

# CP1406 – Week 6

## Improving Web Design with New Page Layouts



# Introduction

- Web design involves a daily pursuit of perfection in layout, function, and efficiency
  - You must constantly re-evaluate content and design and apply new technologies and innovations to keep audiences engaged and customers elated
  - HTML 5 provides tools for improving webpage design, including semantic elements for specific types of content

# Using HTML 5 Semantic Elements

- HTML 5 semantic elements are a set of starting and ending HTML tags
  - Provide a standard naming convention for webpage content, making webpages more universal, accessible, and meaningful to search engines

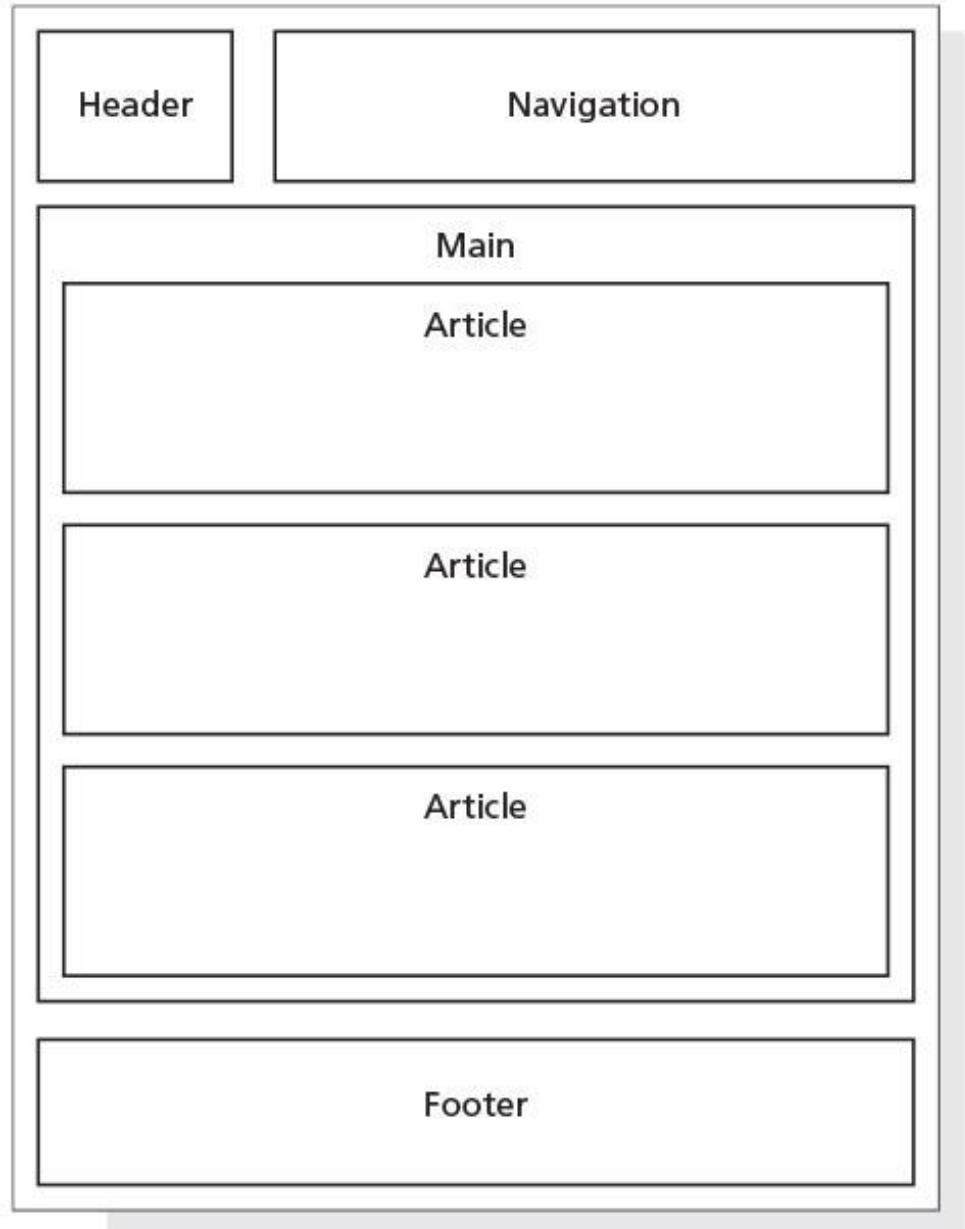
# Article Element

- A complete, self-contained composition in a document, page, application, or site
  - Independently distributable or reusable, e.g. in syndication
- Start and end tags of article elements are <article> and </article>
  - Content placed between these tags will appear on a webpage as part of the article element

# Article Element

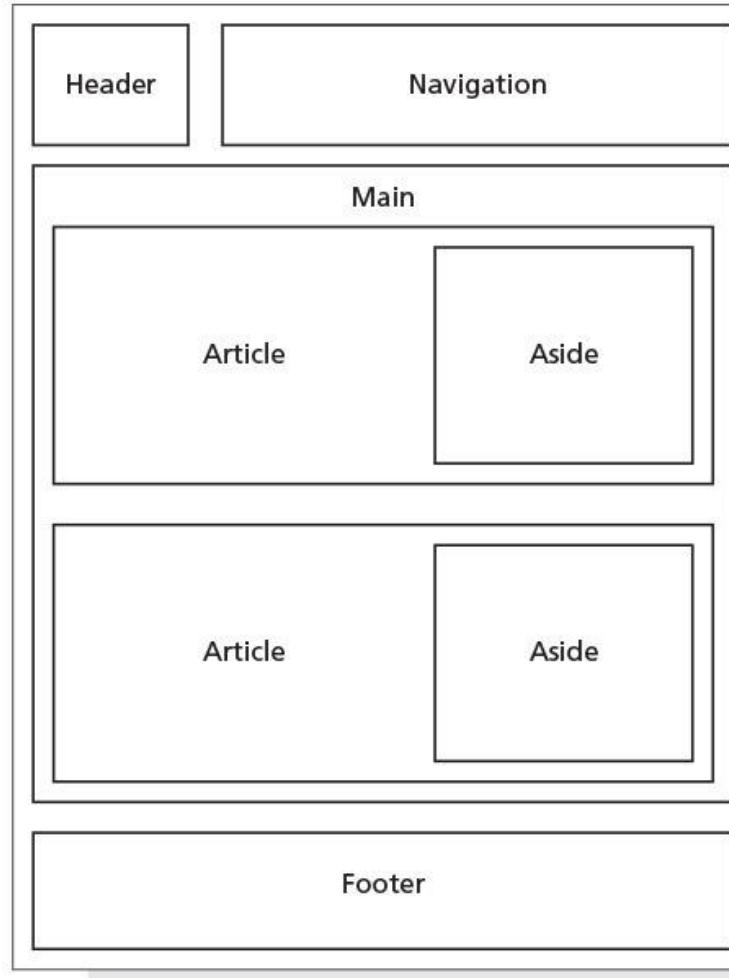
- Articles may be nested within other HTML elements
  - Such as the main element, section element, or other article elements
- Articles are commonly used to contain news articles, blog and forum posts, or comments

# Article Element



# Aside Element

- Used as a sidebar that contains additional information about a particular item mentioned within another element

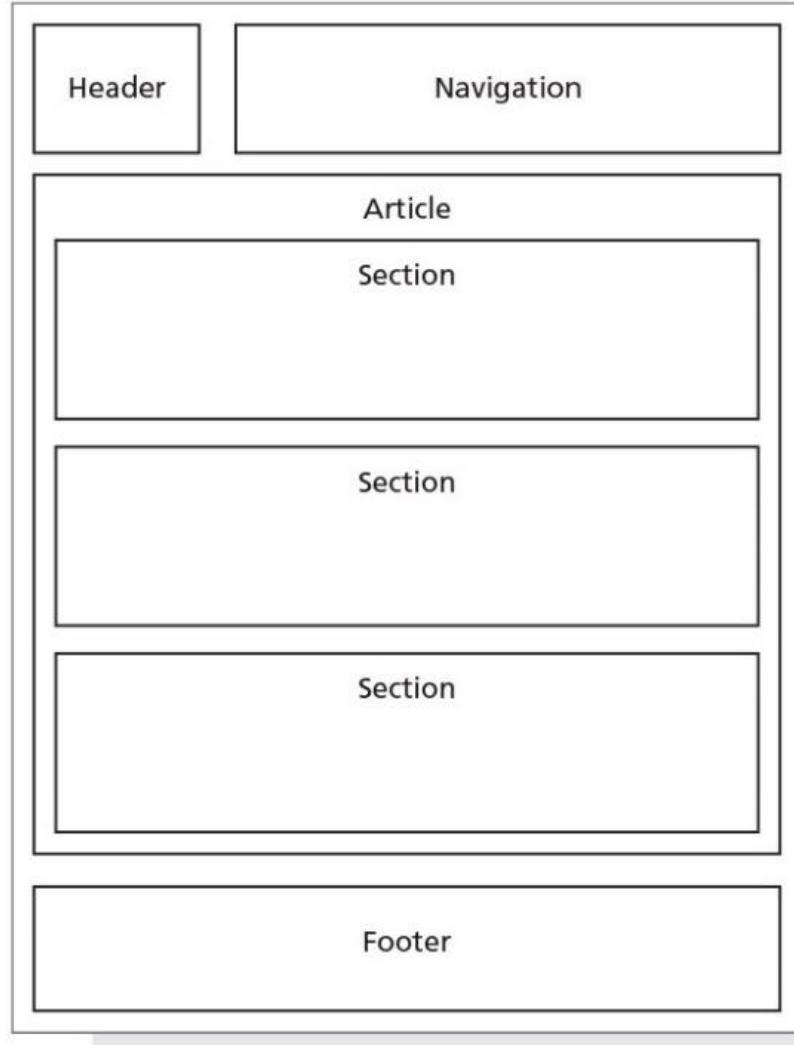


# Aside Element

- Examples:
  - If an article on a webpage contains a recipe and a list of ingredients, one could include an aside element with more information about one of the key ingredients, such as its origin or where to purchase it
  - Can be nested within article elements or within main or section elements

# Section Element

- Represents a generic section of a document or application



# Section Element

- A section is a thematic grouping of content
- The theme of each section should be identified, typically by a heading
- Not a generic container element
- A general rule is that the section element is appropriate only if the element's contents would be listed explicitly in the document's outline

# Section Element

- The following is an example of several section elements nested within an article element

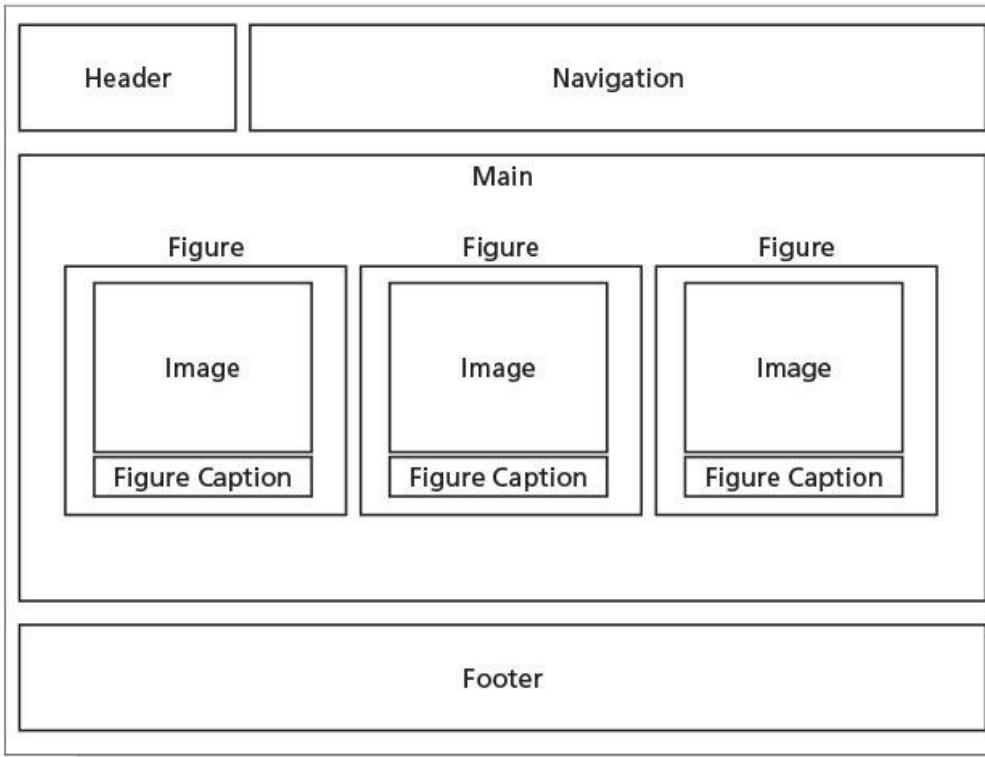
```
<article>
    <h1>Tutorials: Cooking Basics</h1>
    <p>Watch our tutorials to learn the basics of
good cooking.</p>
    <section>
        <h1>Tutorial 1</h1>
        <p>Assembling basic kitchen tools.</p>
    </section>
    ...
</article>
```

# Figure and Figure Caption Elements

- The figure element is used to group content, such as illustrations, diagrams, and photos
  - Represents some flow content that is self-contained and is typically referenced as a single unit from the main flow of the document

# Figure and Figure Caption Elements

- Can contain one or more img elements
- May contain an optional figure caption element, which is used to provide a caption for the figure element
- Start and end tags of the figure caption element are <figcaption> and </figcaption>



# Improving Design with CSS

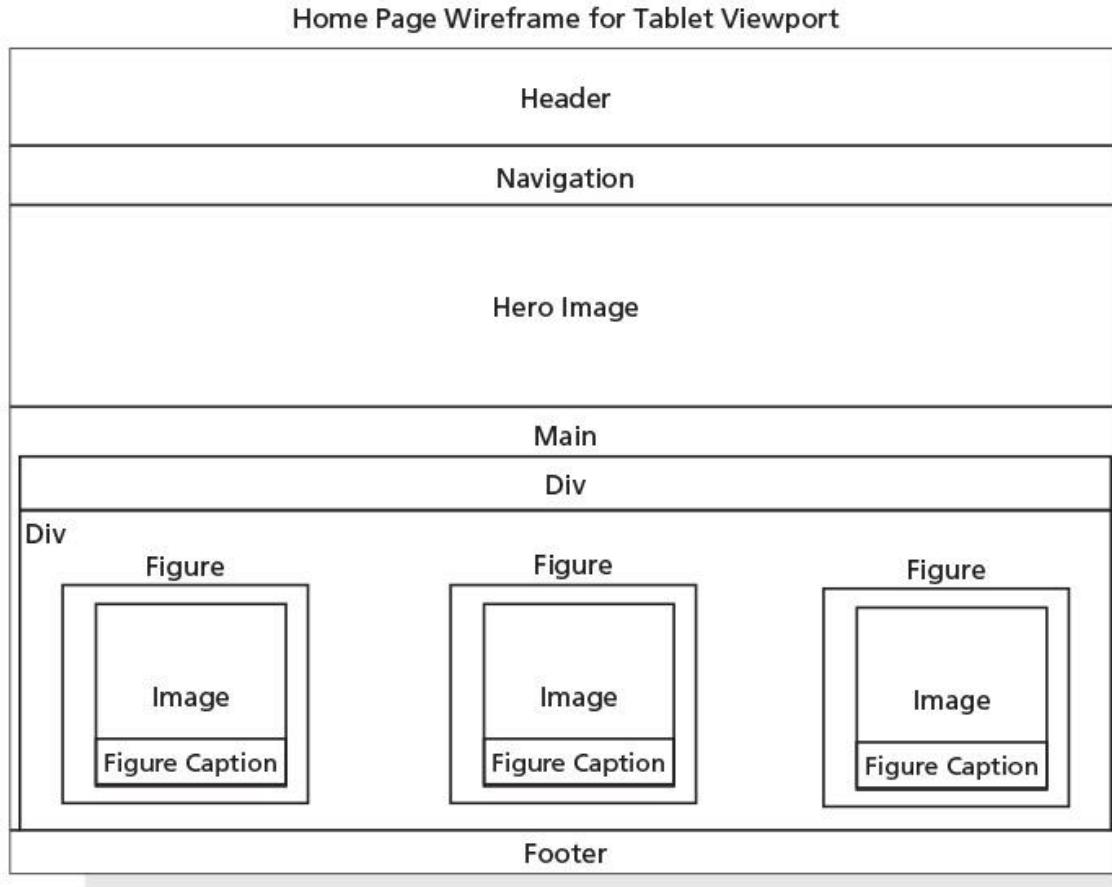
- CSS grid layout
  - Newer webpage design model used to create a single or multiple-column layout by controlling the size and position of boxes of content on a webpage
- Opacity
  - Specifies the amount of transparency of an element

# Improving Design with CSS

- CSS shadows
  - Box-shadow applies a shadow to an element
  - Text-shadow property applies a shadow to text
- CSS box-sizing
  - Allows any specified padding or border to be included within the element's total size

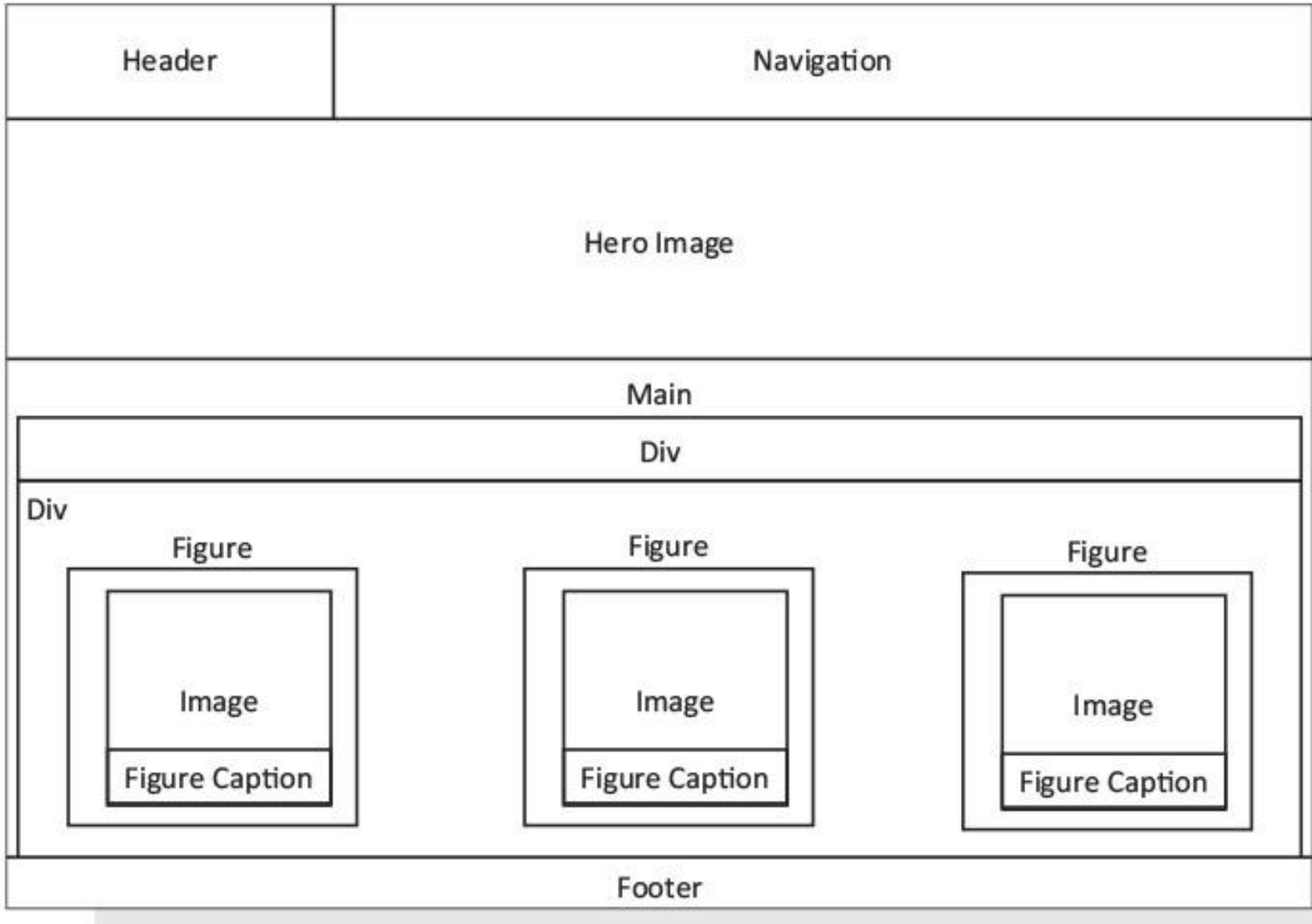
# Redesigning the Home Page

- Home page can be improved by adding figure and figcaption elements with pictures
  - Provide more visual content for potential clients



# Redesigning the Home Page

Home Page Wireframe for Desktop Viewport



# Redesigning the Home Page

desktop viewport

Welcome to Forward Fitness Club. Our mission is to help our clients meet their fitness and nutrition goals.

If you have struggled with getting healthy and need the motivation and resources to make a healthy lifestyle change, contact us today. Our facility includes state-of-the-art equipment, convenient group training classes, and nutrition tips and information to keep you healthy.

We provide a FREE, one-week membership to experience the benefits of our equipment and facility. This one-week trial gives you complete access to our equipment, training classes, and nutrition planning. Contact us today to **start your free trial!**

text shadow applied  
to heading 3 element



# Creating the Nutrition Page

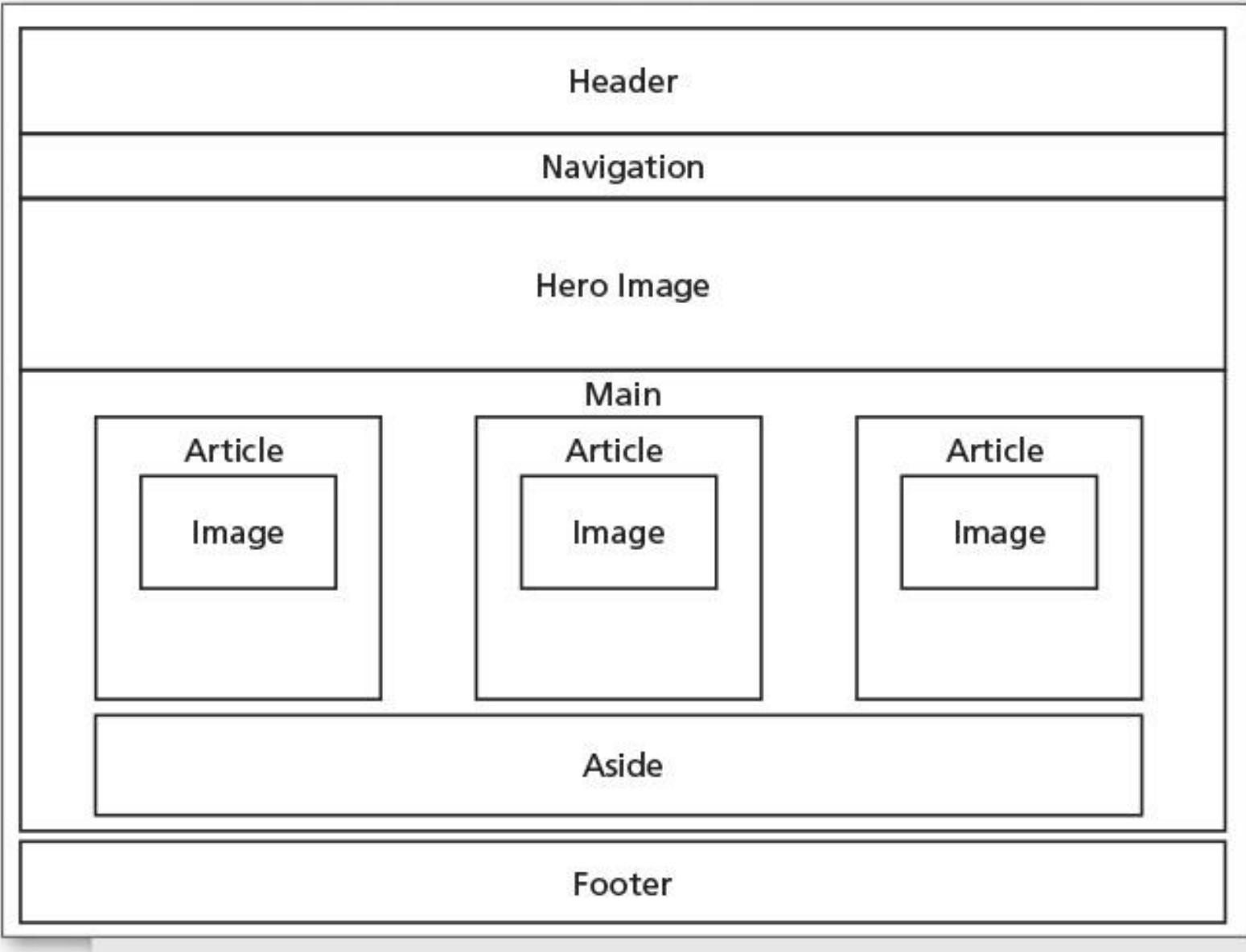
- The Nutrition page provides tips for good nutrition, guidelines for a healthy diet, and a featured recipe of the week
  - The template.html file is used to create the new page
- CSS grid spans
  - A style rule for the class is created that spans the element across three columns

## Example

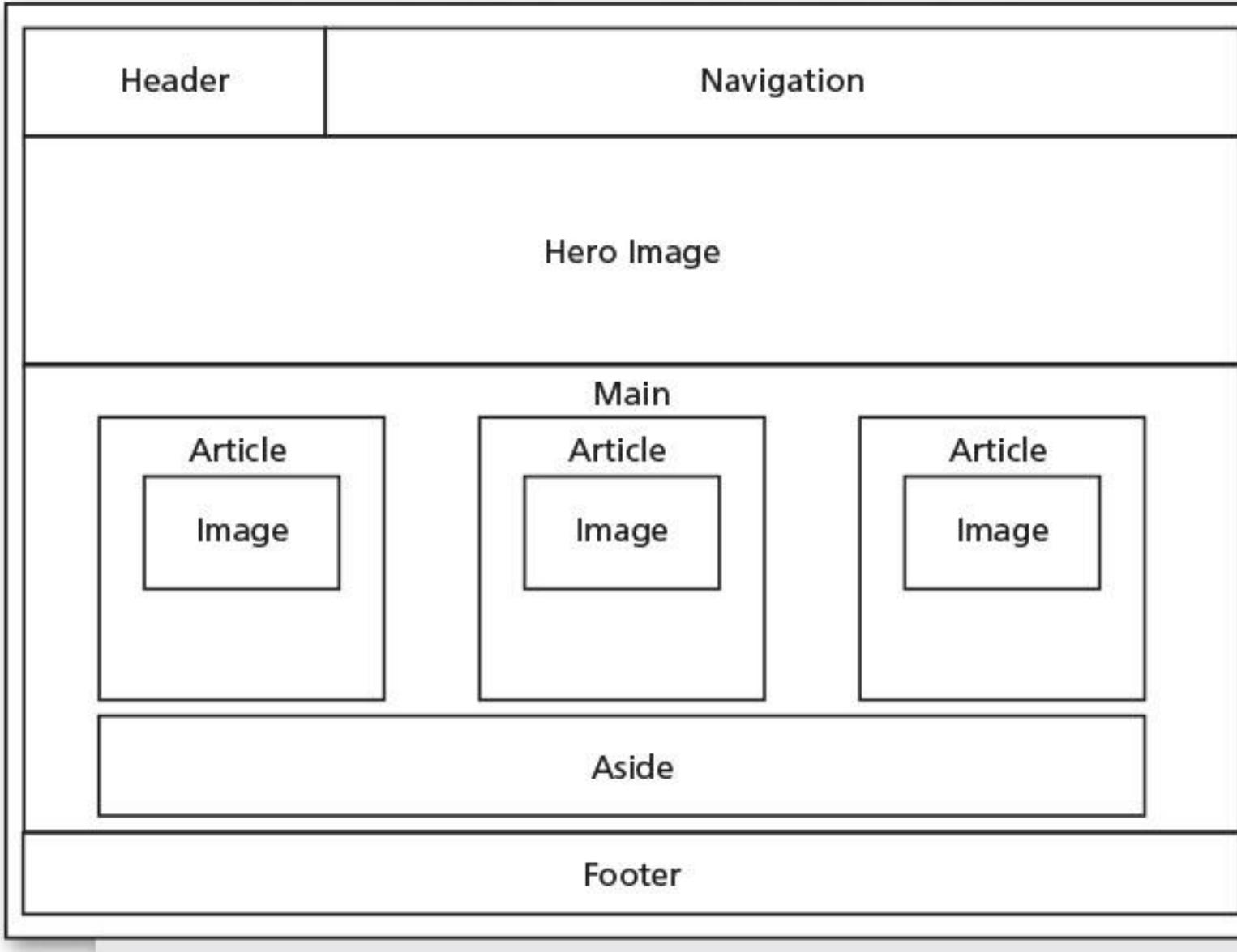
Make "item1" start on column 1 and span 2 columns:

```
.item1 {  
    grid-column: 1 / span 2;  
}
```

# Creating the Nutrition Page



# Creating the Nutrition Page



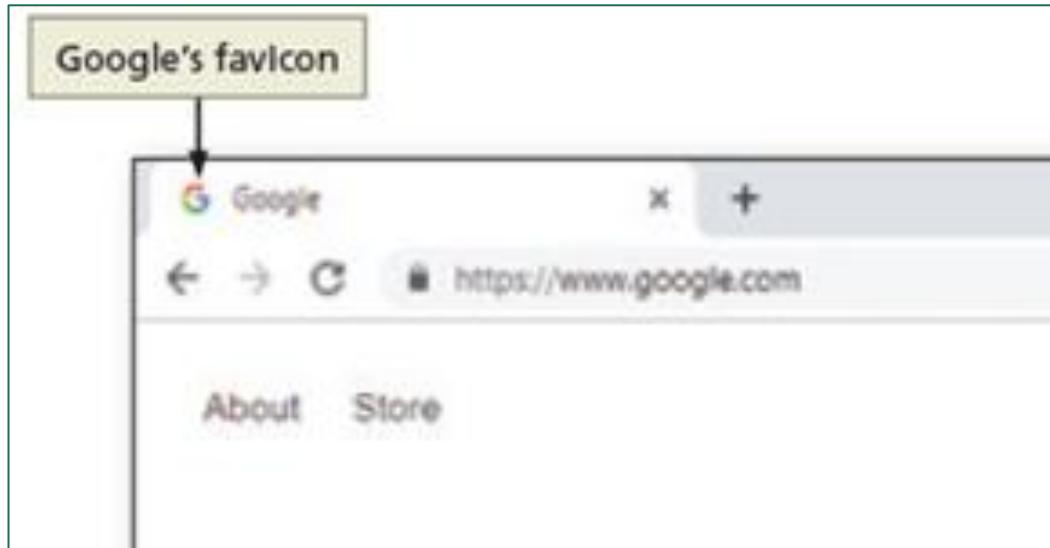
# Creating the Nutrition Page

- Structural pseudo-class, nth-of-type()
  - Used to select specific elements within a parent element
    - Example: if you have a table with 20 rows, you may want to apply a different background colour to all odd or all even rows

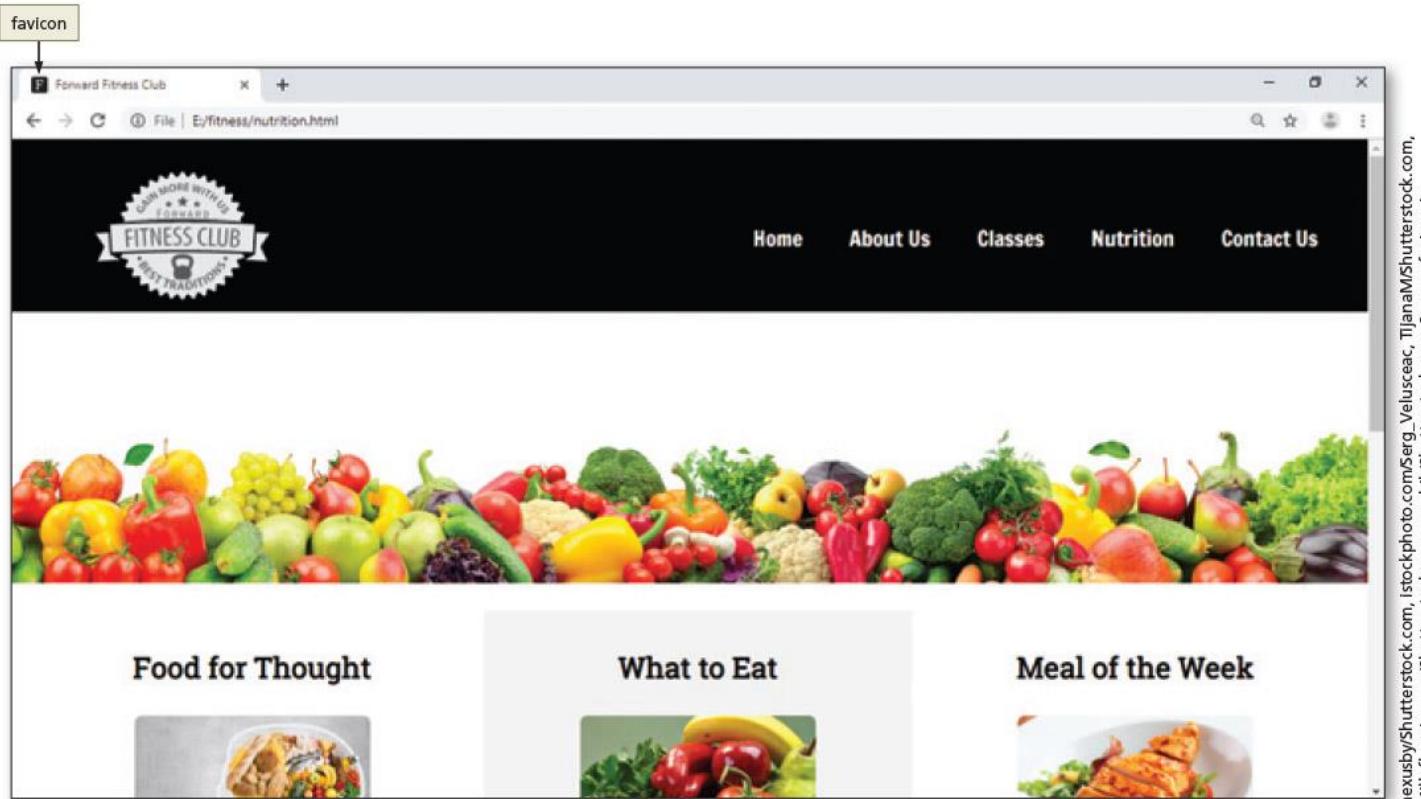
```
p:nth-of-type(odd) {  
    background-color: #ccc;  
}
```

# Adding a Favicon

- Small image that appears on the browser tab that represents the business
  - Might be a logo or another graphic that identifies the business brand
  - Helps improve search engine optimisation
  - Can be PNG, GIF, or ICO file
  - Image sizes are based upon the favicon's use



# Adding a Favicon



nexusby/Shutterstock.com, istockphoto.com/Serg\_Veluscaec, TijanaM/Shutterstock.com, Source: favicon.io  
Millefire Images/Shutterstock.com, verchik/Shutterstock.com, Source: favicon.io

```
<head>
  <title>My Page Title</title>
  <link rel="icon" type="image/x-icon"
    href="/images/favicon.ico">
</head>
```

# Chapter Summary

- In this chapter, you learned how to:
  - Use the HTML 5 figure, figcaption, section, article, and aside semantic elements
  - Add these elements to the webpages in the website
  - Create and modify style rules in the style sheet to format the new elements and adapt to the website design
  - Use a CSS grid layout to create multiple columns
  - Create style rules to add opacity, box shadows, and text shadows
  - Add a favicon to a website