



WEB PROGRAMMING LAB EXERCISE-CSS

Lab assignment questions focused on HTML & CSS

Lab Assignment 1: Responsive Layout

Create a responsive webpage layout with a header, a two-column section, and a footer.

- Use CSS Grid or Flexbox.
- Ensure the columns stack vertically on smaller screens using media queries.

Sample Answer to Q1.

CSS1.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Responsive Layout</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <header class="header">
    <h1>My Responsive Webpage</h1>
  </header>
  <main class="main-content">
    <section class="left-column">
      <h2>Left Column</h2>
      <p>This is the content of the left column.</p>
    </section>
    <section class="right-column">
      <h2>Right Column</h2>
      <p>This is the content of the right column.</p>
    </section>
  </main>
  <footer class="footer">
    <p>Footer Content</p>
  </footer>
</body>
</html>
```

CSS1.html

```
/* General Styles */
body {
  font-family: Arial, sans-serif;
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}

header, footer {
  background-color: #4CAF50;
  color: white;
  text-align: center;
  padding: 10px 0;
}

/* Main Layout */
.main-content {
  display: flex;
  flex-wrap: wrap; /* Allows wrapping for responsiveness */
  gap: 10px; /* Adds space between columns */
  padding: 10px;
}

.left-column, .right-column {
  flex: 1; /* Distributes equal space */
}
```



```
padding: 15px;
background-color: #f2f2f2;
border: 1px solid #ccc;
}

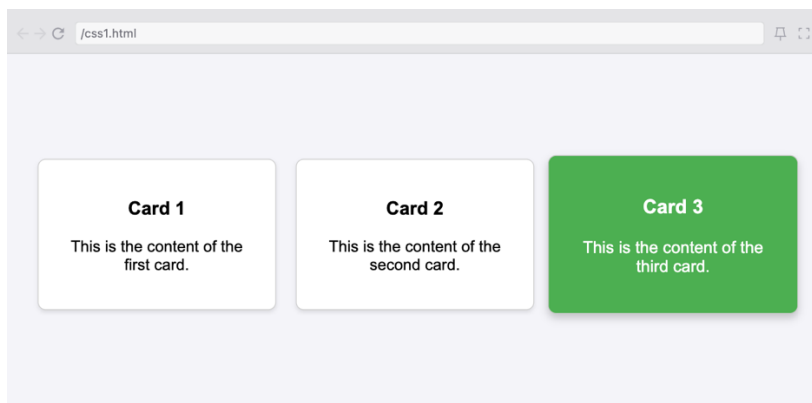
/* Responsive Design */
@media (max-width: 768px) {
  .main-content {
    flex-direction: column; /* Stacks the columns vertically */
  }
}
```

Output:



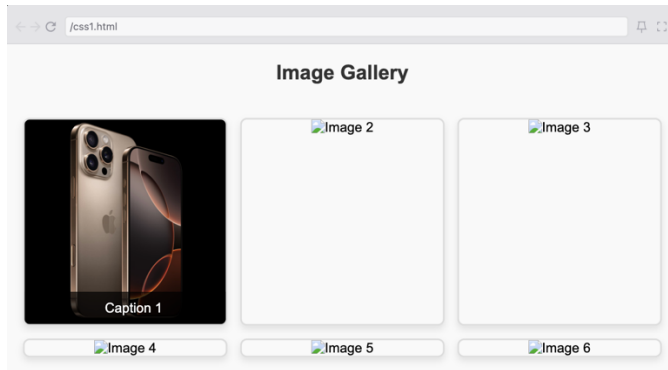
Lab Assignment 2: Hover Effects

2. Create a card-style layout with three cards.
 - Add hover effects to each card:
 - Change the background color.
 - Scale the card slightly.
 - Add a shadow effect.



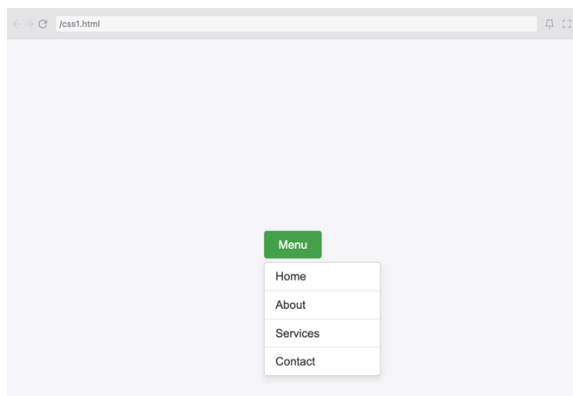
Lab Assignment 3: Image Gallery

3. Create an image gallery with at least six images.
 - Use CSS Grid to arrange them into three columns.
 - Add a hover effect to enlarge the image and display a caption.



Lab Assignment 4: Styled Navigation Menu

4. Build a horizontal navigation menu with dropdown functionality.
 - Use only HTML and CSS.
 - Style the dropdown menu to appear when hovering over a specific menu item.



Lab Assignment 5: Custom Buttons

5. Design three buttons with unique styles:
 - One button with a gradient background.
 - One button with a border that changes color on hover.
 - One button with a glowing effect using `box-shadow`.



Lab Assignment 6: CSS Animations

6. Create an animated webpage header:
 - Use `@keyframes` to animate text color, size, or position.
 - Add a smooth transition to an element when hovered.
-

Lab Assignment 7: Multi-Section Page

7. Design a multi-section webpage with a sticky navigation bar.
 - Use internal links (`#section1`, `#section2`) for navigation.
 - Style the active link differently using CSS.
-

Lab Assignment 8: Form Styling

8. Create a styled login form with:
 - Inputs for email and password, a checkbox for "Remember Me," and a submit button.
 - Style the form to include rounded corners, shadows, and a hover effect on the button.
 - Validate the form fields using CSS pseudo-classes (`:valid`, `:invalid`).
-

Lab Assignment 9: Pricing Table

9. Design a pricing table with three plans.
 - Use Flexbox to align the plans side-by-side.
 - Highlight the most popular plan with a distinct background color.
 - Add buttons that change color on hover.
-

Lab Assignment 10: Animated Loading Screen

10. Create an animated loading screen.
 - Use CSS to animate a spinner or a progress bar.
 - Display the loading screen for 3 seconds before showing the main content.
-

Lab Assignment 11: Box Model Challenge

11. Create a box with:
 - A fixed width and height.



- Padding and margin in percentages.
 - A border that changes thickness and color on hover.
-

Lab Assignment 12: Dark/Light Theme Toggle

12. Create a webpage with a button to toggle between light and dark themes.
 - Use JavaScript to toggle a class, and CSS to define styles for each theme.
-

Lab Assignment 13: CSS Transformations

13. Create a 3D rotating card:
 - Use CSS `transform` to rotate the card on hover.
 - Display different content on the front and back of the card.
-

Lab Assignment 14: Timeline Design

14. Build a vertical timeline layout for events or milestones.
 - Use pseudo-elements (`::before`, `::after`) for the timeline and dots.
 - Style each event differently.
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Lab Assignment 15: CSS Gradient Effects

15. Create a webpage header with a gradient background:
 - Use a linear gradient for the main background.
 - Add an overlay gradient for a translucent effect over text.
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