

**Tutorial No. 06**

**Title:** CSS3 – Flexible content layout and responsive web page.

Batch: A1      Roll No.: 16010422013

Tutorial No.: 6

**Aim:** To design flexible content layout and responsive web pages.

**Resources needed:** Notepad++, Web Browser

### Theory:

**Responsive Web Design-**The goal of a responsive layout is to function well on every single device. Regardless of screen size or resolution, your responsive designs should always be usable.

Focus on usability for every single aspect of your site. This may be easier starting with mobile-first because you're designing for limited features, then moving up to desktop which supports a wider screen size.

**Flex Layout Model-** CSS3 flexible Box, or flexbox is a new layout model for creating the more flexible user interface design with multiple rows and columns without using the percentage or fixed length values. The CSS3 flex layout model provides a simple and powerful mechanism for handling the distributing of space and alignment of content automatically through stylesheet without interfering with the actual markup.

### Activity

Add grid layout, flex container and responsive property to the webpages

### Results: (Program printout with output)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Bingo.co</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <header>
    <h1>BINGO!</h1>
    <nav>
      <ul>
        <li><a href="#">Home</a></li>
        <li><a href="#">Shop</a></li>
        <li><a href="#">About</a></li>
        <li><a href="contact.html">Contact</a></li>
        <li><a href="login.html">Login</a></li>
        <li><a href="search.html">Search</a></li>
      </ul>
    </nav>
```

```

</header>
<main>
  <section class="featured-products">
    <h2>Featured Products</h2>
    <div class="product-container">
      <div class="product-card">
        
        <h3>Multipurpose Refrigerator</h3>
        <p>Rs. 50000</p>
        <button onclick="addToCart('Product 1', 50)">Add to
Cart</button>
      </div>
      <div class="product-card">
        
        <h3>QLED TV</h3>
        <p>Rs. 60000</p>
        <button onclick="addToCart('Product 2', 60)">Add to
Cart</button>
      </div>
    </div>
  </section>
  <section class="newsletter">
    <h2>Subscribe to Our Newsletter</h2>
    <form action="#">
      <input type="email" placeholder="Enter your email">
      <button type="submit">Subscribe</button>
    </form>
  </section>
</main>
<footer>
  <p>&copy; 2024 BINGO. All rights reserved.</p>
</footer>

  <script src="script.js"></script>
</body>
</html>

```

### CSS Properties:

```

{
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}

body {
  font-family: Arial, sans-serif;

```

```
    line-height: 1.6;
    background-color: #f4f4f4;
    color: #333;
}

header {
    background-color: #333;
    color: #fff;
    padding: 20px;
    align-content: center;
}

header h1 {
    margin-bottom: 10px;
    display: flex;
    justify-content: center;
    align-content: center;
}

nav ul {
    list-style-type: none;
    align-items: center;
}

nav ul li {
    display: inline;
    margin-right: 20px;
}

nav ul li a {
    color: #fff;
    text-decoration: none;
}

main {
    padding: 20px;
}

.featured-products {
    margin-bottom: 40px;
}

.featured-products h2 {
    margin-bottom: 10px;
}

.product-card{
    size: 15cm;
}

.newsletter {
    background-color: #fff;
```

```

    padding: 20px;
}

.newsletter form {
    display: flex;
}

.newsletter input[type="email"] {
    flex: 1;
    padding: 10px;
    border: 1px solid #ccc;
}

.newsletter button {
    padding: 10px 20px;
    background-color: #333;
    color: #fff;
    border: none;
    cursor: pointer;
}

.image-div {
    width: 300px;
}

```

### Search Bar:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Search Bar Example</title>
    <style>
        #search-container {
            text-align: center;
            margin-top: 50px;
        }
        #search-box {
            padding: 10px;
            width: 300px;
            font-size: 16px;
            border: 1px solid #ccc;
            border-radius: 5px;
            outline: none;
        }
        #search-button {
            padding: 10px 20px;
            font-size: 16px;
            background-color: #4CAF50;
            color: white;
            border: none;
            border-radius: 5px;

```

```

        cursor: pointer;
    }
</style>
</head>
<body>
    <div id="search-container">
        <form action="/search" method="get">
            <input type="text" id="search-box" name="q"
placeholder="Search...">
            <button type="submit" id="search-button">Search</button>
        </form>
    </div>
</body>
</html>

```

### Login Page:

```

!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Login Page</title>
    <style>
        body {
            font-family: Arial, sans-serif;
        }
        .container {
            width: 300px;
            margin: 0 auto;
            margin-top: 100px;
            border: 1px solid #ccc;
            padding: 20px;
            border-radius: 5px;
            box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
        }
        input[type="text"],
        input[type="password"],
        input[type="submit"] {
            width: 100%;
            padding: 10px;
            margin-bottom: 10px;
            border-radius: 3px;
            border: 1px solid #ccc;
            box-sizing: border-box;
        }
        input[type="submit"] {
            background-color: #007bff;
            color: white;
            cursor: pointer;
        }
        input[type="submit"]:hover {

```

```

        background-color: #0056b3;
    }
</style>
</head>
<body>
    <div class="container">
        <h2>Login</h2>
        <form action="login.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>
            <input type="submit" value="Login">
        </form>
    </div>
</body>
</html>

```

### Contact page:

```

!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Contact Us</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
            background-color: #f2f2f2;
        }
        .container {
            max-width: 800px;
            margin: 20px auto;
            padding: 20px;
            background-color: #fff;
            border-radius: 8px;
            box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
        }
        h1 {
            text-align: center;
        }
        form {
            margin-top: 20px;
        }
        label {
            display: block;
            margin-bottom: 5px;
            font-weight: bold;
        }
        input[type="text"],
    
```

```
input[type="email"],
textarea {
    width: 100%;
    padding: 8px;
    margin-bottom: 10px;
    border: 1px solid #ccc;
    border-radius: 4px;
    box-sizing: border-box;
}
textarea {
    height: 150px;
}
input[type="submit"] {
    background-color: #4CAF50;
    color: white;
    padding: 10px 20px;
    border: none;
    border-radius: 4px;
    cursor: pointer;
    font-size: 16px;
}
input[type="submit"]:hover {
    background-color: #45a049;
}
</style>
</head>
<body>

<div class="container">
    <h1>Contact Us</h1>
    <form action="send_message.php" method="post">
        <label for="name">Name:</label>
        <input type="text" id="name" name="name" required>

        <label for="email">Email:</label>
        <input type="email" id="email" name="email" required>

        <label for="message">Message:</label>
        <textarea id="message" name="message" required></textarea>

        <input type="submit" value="Submit">
    </form>
</div>


</body>
</html>
```



# BINGO!

[Home](#) [Shop](#) [About](#) [Contact](#) [Login](#) [Search](#)

## Featured Products



**Multipurpose Refrigerator**  
Rs. 50000  
[Add to Cart](#)

## Contact Us

**Name:**

**Email:**

**Message:**

## Login

**Username:**

**Password:**

**Outcomes:**

**Apply HTML5 and CSS3 for web page designing.**

**Conclusion: (Conclusion to be based on the outcomes achieved)**

**In conclusion, the updated webpage incorporates advanced CSS properties such as grid layout and flexbox to create a modern and responsive design. The grid layout allows for a flexible and dynamic arrangement of content, while the flex container ensures that the layout adapts smoothly to different screen sizes and devices. Additionally, responsive styles have been added to optimize the layout for various screen sizes, ensuring a seamless user experience across devices. Overall, these enhancements improve the usability and visual appeal of the webpage, making it more engaging and accessible to users.**

**Grade: AA / AB / BB / BC / CC / CD /DD**

Signature of faculty in-charge with date

**References:**

**Books/ Journals/ Websites:**

- “Web technologies: Black Book”, Dreamtech Publications
- <http://www.w3schools.com>
- <https://css-tricks.com/snippets/css/complete-guide-grid/>
- <https://css-tricks.com/snippets/css/a-guide-to-flexbox/>