

Front-End Web Development

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Start your engines!

- Connect to wifi
- Open your text editor
- Open GitHub desktop and GitHub website
- Open schoology

Final Project Milestone 1

- Project Proposal/Wireframe
- **OVERDUE:** Still waiting for a few of these, you need to get these in by Wednesday the latest!
- **REMINDER:** No “auto” extensions - if you need an extension please do me the courtesy of asking me personally

Final Project Milestone 2

- Draft HTML/CSS
- Pseudo code for JavaScript
- **Due week 7 - Wednesday 2nd March**

Submit your assignment

- Please submit assignment 4
- **REMINDER:** No “auto” extensions - if you need an extension please do me the courtesy of asking me personally

Reminder – Graduation requirements

- To graduate from the course, students must:
 - 1. complete at least 80% of assigned homework
 - 8 assignments so you can only miss one!
 - 2. attend 80% of classes - so you can miss up to a maximum of four
 - 3. satisfactorily complete the final project (as determined by the course instructor and stated on the class syllabus).

What are we going to cover today?

- Review - 60 min
 - Heading structure
 - Using Google fonts
 - Layouts
 - Exercise 1
- Responsive Design Discussion - 20min
- Break - 15min
- Exercise 2 - 20min
- Media Queries - 60min
 - Exercise 3

FEWD – LESSON 11

RESPONSIVE BASICS

FEWD – LESSON 11

REVIEW

Heading structure

- The **Document Outline**
- The document outline is the structure of a document, generated by the document's headings, form titles, table titles, and any other appropriate landmarks to map out the document. (HTML5 Doctor)
- We use h1-h6 to convey the document structure.

Heading structure

<h1>Page heading</h1>

<p>We can have paragraphs, lists, tables etc here that apply to whole page</p>

<h2>Heading of sub-section of page</h2>

<p>Again we can have paragraphs, lists, tables etc applying to this section here</p>

<h3>Heading of sub-section of the section with h2 heading</h3>

<p>Paragraphs, lists, tables etc applying to this section here</p>

<h2>Another level-2 sub-section of the page</h2>

<p>Paragraphs, lists, tables etc applying to this section here</p>

Heading structure – Document Outline

The resulting document outline

1. Page - started by h1

1.1. Sub-section of page - level-2 section started by h2

1.1.2. Sub-section of level 2 section - started by h3

1.2. Sub-section of page - level-2 section started by h2

Heading structure – explicit sectioning

`<h1>Page heading</h1>`

`<p>We can have paragraphs, lists, tables etc here that apply to whole page</p>`

`<section>`

`<h2>Heading of sub-section of page</h2>`

`<p>Again we can have paragraphs, lists, tables etc applying to this section here</p>`

`<section>`

`<h3>Heading of sub-section of the section with h2 heading</h3>`

`<p>Paragraphs, lists, tables etc applying to this section here</p>`

`</section>`

`</section>`

Using google fonts

- › Only choose the font-weights that you are going to use, each font-weight for a particular font is a set of glyphs that will be downloaded, so don't have your end user download unused fonts.
- › `@import` statements must go at the very top of your CSS file before any other line including comments.
- › You need to set
 - › **font-family**: 'Oswald', sans-serif; /* to choose the font */
 - › **font-weight**: 400; /* to choose the particular style of font */
- › Use the numerical number for weight, don't use normal, bold, lighter etc - You may not get what you expect!

Layouts

- The Fixed Layout
 - Prior to responsive design Fixed Layouts were the most widely use
 - Relies on a container of fixed width
 - Usually 960px or 980px
 - <http://ipadisthin.github.io/layout-examples/fixed.html>

Layouts

- The Fluid Layout
 - The Fluid Layout was also widely used - all widths in percentages
 - <http://ipadisthin.github.io/layout-examples/fluid.html>
- And the Elastic layout uses ems for widths.
 - <http://ipadisthin.github.io/layout-examples/elastic.html>
 - My favourite technique because its accessible and preserves line-length for text zoom
 - Achieves WCAG 2.0 Criterion 1.4.4.(Resize text) - Technique page

Exercise 1 - Layouts Review

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KEY OBJECTIVES

Create layout from image

AGENDA

20 mins

1. Download lesson exercise1.png from schoology
2. Create this layout

DELIVERABLE

Layout page

RESOURCES

exercise1.png
Code editor

FEWD – LESSON 11

RESPONSIVE DESIGN

What is Responsive Design

- › In 2010 Ethan Marcotte published an article on A List Apart titled:

Responsive Web Design

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

- › It was the biggest change in web design methodology and philosophy since web design began and it has swept across the industry and now is the expected way of creating websites.

What is Responsive Design

- Responsive web design pretty much put an end to the mobile vs desktop content debate and provided
- It provided a method to provide the same content to all devices with design appropriate to the device.

Responsive Layout

- Different styles for different screen widths (viewports)
- Fluid layout
- Flexible images (and videos)

Responsive Examples

<http://mediaqueri.es/>

FEWD - LESSON 11

BREAK

Exercise 2 - CSS override

24

KEY OBJECTIVES

Create layout from image

AGENDA

20 mins

1. Download lesson exercise2.png from schoology
2. Add CSS to your exercise1 site below the current CSS to override the layout and make the layout as per exercise2.png

DELIVERABLE

Layout page

RESOURCES

exercise2.png
Code editor

FEWD – LESSON 11

MEDIA QUERIES

Media Queries

- › Media Queries are what enable us to provide different styles to different devices
- › We target the devices viewport width.

Media Queries – what should be in code?

- Media Queries go in CSS
- Mobile First

```
@media only screen and (min-width: 600px) {  
    /* Style adjustments for viewports that meet the condition  
    */  
}
```

Media Queries – what should be in code?

‣ Desktop First

```
@media only screen and (max-width: 600px) {  
    /* Style adjustments for viewports that meet the condition  
    */  
}
```

Media Queries – what should be in code?

- You can also target orientation

```
@media only screen and (orientation: portrait) {  
    /* Style adjustments for viewports that meet the condition  
    */  
}
```

Media Queries – what should be in code?

- You can do more than one condition

@media only screen and (min-width: 600px) and
(orientation: portrait) {

 /* Style adjustments for viewports that meet the condition
*/
}

Viewport meta tag

- › Mobiles will default the view of your web site to 980px shrunk to fit mobile width.
- › Take a look at <http://ipadisthin.github.io/layout-examples/fixed.html> in your mobile

Viewport meta tag

```
<meta name="viewport" content="width=device-width,  
initial-scale=1">
```

In the `<head>` section of your web pages, tells the mobile browser to default to its ‘device-width’

(HTML Boilerplate has this)

Device widths

<http://www.canbike.org/CSSpixels/>

- Note: device-widths not always the same as device resolution, 1.5 and double density screens have greater resolution than device width.

Exercise 3 - Media queries

34

KEY OBJECTIVES

Create layout from image

AGENDA

20 mins

1. Using Code from exercise 2
2. Add a media query around your exercise 2 CSS override styles to make layout responsive

DELIVERABLE

Responsive Layout page

RESOURCES

exercise 2 code
Code editor