Web Fundamentals - RWD Quick Labs

Quick Labs Environment Set-Up

1. Open VSCode.
2. Using File → Open, navigate to the Quick Labs folder and click Open. This will give you access to all of the Quick Lab files and solutions needed to complete the Quick Labs.
3. At the bottom of the VSCode window, you should see a Go Live icon. Click on this will launch live-server for the currently selected file or folder. If a folder is selected, this will be shown in your browser, and you will be able to navigate here. If a file is selected, the browser will attempt to display the file.

Quick Lab 11 - Media Queries

Objectives

- Use media queries to change the layout on screen dependent on its size

Activity

1. Open the files index.html from the QuickLabs/11_MediaQueries/starter folder in the browser using live-server *(Please see step 3 of setting up the environment for help on this)*.
2. In mediaqueries.css, add a media query that:
    - Detects if the minimum width of the screen is 794 pixels
    - Sets the body to have properties of:
        - background with HSLA values of 240, 100%, 50% and 0.2
        - margins top and bottom of 25px
        - margins left and right of 6%
    - Sets the figure to have properties of:
        - float to be left
        - width to be 40%
        - right margin to be 4.5%
3. Add a second media query that:
    - Sets the body to have properties of:
        - background with HSLA values of 120, 100%, 50% and 0.2
        - margins top and bottom of 25px
        - margins left and right of 10%
        - a maximum width of 1130px
    - Sets the figure to have properties of:
        - width of 28%
        - right margin to be 2.5%
4. Check the output in the browser - everything does not work as it should... Can you work out what is missing from the index.html <head>? Think VP!

This is the end of Quick Lab 11

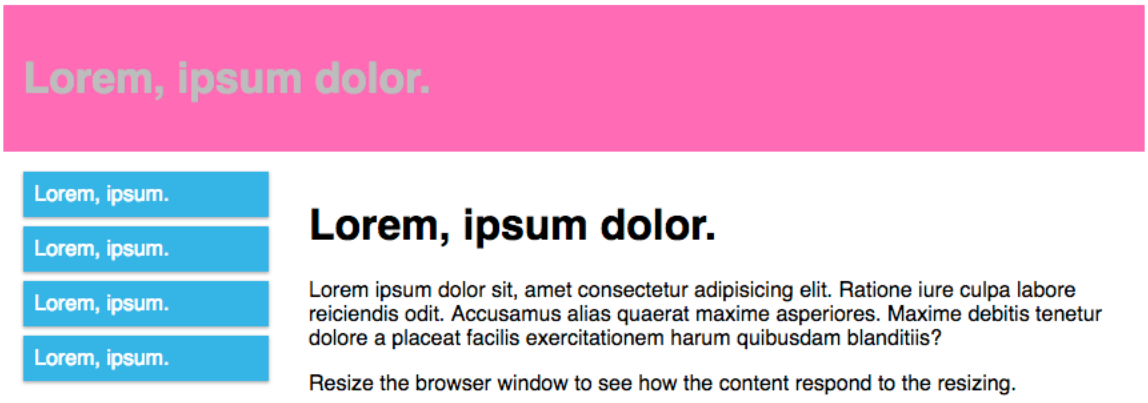
Quick Lab 12 – Grids

Objectives

- To apply classes to HTML to utilise a Grid layout

Activity

1. Open the files index.html from the QuickLabs/12_Grids/starter folder in the browser using live-server *(Please see step 3 of setting up the environment for help on this).*
2. Open grids.css and examine the style rules that have been placed in the file already.
3. You should apply the appropriate CSS classes to the elements in the HTML to make your page (when full screen) look like the image below:



For reference, the menu links are 1/4 of the screen.

4. Once you have succeeded, experiment using the other col-X settings.

This is the end of Quick Lab 12

Quick Lab 13 - Flex Box

Objectives

- To examine some of flexbox's properties and values

Activity

1. Open the files index.html from the QuickLabs/12_Grids/starter folder in the browser using live-server *(Please see step 3 of setting up the environment for help on this)*. Have a look at the output.
2. Examine the CSS classes that are applied to the 3 <ul> tags - you should notice that each has a flex-container class and then another.
3. In flexbox.css create a rule for the flex-container *class* that has:
    - padding and margin set to 0;
    - list-style set to none;
    - A border that is a solid line of 1px coloured silver;
    - display set to flex.
4. Create a rule for the nowrap class that has flex-wrap set to nowrap.
5. Create a rule for the wrap class that has flex-wrap set to wrap.
6. Create a rule for the wrap-reverse class that has flex-wrap set to wrap-reverse.

Save the file and check the output and that it responds appropriately when you shrink/expand the size of the available screen.

7. Create a rule for the direction class that has flex-direction set to column.

Again, save and check the output - *the 4th set of blocks should have been affected*.

8. Change the flex-direction for the direction class to row.
9. Add a rule for the justify class and set justify-content to center.

Again, save and check the output - *the 4th set of blocks should have been affected*.

Experiment with any of the flex properties by adding properties to the classes. Note that some properties will not affect elements with particular others applied to them.

This is the end of Quick Lab 13

Quick Lab 14 - Responsive Images

Objectives

- To be able to use the **srcset** attribute with images.
- To use the **<source>** element and **sizes** attributes for responsive images

Activity

1. Open the files **index.html** from the **QuickLabs/11_MediaQueries/starter** folder in the browser using **live-server** *(Please see step 3 of setting up the environment for help on this)*.
2. In the first **<article>**, add an **<img>** that:
    - Initially uses the image **"baboon1x.jpg"** as its **src**;
    - Has an **alt** of **"Baboon"**;
    - Has a **srcset** set to **"baboon1x.jpg 1x, baboon2x.jpg 2x"**.
3. Save the file and view in the browser - the *1x image* should be shown
4. Use the *Device Selector* in the *Developer Tools* and **reload** the page. This should change the image to the *2x image*.
5. In the second **<article>**, add a **<picture>**. It should have child elements of:
    - **<source>** with a **media** attribute set to a **"(min-width:1024px)"** and a **srcset** of **"kitten-large.png"**;
    - **<source>** with a **media** attribute set to a **"(min-width: 667px)"** and a **srcset** of "**kitten-medium.png**";
    - **<img>** with a **src** of **"kitten-small.png"** and **alt** of **"Cute Kitten"**.
6. Save the file and view in the browser. Changing the width of the device through the *Device Selector* being set to *Responsive* should change the image as the width is increased or decreased.
7. In the third **<article>**, add an **<img>** with attributes set to:
    - **src** of **"small.jpg"**;
    - **alt** of **"Cute Kitten"**;
    - **sizes** set to **"50vw"**;
    - **srcset** of **"kitten-small.png 500w, kitten-medium.png 1000w, kitten-large.png 1500w"**.
8. Save the file and change the Responsive width of the Device Selector to be around 400 pixels.
9. Refresh the page and note that the **kitten-small.png** image is shown.
10. Increase the width of the available screen and note that the image changes to the larger ones as breakpoints are hit.

11. Once the kitten-large.png image is shown, *refresh* the page again.
12. Decrease the width of the available screen and note that the image *DOES NOT* change.

This is the end of Quick Lab 14