

Week 9 – Web Design – Sydney Campus



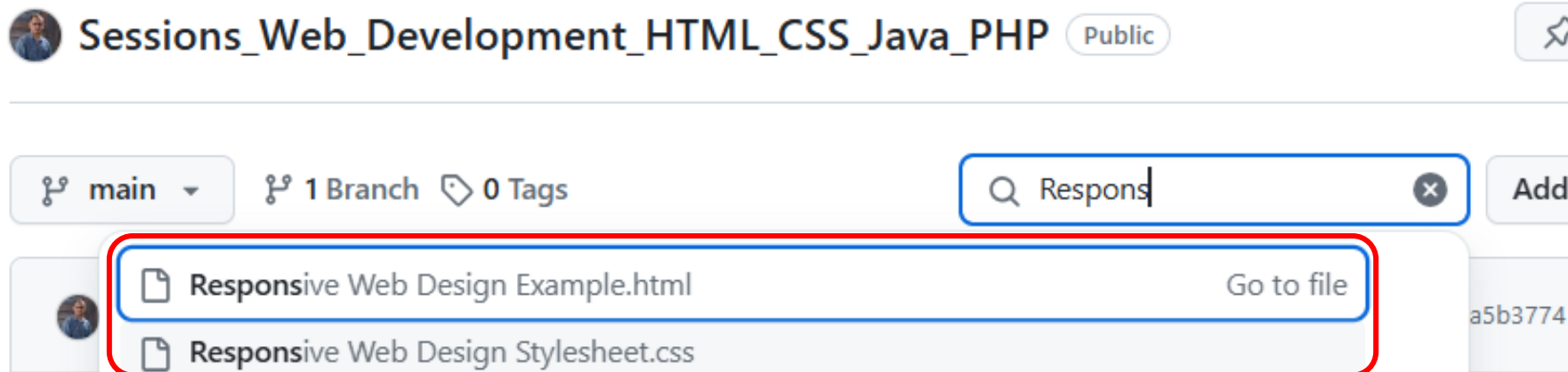
1. Explicit Example Covering Key Concepts for Lecture 8
2. Step-by-step Instructions for Tutorial Week 9
3. Attendance & Tutorial Questions - Recognising student participation and engagement specifically identifying those who are most actively involved!

Lecturer/Tutor: Dr. Farshid Keivanian

1. Explicit Example Covering Key Concepts for Lecture 8

Objective: To create a responsive web page that covers all the key concepts from Lecture 8, including fluid layouts, flexible images, media queries, and the mobile-first strategy. **'Responsive Web Design Example.html'** and **'Responsive Web Design Stylesheet.css'**

Example: Responsive Web Page



1. Explicit Example Covering Key Concepts for Lecture 8

```
<!DOCTYPE html>  
<html lang="en">
```

- This line declares the document type as HTML5 and sets the language of the document to English.

1. Explicit Example Covering Key Concepts for Lecture 8

```
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Responsive Web Design Example</title>
  <link rel="stylesheet" href="Responsive Web Design Stylesheet.css">
</head>
```

- **<head>**: Contains metadata and links to resources.
- **<meta charset="UTF-8">**: Sets the character encoding to UTF-8.
- **<meta name="viewport" content="width=device-width, initial-scale=1">**: Ensures proper scaling on mobile devices.
- **<title>Responsive Web Design Example</title>**: Sets the title of the web page, which appears in the browser tab.
- **<link rel="stylesheet" href="styles.css">**: Links to an external CSS file for styling the page.

```
<body>
  <header>
    <h1>Responsive Design Example</h1>
    <nav>
      <ul>
        <li><a href="#">Home</a></li>
        <li><a href="#">About</a></li>
        <li><a href="#">Services</a></li>
        <li><a href="#">Contact</a></li>
      </ul>
    </nav>
  </header>
```

- **<header>**: Defines the header section of the page.
- **<h1>Responsive Design Example</h1>**: Main heading of the page.
- **<nav>**: Defines a navigation menu.
- ****: Unordered list to hold navigation links.
- **Link**: List items containing links (e.g., Home, About, Services, Contact).

```
<main>
  <section>
    <h2>Introduction to Responsive Design</h2>
    <p>This example demonstrates the principles of responsive
design, including fluid layouts, flexible images, and media
queries.</p>
    
  </section>
</main>
```

- **<main>**: Main content area of the page.
- **<section>**: Defines a section within the main content.
- **<h2>Introduction to Responsive Design</h2>**: Subheading for the section.
- **<p>This example demonstrates...media queries.</p>**: Paragraph explaining the purpose of the example.
- ****: Image with a source file and alternative text.

1. Explicit Example Covering Key Concepts for Lecture 8

```
<footer>  
    <p>Designed by: Dr. Farshid Keivanian</p>  
</footer>  
</body>  
</html>
```

- **<footer>**: Defines the footer section of the page.
- **<p>Designed by: Dr. Farshid Keivanian</p>**: Paragraph crediting the designer.
- **</body>**: Closing tag for the body.
- **</html>**: Closing tag for the HTML document.

This HTML structure outlines a basic responsive web design example, including a header with navigation, main content with a section explaining responsive design, and a footer crediting the designer.

1. Explicit Example Covering Key Concepts for Lecture 8

```
/* Style sheet created by: Dr. Farshid Keivanian, 23 May 2024 */
```

A comment indicating the author of the stylesheet and the date it was created. Comments in CSS are enclosed in `/* */`.

1. Explicit Example Covering Key Concepts for Lecture 8

```
/* Style for body specifies a background color */  
body {  
    background-color: #f0f0f0;  
    font-family: Arial, sans-serif;  
    margin: 0;  
    padding: 0;  
}
```

This block sets the styles for the <body> element:

- **background-color: #f0f0f0;** Sets the background color to a light gray.
- **font-family: Arial, sans-serif;** Sets the font family to Arial, with a fallback to sans-serif.
- **margin: 0;** Removes the default margin.
- **padding: 0;** Removes the default padding.

1. Explicit Example Covering Key Concepts for Lecture 8

```
nav ul {  
  list-style-type: none;  
  padding: 0;  
}
```

This block sets the styles for the element inside <nav>:

- **list-style-type: none;** Removes the default bullet points from the list.
- **padding: 0;** Removes the default padding.

1. Explicit Example Covering Key Concepts for Lecture 8

```
nav ul li {  
  display: inline;  
  margin: 0 1em;  
}
```

This block sets the styles for the `` elements inside `<nav>` ``:

- **display: inline;** Displays the list items horizontally.
- **margin: 0 1em;** Adds horizontal spacing between the list items.

1. Explicit Example Covering Key Concepts for Lecture 8

```
nav ul li a {  
    color: white;  
    text-decoration: none;  
}
```

This block sets the styles for the <a> elements inside <nav> :

- **color: white;** Sets the text color to white.
- **text-decoration: none;** Removes the underline from the links.

1. Explicit Example Covering Key Concepts for Lecture 8

```
/* Fluid layout for main content */  
main {  
    margin: 2em auto;  
    max-width: 800px;  
    padding: 1em;  
}
```

This block sets the styles for the <main> element:

- **margin: 2em auto;** Adds vertical margins and centers the main content horizontally.
- **max-width: 800px;** Limits the width of the main content to 800 pixels.
- **padding: 1em;** Adds padding inside the main content area.

1. Explicit Example Covering Key Concepts for Lecture 8

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

This block sets the styles for the elements inside <main>:

- **max-width: 100%;** Ensures the images do not exceed the width of their container.
- **height: auto;** Maintains the aspect ratio of the images.

1. Explicit Example Covering Key Concepts for Lecture 8

```
/* Responsive styles */
@media only screen and (max-width: 600px) {
    header, nav ul li {
        display: block;
        text-align: center;
    }
}
```

This block sets responsive styles for screens with a maximum width of 600 pixels:

- **@media only screen and (max-width: 600px):** Media query targeting screens with a width of 600 pixels or less.
- **header, nav ul li { display: block; text-align: center; }:** Changes the display property to block and centers the text for the <header> and elements inside <nav> to ensure better readability on small screens.

This stylesheet provides a simple but effective set of styles for creating a responsive web design.

1. Explicit Example Covering Key Concepts for Lecture 8



localhost/Responsive%20Web%20Design%20Example.html



All Bookmarks

Responsive Design Example

[Home](#) [About](#) [Services](#) [Contact](#)

Introduction to Responsive Design

This example demonstrates the principles of responsive design, including fluid layouts, flexible images, and media queries.



2. Step-by-step Instructions for Tutorial Week 9

Project 2: Using Tables

1. Open **apply09.html** in your text editor:

- Add a title: **2017 Sales by Quarter**
- Modify the comment at the top:

```
<!-- This website template was created by: Mayer Alvarez Vivanco, Today's  
Date -->
```

Replace “Student’s Name” with “Mayer Alvarez Vivanco” in the footer:

```
<footer>  
    <p>Designed by: Mayer Alvarez Vivanco</p>  
</footer>
```

2. Step-by-step Instructions for Tutorial Week 9

2. Open `applystyles09.css` and modify the comment at the top:

```
/* Style sheet created by: Mayer Alvarez Vivanco, Today's Date */
```

3. In `apply09.html`, add a table element within the main element:

```
<main>
  <table>
    <caption>2017 Sales by Quarter</caption>
    <tr>
      <th>Product</th>
      <th>Quarter 1</th>
      <th>Quarter 2</th>
      <th>Quarter 3</th>
      <th>Quarter 4</th>
    </tr>
    <tr>
      <th>Tablets</th>
      <td>&#36;24,500</td>
      <td>&#36;21,525</td>
      <td>&#36;20,217</td>
      <td>&#36;28,575</td>
    </tr>
    <tr>
      <th>Monitors</th>
      <td>&#36;12,825</td>
      <td>&#36;12,400</td>
      <td>&#36;11,900</td>
      <td>&#36;14,233</td>
    </tr>
    <tr>
      <th>Laptops</th>
      <td>&#36;33,000</td>
      <td>&#36;32,750</td>
      <td>&#36;31,595</td>
      <td>&#36;32,465</td>
    </tr>
    <tr>
      <th>Desktops</th>
      <td>&#36;21,478</td>
      <td>&#36;20,895</td>
      <td>&#36;18,200</td>
      <td>&#36;21,625</td>
    </tr>
  </table>
</main>
```

4. In `applystyles09.css`, create the following style rules:

```
/* Style for table */  
table {  
    width: 80%;  
    margin-left: auto;  
    margin-right: auto;  
}
```

```
/* Style for table, tr, th, td */  
table, tr, th, td {  
    border-collapse: collapse;  
    border: solid 0.1em #000000;  
    padding: 1em;  
}
```

```
/* Style for table data */  
td {  
    text-align: center;  
}
```

```
/* Style for table caption */  
caption {  
    font-size: 2em;  
    padding: 1em;  
    margin-top: 1em;  
}
```

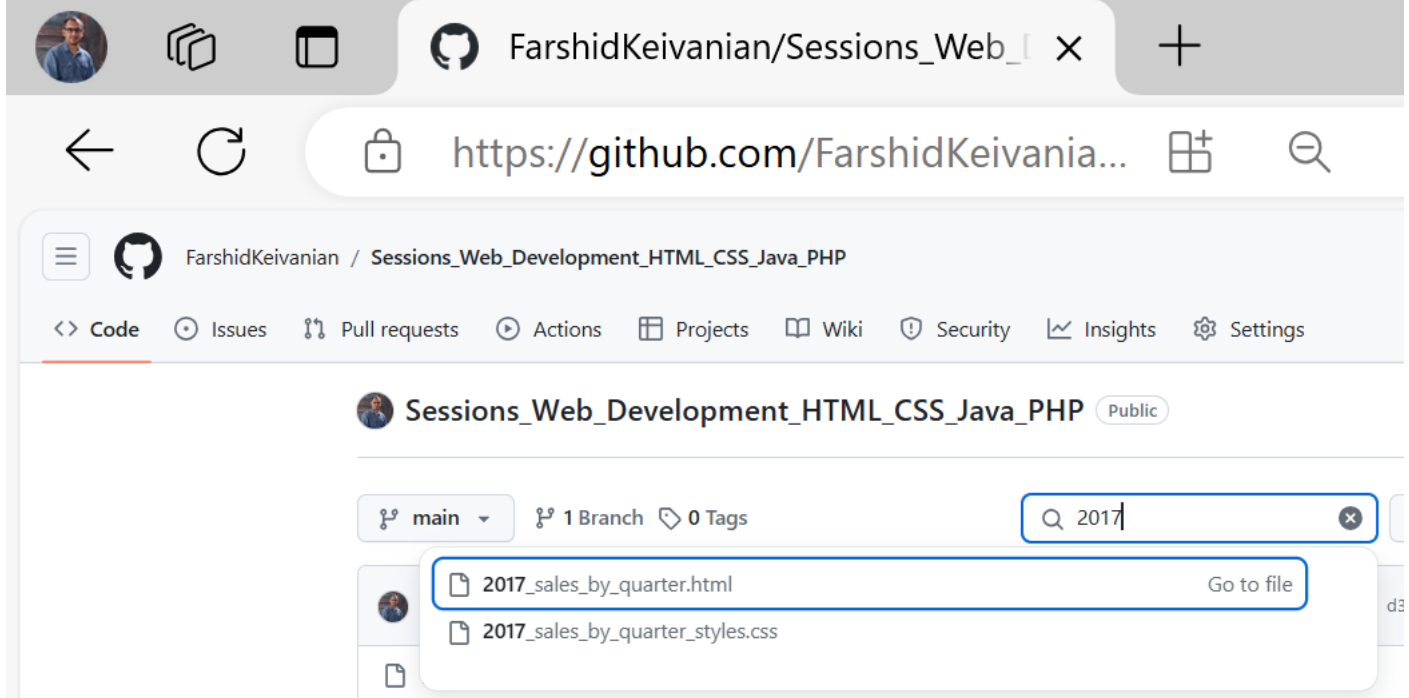
5. Validate HTML and CSS files using W3C validator:

- Use the W3C validator found at validator.w3.org for HTML.
- Use the W3C validator found at jigsaw.w3.org/css-validator for CSS.

6. Describe the purpose of using the table header elements:

- **Purpose:** The table header elements (**<th>**) are used to define header cells in the table, which are typically rendered in bold and centered by default. They provide a semantic meaning, indicating that the cells contain header information.
- **Styling:** To left-align the text in table header elements

```
th {  
    text-align: left;  
}
```



2017 Sales by Quarter

Product	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Tablets	\$24,500	\$21,525	\$20,217	\$28,575
Monitors	\$12,825	\$12,400	\$11,900	\$14,233
Laptops	\$33,000	\$32,750	\$31,595	\$32,465
Desktops	\$21,478	\$20,895	\$18,200	\$21,625

Challenge 2: Working with Form Elements

1. Open form09.html in your text editor:

- Add a title: **User Registration Form**
- Link to **styles09.cs**

```
<link rel="stylesheet" href="styles09.css">
```


Challenge 2: Working with Form Elements

- Modify the comment at the top

```
<!-- This website template was created by: Mayer Alvarez Vivanco,  
Today's Date -->
```

Challenge 2: Working with Form Elements

- Replace “Student’s Name” with “Mayer Alvarez Vivanco” in the footer

```
<footer>  
  <p>Designed by: Mayer Alvarez Vivanco</p>  
</footer>
```

Challenge 2: Working with Form Elements

2. Create the form within the main element:

```
<main>
  <form action="submit_form.php" method="post">
    <label for="username">Username:</label>
    <input type="text" id="username" name="username" required>

    <label for="password">Password:</label>
    <input type="password" id="password" name="password" required>

    <label for="dob">Date of Birth:</label>
    <input type="date" id="dob" name="dob" required>

    <p>Upload your file here</p>
    <input type="file" name="file" size="20">

    <p>Example of Radio Buttons</p>
    <input type="radio" id="option1" name="option" value="1">
    <label for="option1">Option 1</label>
    <input type="radio" id="option2" name="option" value="2">
    <label for="option2">Option 2</label>
    <input type="radio" id="option3" name="option" value="3">
    <label for="option3">Option 3</label>
  </form>
</main>
```

Challenge 2: Working with Form Elements

3. In `styles09.css`, create style rules for form elements:

```
/* Style for form elements */
form {
  width: 50%;
  margin: auto;
  padding: 1em;
  background-color: #f9f9f9;
  border: 1px solid #ccc;
}
form label {
  display: block;
  margin-top: 1em;
}
form input[type="text"], form input[type="password"], form input[type="date"], form input[type="file"] {
  width: 100%;
  padding: 0.5em;
  margin-top: 0.5em;
}
form p {
  margin-top: 1em;
  font-weight: bold;
}
```

Challenge 2: Working with Form Elements

4. Describe the difference in how the date type input field displays in Firefox and Google Chrome:

- **Firefox:** The date input field is displayed as a regular text box where users must manually enter the date in the specified format.
- **Google Chrome:** The date input field includes a date picker, allowing users to select a date from a calendar widget.

By following these instructions, you will learn to create and style tables and forms in HTML and CSS, enhancing your understanding of web development practices and preparing yourself for your tutorial week 9.

Designed by: Mayer Alvarez Vivanco

3. Attendance & Tutorial Questions - Recognising student participation and engagement specifically identifying those who are most actively involved!

Q1) What are the three main concepts of responsive design discussed in Lecture 8?

- A. Fixed layouts, fluid layouts, and flexible images
- B. Fluid layouts, media queries, and flexible images**
- C. Media queries, viewport tags, and mobile-first strategy
- D. Flexible images, fixed layouts, and media queries

3. Attendance & Tutorial Questions - Recognising student participation and engagement specifically identifying those who are most actively involved!

Q2) Which of the following statements correctly describes a fluid layout in responsive web design?

- A. It uses fixed measurement units like pixels to define the width of content areas.
- B. It changes in width based on the size of the viewport, using proportional size measurements.**
- C. It requires media queries to adjust content size based on the viewport.
- D. It is the same as a fixed layout but with flexible images.

A top-down view of several wrapped Christmas gifts on a dark wooden surface. The gifts are wrapped in various patterns: red with white hearts, red with white snowflakes, brown with red plaid, and brown with red geometric patterns. Most are tied with red ribbons, while one is tied with a green and white checkered ribbon and another with a white string. In the bottom left corner, a pair of hands is shown unwrapping a gift with a red ribbon. The text "Happy a Learning Day!" and "Dr. Farshid Keivanian" is overlaid in white in the center of the image.

Happy a Learning Day!
Dr. Farshid Keivanian