect-ratio
- device-aspect-ratio
- color
- color-index
- monochrome
- resolution
- scan grid

Most of the above can be combined with min- and max- prefixes

Most common are min-width and max-width prefixes

Media queries can be used to load an alternate style sheet or offer alternate styles within an existing style sheet
Media Query Syntax

Two possible values: only or not

- only screens out older browsers from reading the rest of the query
- not negates the result: not screen means everything except screen type is the media type

feature: value

Enclosed by parentheses and preceded by the word, and

Predefined media features

Multiple features and values can also be combined with and
Basic CSS Rule Set

body {background-color: orange;}

CSS Rule Set with @media Rule

@media only screen and (min-width: 480px) {
  body {background-color: orange;}
}
Basic Style Sheet Link

<link rel="stylesheet" href="style/basic.css">

Style Sheet Link with Media Attribute

<link rel="stylesheet" media="only screen and (min-width: 640px)" href="style/main.css">
Introduction to Web Design & Computer Principles
CSCI-UA 4

Responsive Web Design
Media Queries