

Week 8 – Web Design – Sydney Campus




1. Explicit example 1 covering lecture 7
2. Explicit example 2 covering lecture 7
3. Step-by-step Instructions for Tutorial Week 8
4. Attendance & Tutorial Questions - Recognising student participation and engagement specifically identifying those who are most actively involved!

Lecturer/Tutor: Dr. Farshid Keivanian

1. Explicit example 1 covering lecture 7


These HTML and CSS codes work together to create a simple, responsive webpage with a main article and an aside for additional tips, while ensuring that images are fluid and adapt to the container's width.


HTML and CSS Code:


 Sessions_Web_Development_HTML_CSS_Java_PHP Public

main ▾ 1 Branch 0 Tags

Health


 Healthy Eating - Nutrition Page.html Go to file

 Australian Fitness Center - Your Gateway to **Health** and Fitness.html

 Sessions_Web_Development_HTML_CSS_Java_PHP Public

main ▾ 1 Branch 0 Tags

Responsive Image and Co

 Responsive Image and Container Styles.css Go to file

1. Explicit example 1 covering lecture 7

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nutrition Page</title>
  <link rel="stylesheet" href="Responsive Image and Container Styles.css">
</head>
<body>
  <article>
    <h1>Healthy Eating</h1>
    <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.<
    <aside>
      <h2>Tips</h2>
      <p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a
    </aside>
  </article>
</body>
</html>
```

1 <!DOCTYPE html>:

- This declaration defines the document type and version of HTML being used. Here, it specifies that the document is an HTML5 document.

2 <html lang="en">:

- The root element of the HTML document. The lang="en" attribute indicates that the content is in English.

1. Explicit example 1 covering lecture 7

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nutrition Page</title>
  <link rel="stylesheet" href="Responsive Image and Container Styles.css">
</head>
<body>
  <article>
    <h1>Healthy Eating</h1>
    <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.</p>
    <aside>
      <h2>Tips</h2>
      <p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a
    </aside>
  </article>
</body>
</html>
```

3. <head>:

- Contains meta-information about the HTML document, such as its character set, viewport settings, title, and linked stylesheets.

4. <meta charset="UTF-8">:

- Specifies the character encoding for the HTML document. UTF-8 is a standard character encoding that includes almost all characters and symbols in the world.

1. Explicit example 1 covering lecture 7

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nutrition Page</title>
  <link rel="stylesheet" href="Responsive Image and Container Styles.css">
</head>
<body>
  <article>
    <h1>Healthy Eating</h1>
    <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.</p>
    <aside>
      <h2>Tips</h2>
      <p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a
    </aside>
  </article>
</body>
</html>
```

5. <meta name="viewport" content="width=device-width, initial-scale=1.0">:

- Provides instructions to the browser on how to control the page's dimensions and scaling. This ensures the webpage is responsive, adapting to different screen sizes.

6. <title>Nutrition Page</title>:

- Sets the title of the HTML document, which appears in the browser's title bar or tab.

1. Explicit example 1 covering lecture 7

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nutrition Page</title>
  <link rel="stylesheet" href="Responsive Image and Container Styles.css">
</head>
<body>
  <article>
    <h1>Healthy Eating</h1>
    <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.</p>
    <aside>
      <h2>Tips</h2>
      <p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a
    </aside>
  </article>
</body>
</html>
```

7. <link rel="stylesheet" href="styles.css">:

- Links an external CSS file (styles.css) to the HTML document, which contains the styles that will be applied to the HTML elements.

1. Explicit example 1 covering lecture 7

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nutrition Page</title>
  <link rel="stylesheet" href="Responsive Image and Container Styles.css">
</head>
<body>
  <article>
    <h1>Healthy Eating</h1>
    <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.</p>
    <aside>
      <h2>Tips</h2>
      <p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a
    </aside>
  </article>
</body>
</html>
```

8. <body>:

- Contains the content of the HTML document that is visible to the user.

9. <article>:

- Represents a self-contained piece of content that can be distributed independently. Here, it is used to group content related to "Healthy Eating."

1. Explicit example 1 covering lecture 7

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nutrition Page</title>
  <link rel="stylesheet" href="Responsive Image and Container Styles.css">
</head>
<body>
  <article>
    <h1>Healthy Eating</h1>
    <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.</p>
    <aside>
      <h2>Tips</h2>
      <p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a
    </aside>
  </article>
</body>
</html>
```

10. <h1>Healthy Eating</h1>:

- Defines the main heading of the article.

11. <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.</p>:

- A paragraph element containing text about healthy eating.

1. Explicit example 1 covering lecture 7

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nutrition Page</title>
  <link rel="stylesheet" href="Responsive Image and Container Styles.css">
</head>
<body>
  <article>
    <h1>Healthy Eating</h1>
    <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.</p>
    <aside>
      <h2>Tips</h2>
      <p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a
    </aside>
  </article>
</body>
</html>
```

12. <aside>:

In this HTML example, the <aside> element is used to provide supplementary information related to the main content of the <article>. The primary purpose of the <aside> is to house content that is indirectly related to the main topic but still relevant and useful. Here, the <aside> contains tips for healthy eating, which complement the main article about healthy eating habits.

1. Explicit example 1 covering lecture 7

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nutrition Page</title>
  <link rel="stylesheet" href="Responsive Image and Container Styles.css">
</head>
<body>
  <article>
    <h1>Healthy Eating</h1>
    <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.</p>
    <aside>
      <h2>Tips</h2>
      <p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a
    </aside>
  </article>
</body>
</html>
```

12. <aside>:

- **Contextual Information:** It offers additional advice (tips) that enhances the reader's understanding and practice of healthy eating.
- **Separation of Content:** It separates supplementary content from the main content.

1. Explicit example 1 covering lecture 7

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nutrition Page</title>
  <link rel="stylesheet" href="Responsive Image and Container Styles.css">
</head>
<body>
  <article>
    <h1>Healthy Eating</h1>
    <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.</p>
    <aside>
      <h2>Tips</h2>
      <p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a
    </aside>
  </article>
</body>
</html>
```

12. <aside>:

- Represents content that is tangentially related to the content around it. Here, it is used to provide additional tips related to the main article content.

1. Explicit example 1 covering lecture 7

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nutrition Page</title>
  <link rel="stylesheet" href="Responsive Image and Container Styles.css">
</head>
<body>
  <article>
    <h1>Healthy Eating</h1>
    <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.</p>
    <aside>
      <h2>Tips</h2>
      <p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a
    </aside>
  </article>
</body>
</html>
```

13. <h2>Tips</h2>:

- A secondary heading within the aside element.

1. Explicit example 1 covering lecture 7

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nutrition Page</title>
  <link rel="stylesheet" href="Responsive Image and Container Styles.css">
</head>
<body>
  <article>
    <h1>Healthy Eating</h1>
    <p>Good nutrition is a lifestyle, not a diet. It starts with a new way of thinking about food.</p>
    <aside>
      <h2>Tips</h2>
      <p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a week.</p>
    </aside>
  </article>
</body>
</html>
```

14. **<p>Control impulsive urges to buy junk food, and instead, allow yourself one "cheat meal" a week.</p>**:

- A paragraph within the aside element providing a tip related to healthy eating.

1. Explicit example 1 covering lecture 7

```
new 5 x test.php x australian-cultural-festival.html x learn_web_design.html x Healthy Eating - Nutrition Page.html x Responsive Image and Container Style
/* styles.css */
img {
    max-width: 100%;
    height: auto;
}

#container {
    width: 100%;
    padding: 0 20px;
}
```

1. `/* styles.css */`:

- A comment indicating the start of the CSS file. Comments are ignored by the browser and are used for documentation purposes.

2. `img { max-width: 100%; height: auto; }`:

- This rule applies to all `img` elements within the HTML document.
- **`max-width: 100%;`**: Ensures that images scale down to fit within their container but do not scale up beyond their original size.
- **`height: auto;`**: Maintains the aspect ratio of the images as they scale.

1. Explicit example 1 covering lecture 7

```
new 5 x test.php x australian-cultural-festival.html x learn_web_design.html x Healthy Eating - Nutrition Page.html x Responsive Image and Container Styl
/* styles.css */
img {
    max-width: 100%;
    height: auto;
}

#container {
    width: 100%;
    padding: 0 20px;
}
```

3. #container { width: 100%; padding: 0 20px; }:

- This rule applies to an element with the id container.
- **width: 100%;**: Sets the width of the container to 100% of its parent element.
- **padding: 0 20px;**: Adds 20 pixels of padding to the left and right sides of the container, with no padding at the top or bottom.

1. Explicit example 1 covering lecture 7


```
new 5 x test.php x australian-cultural-festival.html x learn_web_design.html x Healthy Eating - Nutrition Page.html x Responsive Image and Container Styl
/* styles.css */
img {
    max-width: 100%;
    height: auto;
}


#container {
    width: 100%;
    padding: 0 20px;
}
```

These HTML and CSS codes work together to create a simple, responsive webpage with a main article and an aside for additional tips, while ensuring that images are fluid and adapt to the container's width.

2. Explicit example 2 covering lecture 7

This example illustrates the use of semantic HTML5 elements, CSS properties for styling and layout, and responsive design techniques.

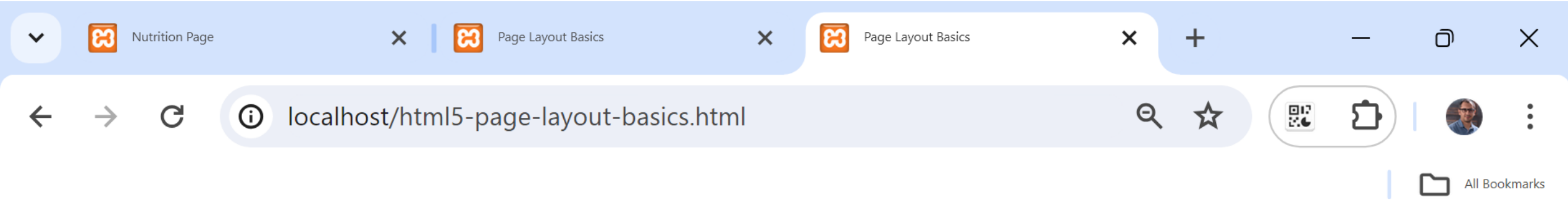
 html5-page-layout-basics.html

 css-styles-html5-page-layout.css



Commit changes

2. Explicit example 2 covering lecture 7



Page Layout Basics

Understanding HTML5 Semantic Elements

The `article` element represents a self-contained composition in a document...

Related Information

This is some additional information related to the main content...

The Section Element

The `section` element represents a thematic grouping of content...



Column 1

Column 2

Column 3

2. Explicit example 2 covering lecture 7

```
page-layout-basics.html x change.log x php_test_page.php x greeting-and-time.php x PHP_MySQL_Integration.php x setup_users_table.sql x fetc
The best title and file name of this?
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Page Layout Basics</title>
  <link rel="stylesheet" href="css-styles-html5-page-layout.css">
</head>
<body>
  <!-- Banner -->
  <header class="banner">
    <h1>Page Layout Basics</h1>
  </header>

  <!-- Main Content -->
  <main>
    <!-- Article Element -->
    <article>
      <h2>Understanding HTML5 Semantic Elements</h2>
      <p>The <code>article</code> element represents a self-contained composition in a document...</p>
    </article>

    <!-- Aside Element -->
    <aside>
      <h3>Related Information</h3>
      <p>This is some additional information related to the main content...</p>
    </aside>

    <!-- Section Element -->
    <section>
      <h2>The Section Element</h2>
      <p>The <code>section</code> element represents a thematic grouping of content...</p>
    </section>

    <!-- Figure and Figcaption Elements -->
    <figure>
      
      <figcaption>This is an example image with a caption.</figcaption>
    </figure>
  </main>

  <!-- Creating a Three-Column Layout -->
  <div class="three-column-layout">
    <div class="column">Column 1</div>
    <div class="column">Column 2</div>
    <div class="column">Column 3</div>
  </div>
</body>
</html>
```

1. Banner: The ``<header>`` element with the class `banner` represents the banner of the website, displaying the site name.

2. Main Content: The ``<main>`` element contains:

- **Article:** The ``<article>`` element represents a self-contained composition.
- **Aside:** The ``<aside>`` element provides additional information related to the main content.
- **Section:** The ``<section>`` element represents a thematic grouping of content.
- **Figure and Figcaption:** The ``<figure>`` element groups an image (````) and its caption (``<figcaption>``).

3. Three-Column Layout: A ``<div>`` with the class `three-column-layout` creates a container for a three-column layout using flexbox.

2. Explicit example 2 covering lecture 7

```
/* Basic styles */
body {
  font-family: Arial, sans-serif;
  margin: 0;
  padding: 0;
}

/* Banner styles */
.banner {
  background-color: #4CAF50;
  color: white;
  text-align: center;
  padding: 1em 0;
}

/* Article, Aside, Section styles */
main {
  padding: 1em;
}

article, aside, section {
  margin-bottom: 1em;
}

aside {
  background-color: #f9f9f9;
  padding: 1em;
  border-left: 4px solid #4CAF50;
}

/* Figure and Figcaption styles */
figure {
  margin: 1em 0;
  text-align: center;
}

figure img {
  max-width: 100%;
  height: auto;
}

figcaption {
  font-size: 0.9em;
  color: #555;
}

/* Three-Column Layout */
.three-column-layout {
  display: flex;
  justify-content: space-between;
  padding: 1em;
  background-color: #f1f1f1;
}

.three-column-layout .column {
  background-color: #ddd;
  padding: 1em;
  width: 30%;
  box-sizing: border-box;
}

/* Opacity and Text-Shadow properties */
.banner {
  opacity: 0.9;
}

h1 {
  text-shadow: 2px 2px 5px rgba(0, 0, 0, 0.3);
}

/* Overflow property */
main {
  overflow: auto;
}

@media (max-width: 768px) {
  .three-column-layout {
    flex-direction: column;
  }
}
```

1. Basic styles: General styling for the `body` and resetting margins and padding.

2. Banner styles: Styling the banner with a background color, text color, and padding. The `opacity` property is used to set transparency.

3. Article, Aside, Section styles: Adding margins and padding to the `` and its child elements. The `aside` element has additional styling for a distinct background and border.

4. Figure and Figcaption styles: Centering the figure and ensuring the image scales responsively. The `figcaption` is styled with a smaller font and color.

5. Three-Column Layout: Using flexbox to create a three-column layout. Each column is styled with a background color, padding, and width.

6. Opacity and Text-Shadow properties: Applying `opacity` to the banner and `text-shadow` to the `

` for visual effects.

7. Overflow property: Ensuring the main content area scrolls if content overflows.

8. Responsive Design: Adjusting the three-column layout for smaller screens using a media query.

3. Step-by-step Instruction for Completing the Tutorial Week 8 – Project 1

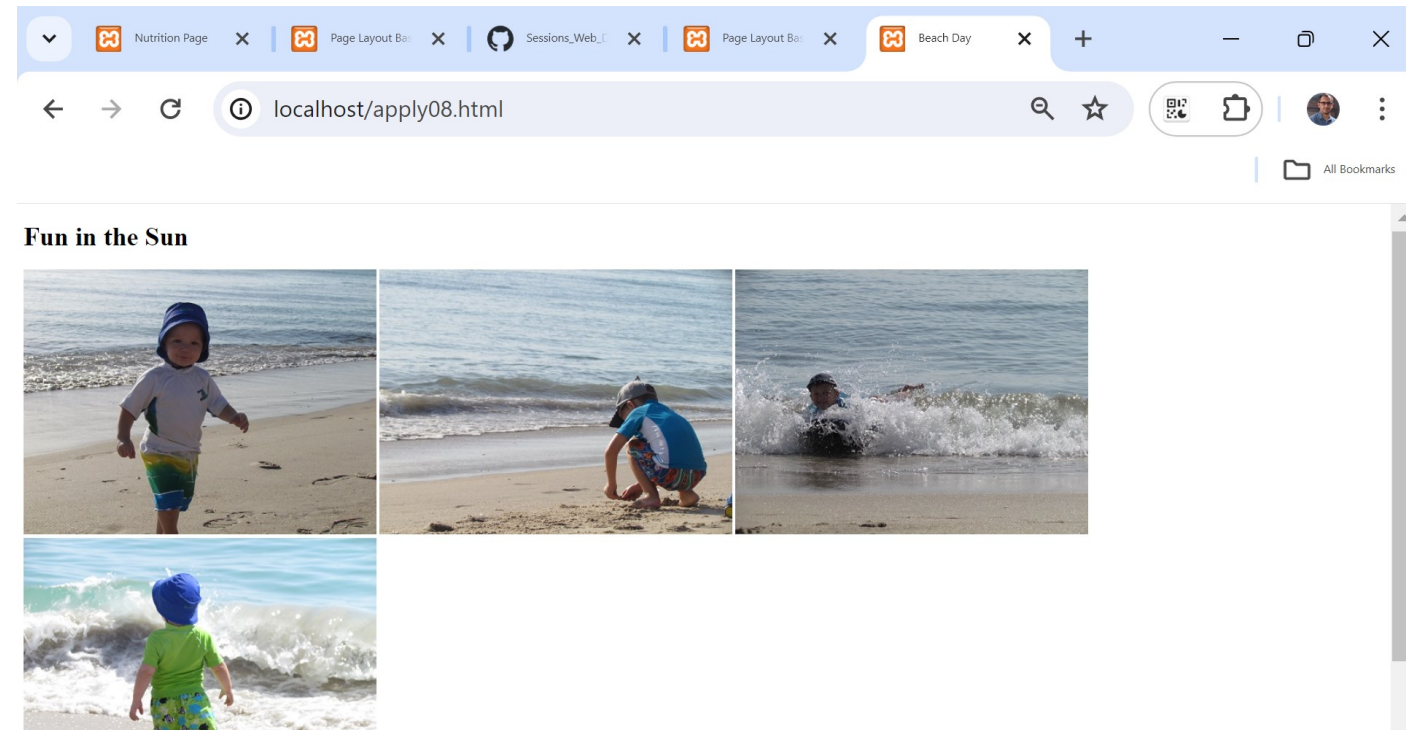
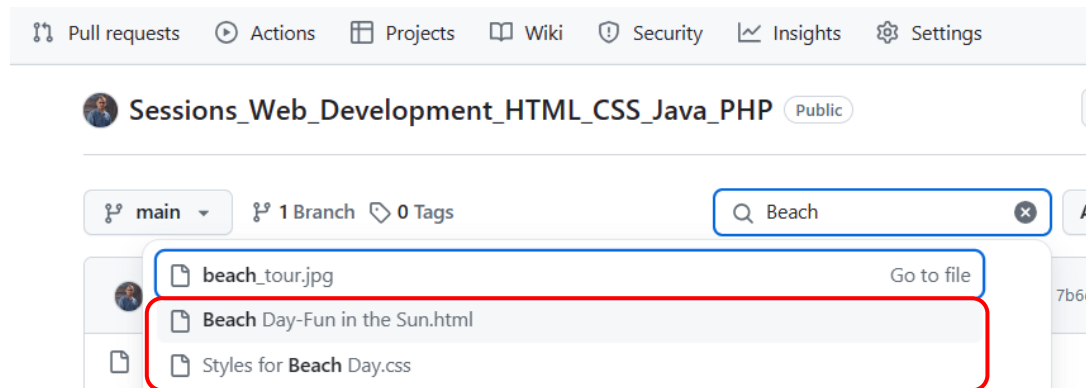
Project 1: Styling for Responsive Design

Instructions:

1. Open apply08.html in your browser:

1. Done.

2. Open apply08.html in your text editor and modify the comment at the top:



3. Step-by-step Instruction for Completing the Tutorial Week 8 – Project 1

Project 1: Styling for Responsive Design

3. Remove the width and height attributes from the image elements and save your changes:

- Done above.

4. Open styles08.css and modify the comment at the top:

3. Step-by-step Instruction for Completing the Tutorial Week 8 – Project 1

5. Add a max-width property with a value of 100% to the img selector:

- Done above.

6. Change the width value of the #container selector to use a relative measurement:

- Done above.

7. Save the styles08.css file and refresh the apply08.html file in your browser. Resize the browser to ensure the layout is fluid and images are flexible:

- Done.

8. Add the following meta tag within the head section of the document:

- Done above.

3. Step-by-step Instruction for Completing the Tutorial Week 8 – Project 1

9. Save your changes to apply08.html and open the file in Google Chrome:

- Done.

10. Use the developer tools in Google Chrome to view the page in an emulator:

- Done.

11. Select a device and refresh the page. The page should look similar to Figure 1:

- Verified.

3. Step-by-step Instruction for Completing the Tutorial Week 8 – Project 1

12. Validate your HTML document using the W3C validator:

- W3C Validator

13. Validate your CSS file using the W3C validator:

- W3C CSS Validator

14. Submit the apply08.html and styles08.css files in a format specified by your instructor:

- Done.

15. Explain how the percentage unit of measurement makes a fluid layout more flexible as compared to px:

- Using percentages for width allows the layout to adapt to different screen sizes, making it more flexible and responsive. Unlike fixed pixel values, percentage values enable elements to scale relative to their container, providing a better user experience across various devices.

3. Step-by-step Instruction for Completing the Tutorial Week 8 – Challenge 1

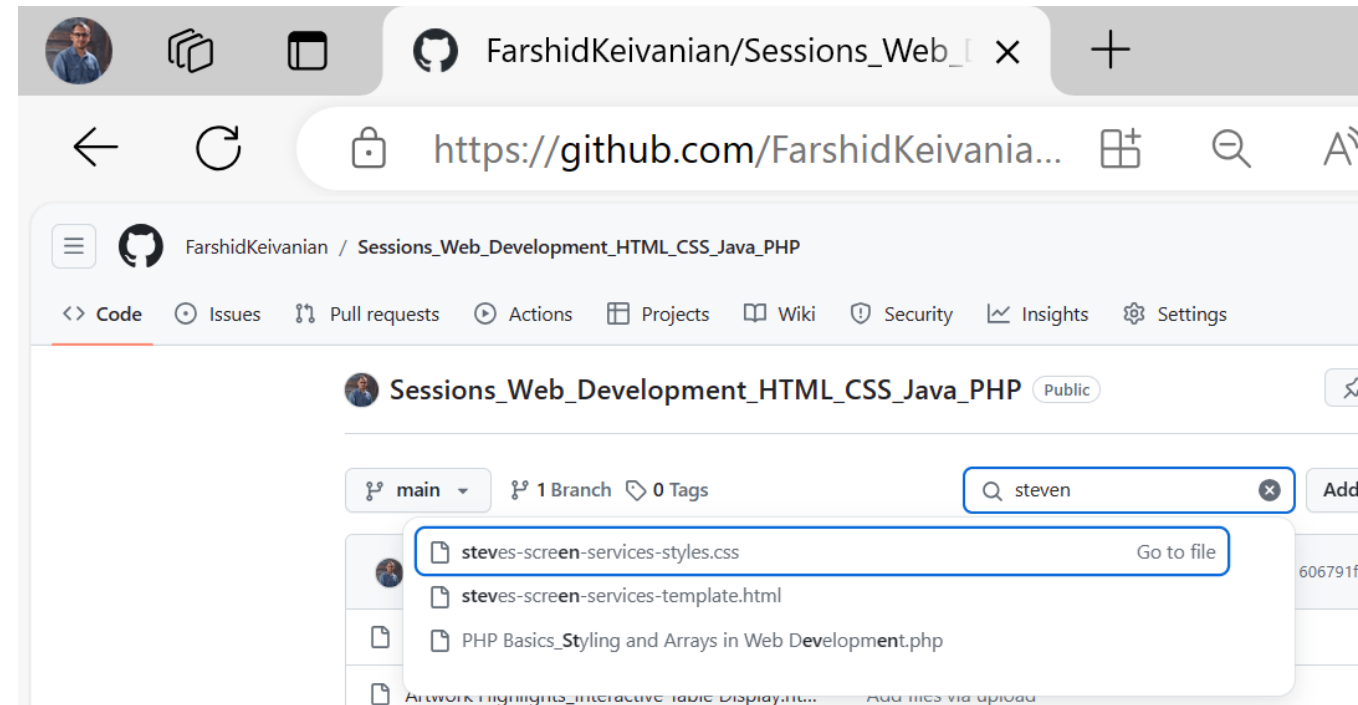
Challenge 1: Creating a Responsive Website for Steve's Screen Services

Instructions:

1. Open index.html and screenstyles.css in your text editor:

1. Done.

2. Modify the comment at the top of index.html:

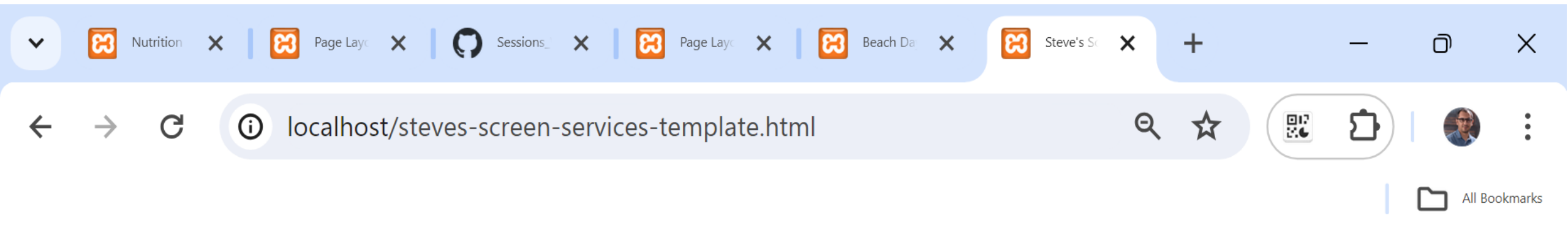


3. Step-by-step Instruction for Completing the Tutorial Week 8 – Challenge 1



```
<!DOCTYPE html>
<!-- This website template was created by: Mayer Alvarez Vivanco, 2024-05-17 -->
<html lang="en">
<head>
  <title>Steve's Screen Services</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="steves-screen-services-styles.css">
</head>
<body>
  <div id="container">
    <header>
      Steve's Screen Services
    </header>
    <div id="banner">
      
    </div>
    <nav>
      <ul>
        <li><a href="index.html">Home</a></li>
        <li><a href="services.html">Services</a></li>
        <li><a href="gallery.html">Project Gallery</a></li>
        <li><a href="quote.html">Quote</a></li>
        <li><a href="contact.html">Contact</a></li>
      </ul>
    </nav>
    <main>
      <div class="mobile">
        <h3>Need your patio screened or just a small repair?</h3>
        <p><a href="tel:5558235555">Call us today</a> for a FREE estimate and use the reference code Mobile Offer to receive a 10% discount</p>
      </div>
    </main>
    <footer>
      &copy; Copyright 2016. All Rights Reserved.<br>
      <a href="mailto:steve@screen.net">steve@screen.net</a>
    </footer>
  </div>
</body>
</html>
```

3. Step-by-step Instruction for Completing the Tutorial Week 8 – Challenge 1



Steve's Screen Services
New Screen Services picture

- Home
- Services
- Project Gallery
- Quote
- Contact

Need your patio screened or just a small repair?

[Call us today](#) for a FREE estimate and use the reference code Mobile Offer to receive a 10% discount

3. Step-by-step Instruction for Completing the Tutorial Week 8 – Challenge 1

3. Modify the comment at the top of screenstyles.css:

```
/* Styles for Steve's Screen Services - Mayer Alvarez Vivanco, 2024-05-17 */
img {
    max-width: 100%;
}
nav ul {
    padding: 0;
    margin-top: 0.5em;
    margin-bottom: 0.5em;
}
nav li {
    background-color: #000066;
    list-style-type: none;
    margin: 0.4em;
    padding: 0.5em;
}
nav li a {
    color: #FFFFFFF;
    text-decoration: none;
}
.mobile {
    display: inline;
}
```

3. Step-by-step Instruction for Completing the Tutorial Week 8 – Challenge 1

4. Create a link to the external style sheet in index.html:

- Done above.

5. Add the viewport meta tag to the head section:

- Done above.

6. Delete the width and height attributes from all image elements:

- Done above.

3. Step-by-step Instruction for Completing the Tutorial Week 8 – Challenge 1

7. Code each set of navigation links as an unordered list:

- Done above.

8. Create a new div element with a class="mobile" and add the content:

- Done above.

9. Add the style to make images flexible:

- Done above.

10. Style the unordered list in the nav:

- Done above.

3. Step-by-step Instruction for Completing the Tutorial Week 8 – Challenge 1



11. Style the list items within the nav:

- Done above.

12. Style the nav links:

- Done above.

13. Style the mobile class:

- Done above.

14. Validate your HTML code:

- W3C Validator

3. Step-by-step Instruction for Completing the Tutorial Week 8 – Challenge 1

15. Validate your CSS code:

- W3C CSS Validator

16. Save all files and open the index.html page within a browser as shown in Figure 2:

- Done.

17. Submit your assignment in the format specified by your instructor:

- Done.

18. Research trends in navigation design for responsive web design:

- Current trends include using mobile-first design, hamburger menus for compact navigation, sticky navigation bars for easy access, and responsive grids and flexbox layouts for better adaptability.

By following these steps, you will create a responsive design for both Project 1 and Challenge 1.

4. Attendance and Questions

Q1) What is the purpose of the aside element?

- A) To group main content together
- B) To create a sidebar with additional information**
- C) To define a section within a document
- D) To apply styles to an image

Q2) Which property is used to manage content overflow in CSS?

- A) float
- B) overflow**
- C) opacity
- D) text-shadow

The background of the image is a wooden surface with a horizontal grain. There are several wrapped gifts of various sizes. The gifts are wrapped in different papers: some have red paper with white hearts, some have brown paper with red and white geometric patterns, and some have red and white patterned paper with snowflakes and trees. Most gifts are tied with red ribbons in bows. One gift in the bottom left is being tied with a red ribbon by a pair of hands. Another gift in the middle left is wrapped in brown paper with a red and white checkered ribbon and a red star. The text "Happy A Learning Day!" and "Farshid Keivanian" is overlaid in white, centered on the image.

Happy A Learning Day!
Farshid Keivanian