**Department of Computer Science & Engineering**

**Sub: Web Technology Lab**

**Lab Worksheet2**

**Upload the document with correct code: <https://forms.gle/QKdmDDEUqT74EiTq5>**

1. You have a simple web page with a header, a main content area, and a footer. The layout is supposed to be responsive, but on smaller screens, the content spills out of the viewport, causing a horizontal scrollbar. Your task is to identify and fix the issue using CSS debugging techniques.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Debugging Exercise</title>

<style>

body {

font-family: Arial, sans-serif;

margin: 0;

padding: 0;

}

header {

background-color: #333;

color: #fff;

padding: 1em;

text-align: center;

}

main {

display: grid;

grid-template-columns: repeat(2, 1fr);

gap: 10px;

padding: 20px;

}

.content-box {

background-color: #f0f0f0;

padding: 20px;

border: 1px solid #ddd;

}

footer {

background-color: #333;

color: #fff;

padding: 1em;

text-align: center;

clear: both;

}

</style>

</head>

<body>

<header>

<h1>Debugging Exercise</h1>

</header>

<main>

<div class="content-box">

<h2>Content Box 1</h2>

<p> CSS is the language we use to style an HTML document.CSS describes how HTML elements should be displayed.</p>

</div>

<div class="content-box">

<h2>Content Box 2</h2>

<p>CSS is the language we use to style an HTML document. CSS describes how HTML elements should be displayed.</p>

</div>

</main>

<footer>

<p>&copy; 2025 Debugging Exercise</p>

</footer>

</body>

</html>

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Debugging Exercise</title>

    <style>

        \* {

            box-sizing: border-box;

        }

        body {

            font-family: Arial, sans-serif;

            margin: 0;

            padding: 0;

            overflow-x: hidden;

        }

        header {

            background-color: #333;

            color: #fff;

            padding: 1em;

            text-align: center;

        }

        main {

            display: grid;

            grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));

            gap: 10px;

            padding: 20px;

        }

        .content-box {

            background-color: #f0f0f0;

            padding: 20px;

            border: 1px solid #ddd;

        }

        footer {

            background-color: #333;

            color: #fff;

            padding: 1em;

            text-align: center;

        }

    </style>

</head>

<body>

    <header>

        <h1>Debugging Exercise</h1>

    </header>

    <main>

        <div class="content-box">

            <h2>Content Box 1</h2>

            <p> CSS is the language we use to style an HTML document.CSS describes how HTML elements should be displayed.</p>

        </div>

        <div class="content-box">

            <h2>Content Box 2</h2>

            <p>CSS is the language we use to style an HTML document. CSS describes how HTML elements should be displayed.</p>

        </div>

    </main>

    <footer>

        <p>&copy; 2025 Debugging Exercise</p>

    </footer>

</body>

</html>

1. You have a navigation bar with a logo and a list of menu items. The logo and the menu items should be vertically aligned, but currently, they are not. Your task is to identify and fix the issue.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Vertical Alignment Exercise</title>

<style>

nav {

display: flex;

justify-content: space-between;

align-items: flex-start; /\* Change this to fix the issue \*/

padding: 1em;

background-color: #333;

color: #fff;

}

nav img {

width: 50px;

height: 50px;

}

nav ul {

list-style: none;

padding: 0;

margin: 0;

display: flex;

}

nav li {

margin-right: 20px;

}

</style>

</head>

<body>

<nav>

<img src="logo.png" alt="Logo">

<ul>

<li><a href="#">Home</a></li>

<li><a href="#">About</a></li>

<li><a href="#">Contact</a></li>

</ul>

</nav>

</body>

</html>

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Vertical Alignment Exercise</title>

    <style>

        nav {

            display: flex;

            justify-content: space-between;

            align-items: center; /\*Fixed \*/

            padding: 1em;

            background-color: #333;

            color: #fff;

        }

        nav img {

            width: 50px;

            height: 50px;

        }

        nav ul {

            list-style: none;

            padding: 0;

            margin: 0;

            display: flex;

        }

        nav li {

            margin-right: 20px;

        }

        nav a {

            color: white;

            text-decoration: none;

        }

    </style>

</head>

<body>

    <nav>

        <img src="logo.png" alt="Logo">

        <ul>

            <li><a href="#">Home</a></li>

            <li><a href="#">About</a></li>

            <li><a href="#">Contact</a></li>

        </ul>

    </nav>

</body>

</html>

1. The button below has a hover effect that is not working correctly. Fix the transition and animation issues.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Debug Animation</title>

<link rel="stylesheet" href="style.css">

</head>

<body>

<button class="animated-btn">Hover Me</button>

</body>

</html>

.animated-btn {

background: #007BFF;

color: white;

padding: 10px 20px;

border: none;

transition: background-color ease-in; /\* Issue: Missing duration \*/

}

.animated-btn:hover {

background-color: red;

transform: scale(1.5); /\* Issue: Should be smooth \*/

}

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Debug Animation</title>

    <style>

        .animated-btn {

            background: #007BFF;

            color: white;

            padding: 10px 20px;

            border: none;

            cursor: pointer;

            /\* FIXED: ADDED DURATION AND INCLUDED TRANSFORM FOR SMOOTH EFFECT \*/

            transition: background-color 0.3s ease-in, transform 0.3s ease-in-out;

        }

        .animated-btn:hover {

            background-color: red;

            transform: scale(1.5); /\* THIS WILL NOW TRANSITION SMOOTHLY \*/

        }

    </style>

</head>

<body>

    <button class="animated-btn">Hover Me</button>

</body>

</html>

1. Fix Content Overflow:

A div with specified dimensions overflows its container despite padding/margin declarations.

<div class="container">

<div class="content">Overflowing content</div>

</div>

<style>

.container {

width: 300px;

border: 2px solid black;

}

.content {

width: 300px;

padding: 20px;

margin: 15px;

background: lightblue;

}

</style>

<div class="container">

    <div class="content">Overflowing content</div>

  </div>

  <style>

  .container {

    width: 300px;

    border: 2px solid black;

  }

  .content {

    box-sizing: border-box; /\* Fixes overflow \*/

    width: 100%;

    padding: 20px;

    margin: 15px 0;

    background: lightblue;

  }

  </style>