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# Tutorial 11

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# Outline

1. **Review:** What have we learned so far?
  - a. HTML and CSS Group activities
  - b. Elements (tags)
  - c. Selectors
2. **CSS Layout**
  - a. CSS grid
  - b. HTML divs or boxes
3. **Individual activities**
  - a. Create a new layout for a webpage

# ***Review:*** **HTML** elements

**HTML (Hypertext Markup Language)** uses **elements** (or **tags**) to describe the structure (i.e. the sections) of a webpage.

Some elements or tags include:

Default elements	Custom elements
<code>&lt;html&gt; &lt;/html&gt;</code> <code>&lt;body&gt; &lt;/body&gt;</code>	<code>&lt;h1&gt; &lt;/h1&gt;</code> <code>&lt;p&gt; &lt;/p&gt;</code> <code>&lt;a&gt; &lt;/a&gt;</code> <code>&lt;ul&gt;&lt;/ul&gt;</code> <code>&lt;li&gt;&lt;/li&gt;</code> <code>&lt;br&gt;</code> <code>&lt;img&gt; &lt;/img&gt;</code>

# HTML image element

Ex.

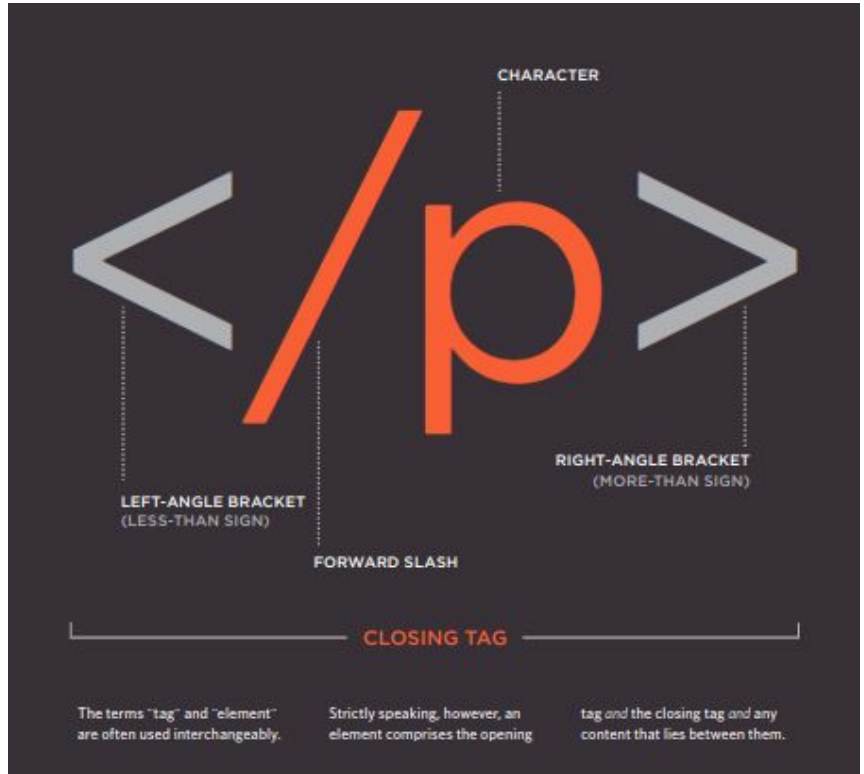
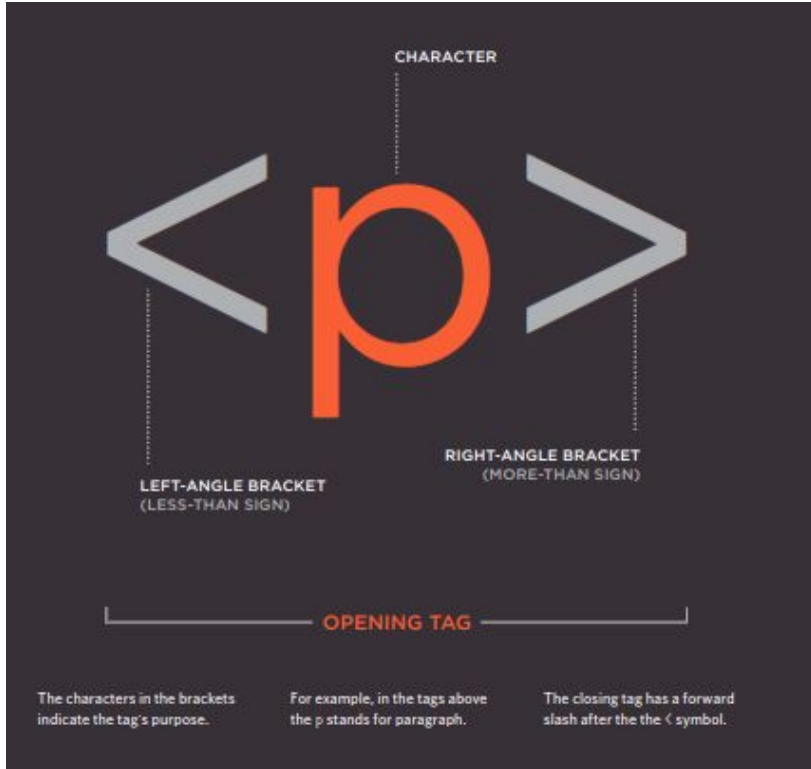
```

```

**\*Note:** The source name of the image has to include the folder name in which it is saved.

Additional resource: [https://www.w3schools.com/tags/tag\\_img.asp](https://www.w3schools.com/tags/tag_img.asp)

# Review: **HTML** syntax



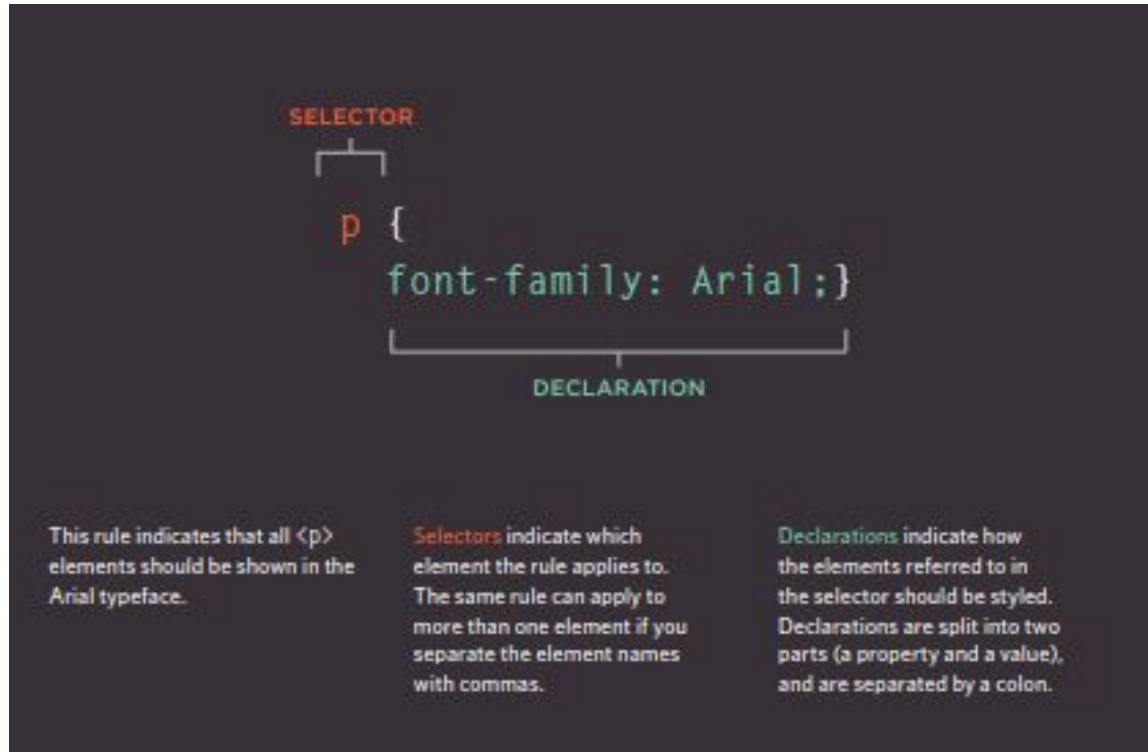
**Resource:** Duckett, J. (2011). *HTML & CSS: design and build websites*, p. 23-24. Wiley.

# **Review:** **CSS** selectors and properties

- CSS is used to modify the presentation (or style) and the layout of a webpage through **selectors** and **properties**.

Element type selectors	Properties
body {} h1 {} p {} ul {} li {} img {}	background-color color font-family font-size text-align border

# Review: **CSS** syntax



**Resource:** Duckett, J. (2011). *HTML & CSS: design and build websites*, p. 23-24. Wiley.

# CSS class selectors

- There exist another type of selectors called **class selectors**. These change the style of the HTML elements that match their **class** name rather than their **type** name.
- Class selectors are useful when:
  - 1) We want to independently style two or more HTML elements that share the same tag. Ex. `<p></p>`.
  - 2) We want more meaningful reference names in our HTML and CSS code.

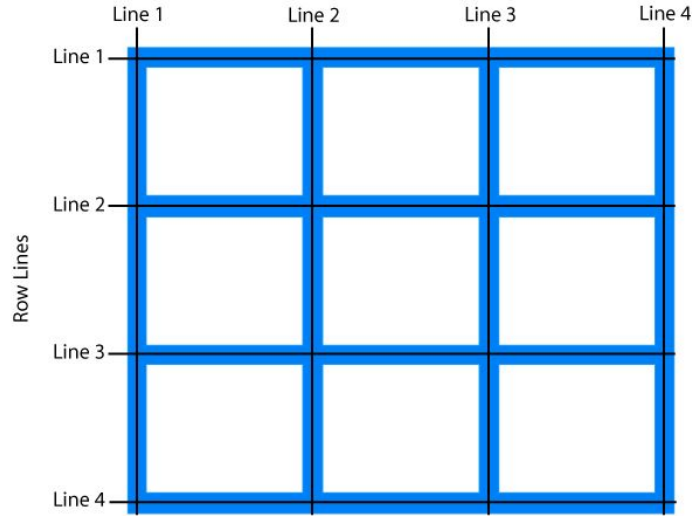
Ex:

HTML	CSS
<code>&lt;p class= "about"&gt; some text &lt;/p&gt;</code>	<code>.about {font-color: blue;}</code>





# CSS grid Layout system



- CSS Grid Layout is a collection of CSS properties that make easier the design of web pages.
- CSS Grid layout uses rows and columns to create grids and rearrange boxes or divs easily.
- CSS “Grids set consistent proportions and spaces between items which helps to create a professional looking design.” (Duckett, 2011, p. 387).

Source: [https://www.w3schools.com/css/css\\_grid.asp](https://www.w3schools.com/css/css_grid.asp)

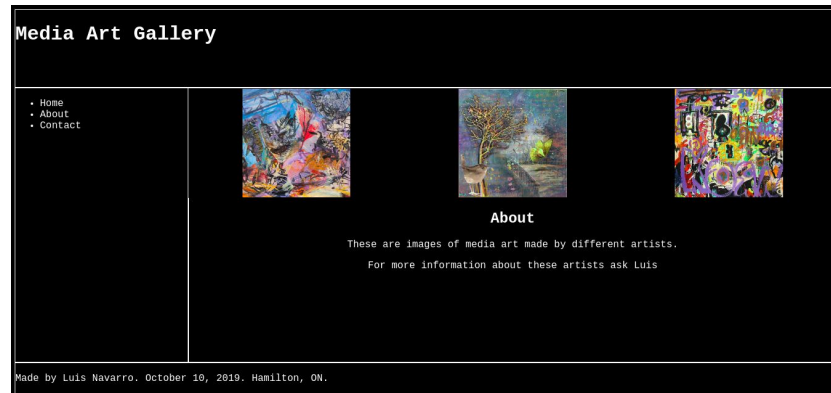
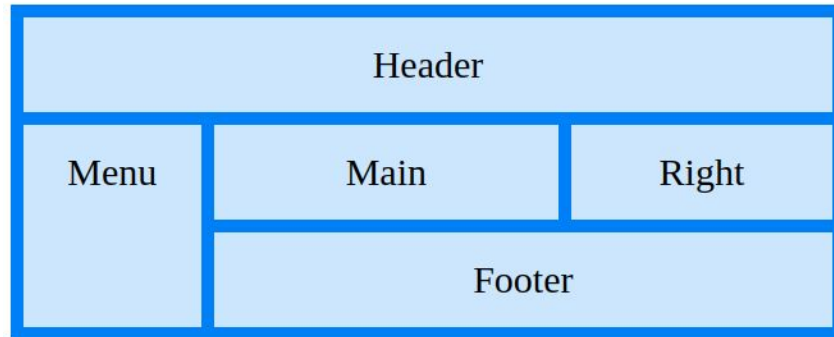
# CSS layout: HTML <div></div> elements

1. To create CSS layouts you have to imagine every HTML **content** is inside a **box (or a <div> element)**.

Ex.

```
<div class="header">  
  <h1> Media Art Gallery </h1>  
</div>
```

This grid layout contains six columns and three rows:



# CSS layout properties

2. Use the CSS layout properties to arrange the div boxes according to your design or composition. Like the following CSS code:

```
.item1 {  
    grid-area: header;  
}  
.item2 {  
    grid-area: menu;  
}  
.item3 {  
    grid-area: content;  
}  
  
.item5 {  
    grid-area: footer;  
}  
  
.grid-container {  
    display: grid;  
    grid-template-areas:  
        'header header header header header'  
        'menu main main main right right'  
        'menu footer footer footer footer footer';  
}
```

# Activity: *Modify an existing layout for a webpage*

## General Instructions:

- 1) Imagine you are creating a new layout for an art gallery webpage.
- 2) Follow the steps in the following slides to modify the arrangement (position) of the heading, the menu, the content page, and the footer.
- 3) Follow the steps in the following slides to modify the arrangement (position) of the biography's text and image.
- 4) Submit your final webpage to A2L.

**\*note:** *This activity has 4 parts (go to the next slides to see detailed instructions).*

**Part 1:** Open an html file in TextEdit and on the web browser.

- Objectives:
  - Configure TextEdit for html code
  - Familiarize with opening html files in the browser

1. **Start** by setting up TextEdit preferences. Do the following:
  - + In the TextEdit app on your Mac choose TextEdit > Preferences.
  - + Select "Plain text"
  - + In the same screen, uncheck any box related to spelling correction.
  - + Now, click "Open and Save", and select "Display HTML files as HTML code instead of formatted text."
2. **Download** the "ArtistBio-activity" folder from A2L -> tutorial 11.
3. **Open** the "biography.html" file in TextEdit (at this point TextEdit should only display the code, if it isn't, go back to step #1).
4. **Open** the "biography.html" file in the Chrome browser (You should see the bio of an artist).
  - + In Chrome, click "Open File" from File menu, or use the ⌘ + O keyboard shortcut.

## Part 2: Identify HTML <div> </div> boxes.

- Objective:
  - Familiarize with HTML <div> boxes.

1. **Imagine** you are modifying the layout (i.e. arrangement) of a webpage for an Art Gallery.
2. **Observe** that your HTML file contains a bunch of <div> boxes with HTML elements inside.
3. **Observe** that just to there is a class and a name right of each <div> box.
  - + These names identify these boxes and their contents.
  - + Keep in mind where to find this names as they will help you when changing the layout in CSS (next part).

## Part 3: Change the main layout using the grid-template-areas property

- Objective:
  - Familiarize with CSS grid layout

1. **Open** the "theme.css" in TextEdit (This file is inside the "ArtistBio-activity" folder).
2. **Find** the **.main-container** selector inside "theme.css".
3. **Find** the **grid-template-areas** property inside **.main-container** selector.
4. **Create** a new arrangement for the **values** inside the **grid-template-areas** property. Follow the next tips:
  - + Change the order of the values.

### Original:

```
grid-template-areas:  
  
'header header '  
menu content '  
  
'footer footer';
```

### Modified:

```
grid-template-areas:  
  
'header header '  
'content menu '  
  
'footer footer';
```



## Part 4: Change the content (biography) layout using the grid-template-areas property

- Objective:
  - Familiarize with CSS grid layout

1. Find the **.content-container** selector inside "theme.css".
2. Find the **grid-template-areas** property inside **.main-container** selector.
3. Create a new arrangement for the **values** inside the **grid-template-areas** property, similarly to how you did in part 3 of this assignment.
4. Visualize your changes in the browser.
5. Submit your work to A2L > Tutorial 11

# Additional resources

**Learn HTML:** <https://www.w3schools.com/html>, <https://www.w3schools.com/tags/>

**Learn CSS:** <https://www.w3schools.com/css>

**Editors:** [textEdit](#), NotePad, Gedit, [Atom](#), [Adobe Dreamweaver](#).