

INTRODUCTION TO WEB DEVELOPMENT

Coding Course Curriculum

Week 5 - Bootstrap

WHAT WE'LL COVER THIS WEEK

- 1. Recap of what we learnt last week (GitHub)
- 1. What's hard in CSS and why do we need to fix it?
- 1. Bootstrap - what it is, what problems it fixes, how to use it
- 1. Even more awesome stuff!
- 1. Homework

WHAT WE COVERED IN WEEK 4 - GITHUB AND VERSION CONTROL

What did we learn last week?

1. Version Control & Using GitHub
2. Create your group repository
3. Publishing on GitHub Pages
4. How Github Pages Works
5. Conflict scenario!
6. How to avoid and reduce merge conflicts

Task: Find a partner and together take a quick look through the notes from last week's session. If you're unclear on any of the concepts, work through them with your partner and an instructor

BOOTSTRAP

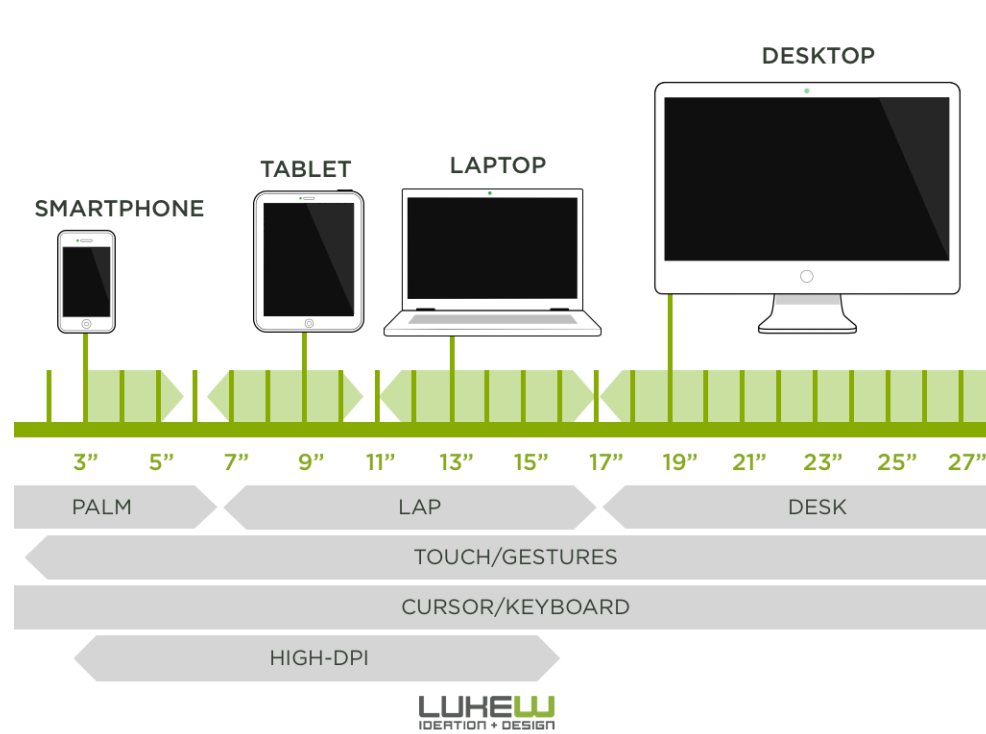
WHAT IS HARD ABOUT CSS?

As designs get more and more complex, they need more and more code!

WHAT ELSE IS HARD ABOUT CSS?

RESPONSIVE WEB DESIGN

Making websites look good on all the different screen sizes we now have.

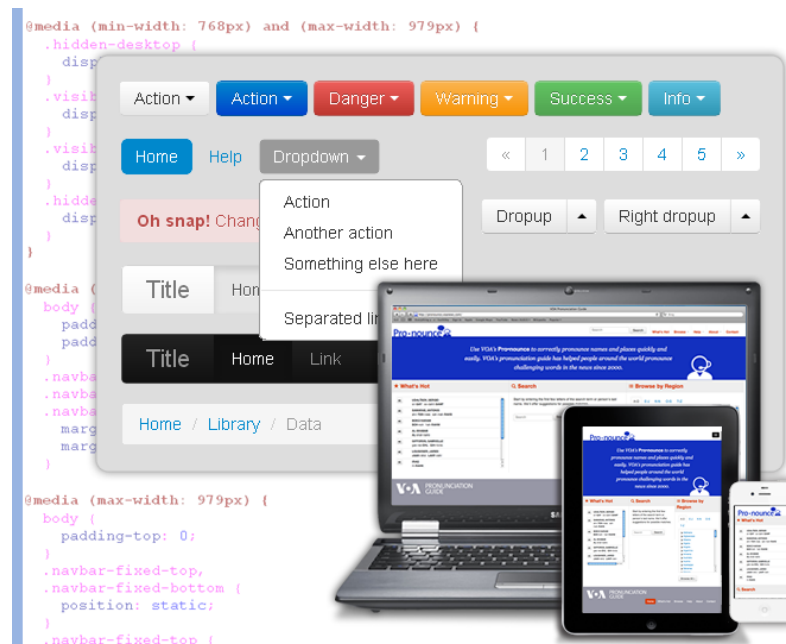


WHAT ARE THE PROBLEMS WE NEED TO SOLVE?

- We need to make sure our websites work on any device shown, regardless of screen size
- We need to become more efficient at writing code

THE SOLUTION: A FRAMEWORK

- What is a framework? A skeleton of code providing generic functionality
- You can use it as a base for your styles
- You can override the framework code with your own



BOOTSTRAP

BOOTSTRAP

- It's a framework
- Made and originally maintained by the team behind Twitter
- A set of ready-made CSS & JavaScript files with style solutions and functions to common requirements
- It's cross browser
- And it's responsive!

USING BOOTSTRAP

1. Link the Bootstrap files in the head of your HTML pages
2. Attach the relevant Bootstrap classes to your HTML elements

<https://getbootstrap.com/>

GETTING STARTED WITH BOOTSTRAP

There are two ways to include Bootstrap in your projects:

- Link to the Bootstrap CDN (Content Delivery Network)
- Download the Bootstrap files and add them to your website folder

CONTENT DELIVERY NETWORKS

- What is a Content Delivery Network?
- Why would you need one?
- CDNs speed the delivery of content to users when websites are facing high traffic across a global reach.



DOWNLOAD THE BOOTSTRAP STARTER EXERCISE

<https://github.com/CodeFirstGirls/beginners-week-five>

- Click on the **fork** icon, to copy it onto your github account
- On your copy, Click **clone or download**
- Select the **Open in Desktop** option.
- Clone the repo into your coding_course folder
- Open the folder in Atom

LINK THE BOOTSTRAP CSS IN YOUR HTML

Add the link inside the `<head>` element of your index.html file

```
<!DOCTYPE html>
<html>
<head>
  <title>Bootstrap funs!</title>
  <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.
css" crossorigin="anonymous">
</head>
...
```

THE ESSENCE OF BOOTSTRAP

A huge collection of classes components

- In the Bootstrap documentation, find the style you want to add to your project
- Copy the Bootstrap class(es) exactly as they are listed
- Add the class(es) to your HTML element
- Save the file and have a look

KEY BOOTSTRAP COMPONENTS!

<https://getbootstrap.com/docs/4.1/components/>

- Nav bars
- Containers
- Grid layouts
- Carousels
- Buttons
- Modals

THE .CONTAINER DIV

This class will centre the <div> inside the viewport

```
...  
<body>  
  <div class='container'>  
    <!-- page content goes here -->  
  </div>  
</body>  
</html>
```

COLUMNS

- Bootstrap works on a grid layout columns
- Each set of columns sit inside a
`<div class='row'></div>`
- Each column `<div>` has a class to indicate the size of the column
`<div class='col-sm'></div>`

WHAT IF YOU DON'T LIKE THE BOOTSTRAP STYLES?

- Override it!
- But it's best to stick with the Bootstrap layout - it's tried and tested in browsers
- Keep overrides to fonts, colours and other small things

THE CORRECT WAY OF OVERRIDING BOOTSTRAP

- Create a custom CSS file
- Link to your file AFTER the Bootstrap files

```
<!DOCTYPE html>
<html>
<head>
  <title>Bootstrap template</title>
  <link href='http://longbootstraplink.css' rel='stylesheet'>
  <link href='css/your-custom-styles.css' rel='stylesheet'>
</head>
...
```

BADGES AND BUTTONS

Options

Use any of the available button classes to quickly create a styled button.

EXAMPLE



```
<!-- Standard button -->
<button type="button" class="btn btn-default">Default</button>

<!-- Provides extra visual weight and identifies the primary action in a set of buttons -->
<button type="button" class="btn btn-primary">Primary</button>

<!-- Indicates a successful or positive action -->
<button type="button" class="btn btn-success">Success</button>

<!-- Contextual button for informational alert messages -->
<button type="button" class="btn btn-info">Info</button>

<!-- Indicates caution should be taken with this action -->
<button type="button" class="btn btn-warning">Warning</button>

<!-- Indicates a dangerous or potentially negative action -->
<button type="button" class="btn btn-danger">Danger</button>

<!-- Deemphasize a button by making it look like a link while maintaining button behavior -->
<button type="button" class="btn btn-link">Link</button>
```

Overview

Grid system

Typography

Code

Tables

Forms

Buttons

Button tags

Options

Sizes

Active state

Disabled state

Images

Helper classes

Responsive utilities

Using Less

Using Sass

Back to top

Preview theme

TASKS

1. Add a new row in the page that has 2 columns, with a block of writing in each
2. Add a Carousel to the top of your page, with pictures! ([instructions here](#))
3. Add a Modal to your page ([instructions here](#))
4. Write over bootstrap! In the 'styles.css' file, change the design of the default CSS styles (this could be colors, fonts, images - the website is your oyster!)
5. Add any more bootstrap components you think look cool!

MORE RESOURCES

- [14 days of bootstrap 4](#)
- <http://fontello.com/> - fonts and icons for bootstrap
- [20 great resources for bootstrap](#)

HOMEWORK

Task:

Finish off adding bootstrap components to the starter website, and customising it

Course competition website

Preparation for next week

Task:

Find out all you can about jquery