

## EXP: 1 Responsive Web Design using HTML & CSS

### A) Create a Responsive Web Page using HTML & CSS

#### AIM:

Create a Responsive Web Page that adjusts layout based on screen size using HTML & CSS.

#### ALGORITHM:

Step 1: Create an HTML File (index.html).

- Define the document structure using <html>, <head>, and <body>.
- Set the page title and include a link to an external CSS file for styling.

Step 2: Design the Web Page Layout.

- Use the <header>, <nav>, <main>, and <footer> tags for better structure.
- Add a responsive navigation menu with links.
- Include content sections with images and text.

Step 3: Implement Responsive CSS.

- Create an external CSS file (styles.css).
- Use CSS media queries to adjust the layout for different screen sizes.
- Apply flexbox and grid for a responsive design.

Step 4: Enhance User Experience.

- Add hover effects and transitions for interactivity.
- Ensure text is readable on all devices.

Step 5: Test Responsiveness.

- Open the web page on different screen sizes or use developer tools to check responsiveness.

PROGRAM:

INDEX.HTML:

```
<!DOCTYPE html>
```

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

```
<head>
```

```
  <meta charset="UTF-8">
```

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

```
  <title>Responsive Web Design</title>
```

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

```
</head>
```

```
<body>
```

```
  <header>
```

```
    <h1>Welcome to Responsive Web Design</h1>
```

```
  </header>
```

```
  <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>

<main>

  <section class="content">

    <h2>About Responsive Design</h2>

    <p>Responsive design makes web pages look good on all devices.</p>

  </section>

</main>

<footer>

  <p>&copy; 2025 Responsive Web Design</p>

</footer>

</body>

</html>
```

STYLES.CSS:

```
body {

  font-family: Arial, sans-serif;

  margin: 0;

  padding: 0;

  text-align: center;

}
```

```
header {  
  
    background-color: #007bff;  
  
    color: white;  
  
    padding: 20px;  
  
}
```

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

```
nav ul li {  
  
    display: inline;  
  
    margin: 0 15px;  
  
}
```

```
nav ul li a {  
  
    text-decoration: none;  
  
    color: #007bff;  
  
}
```

```
.content {  
  
    padding: 20px;  
  
}
```

```
footer {  
  
    background-color: #f4f4f4;
```

```
padding: 10px;

}

@media (max-width: 600px) {

  nav ul {

    display: flex;

    flex-direction: column;

    align-items: center;

  }

  nav ul li {

    margin: 10px 0;

  }

}
```

OUTPUT:

(Screenshot of the responsive web page on different screen sizes.)

RESULT: The responsive web page using HTML & CSS is successfully created.