

---

## Task Report

**Name:** Sneha Shekhar Kalyankar

**Date:** 20 June 2025

**Task Title:** Making CSS Code Compatible for Different Screens (Responsive Design)

---

### Objective:

To learn and implement techniques in CSS that ensure a website layout adjusts smoothly and looks good on all screen sizes, including desktops, tablets, and smartphones.

---

### Tasks Completed:

1. **Studied Media Queries in CSS:**
    - Understood how media queries work.
    - Learned the syntax:

```
@media (max-width: 768px) {  
  /* responsive styles here */  
}
```
  2. **Used Relative Units:**
    - Replaced fixed pixel values with relative units like %, em, rem, vw, and vh to make layouts flexible.
  3. **Created a Responsive Layout:**
    - Built a simple webpage layout using flexbox.
    - Applied flex-direction: column on smaller screens using media queries.
  4. **Tested on Multiple Screen Sizes:**
    - Used browser developer tools (responsive mode) to test how the layout looks on mobile, tablet, and desktop.
    - Ensured text is readable and images scale properly.
  5. **Added Breakpoints:**
    - Applied multiple breakpoints for different screen sizes (e.g., 480px, 768px, 1024px) to customize the layout for various devices.
- 

### Key Concepts Learned:

- Responsive Design Principles
- Media Query Syntax and Use
- Fluid Layout Techniques
- Viewport Meta Tag Importance

- **Flexbox and Grid for Layout Adjustments**
  - **Image Responsiveness using `max-width: 100%`**
- 

### Sample Code Used:

```
/* Default for large screens */
.container {
  display: flex;
  flex-direction: row;
}

/* For smaller screens */
@media (max-width: 768px) {
  .container {
    flex-direction: column;
    align-items: center;
  }

  .header {
    font-size: 24px;
    text-align: center;
  }

  img {
    width: 100%;
    max-width: 300px;
    height: auto;
  }

  p {
    font-size: 16px;
    text-align: center;
  }
}
```

---

Full program code

```
<!DOCTYPE html>
```

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

```
<head>
```

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

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

```
<title>Sneha Shekhar Kalyankar | Portfolio</title>
```

```
<style>
```

```
• {
```

```
Margin: 0;
```

```
    Padding: 0;

    Box-sizing: border-box;

    Font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
}

.image{

    Width:100%;

    Height:55vh;

    Display:flex;

    Justify-content: center;

    Align-items: center;

}

.image img{

    Height: 300px;

    Width: 300px;

    Border-radius: 60%;

    Border: 5px solid #fff;

}
```

```
Body {

    Line-height: 1.6;

    Background: #f4f4f4;

    Color: #333;

}
```

```
Header {

    Background: #1e90ff;

    Color: white;

    Padding: 1.5rem 0;
```

```
Text-align: center;
}
```

```
Nav ul {
  Display: flex;
  Justify-content: center;
  List-style: none;
  Margin-top: 1rem;
}
```

```
Nav a {
  Color: white;
  Text-decoration: none;
  Margin: 0 1rem;
  Font-weight: bold;
}
```

```
Nav a:hover {
  Text-decoration: underline;
}
```

```
Section {
  Padding: 4rem 2rem;
  Max-width: 1000px;
  Margin: auto;
}
```

```
H2 {
```

```
Text-align: center;
Margin-bottom: 2rem;
Color: #1e90ff;
}
```

```
#about p {
  Font-size: 1.1rem;
  Max-width: 800px;
  Margin: auto;
  Text-align: center;
}
```

```
.project-list {
  Display: grid;
  Grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));
  Gap: 1.5rem;
}
```

```
.project-card {
  Background: white;
  Border-radius: 10px;
  Padding: 1.5rem;
  Box-shadow: 0 4px 8px rgba(0,0,0,0.1);
  Transition: transform 0.3s ease;
}
```

```
.project-card:hover {
  Transform: translateY(-5px);
}
```

```
}
```

```
.project-card h3 {  
  Color: #333;  
  Margin-bottom: 0.5rem;  
}
```

```
.project-card p {  
  Font-size: 0.95rem;  
  Line-height: 1.5;  
  Color: #555;  
}
```

```
Form {  
  Display: flex;  
  Flex-direction: column;  
  Max-width: 600px;  
  Margin: auto;  
  Background: white;  
  Padding: 2rem;  
  Border-radius: 10px;  
  Box-shadow: 0 4px 12px rgba(0,0,0,0.1);  
}
```

Form input,

```
Form textarea {  
  Margin-bottom: 1rem;  
  Padding: 0.8rem;
```

```
    Border: 1px solid #ccc;
    Border-radius: 5px;
}
```

```
Form button {
    Background: #1e90ff;
    Color: white;
    Border: none;
    Padding: 0.9rem;
    Border-radius: 5px;
    Cursor: pointer;
    Font-size: 1rem;
}
```

```
Form button:hover {
    Background: #0f7ae5;
}
```

```
Footer {
    Background: #333;
    Color: white;
    Text-align: center;
    Padding: 1rem 0;
    Margin-top: 2rem;
}
```

```
@media (max-width: 600px) {
    Nav ul {
```

```
    Flex-direction: column;

    Gap: 0.5rem;
  }
}
</style>
</head>
<body>

<!--Header →
<header>

  <h1>Sneha Shekhar Kalyankar</h1>

  <nav>

    <ul>

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

      <li><a href="#projects">Projects</a></li>

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

    </ul>

  </nav>

</header>

<div class="image">

  

</div>
```

```
<!--About Section →
<section id="about">

  <h2>About Me</h2>

  <p>Hello! I'm Sneha Shekhar Kalyankar, born on 25 March 2005, currently pursuing
my 3rd Year Diploma in Computer Engineering at Y.B. Patil Polytechnic, Akurdi, Pune. I'm
```



passionate about exploring the world of technology and committed to continuous learning and innovation.</p>

</section>

<!--Projects Section →

<section id="projects">

<h2>My Projects</h2>

<div class="project-list">

<div class="project-card">

<h3>Library Management System</h3>

<p>Developed using Java. A desktop application to manage library operations like issue, return, and inventory control.</p>

</div>

<div class="project-card">

<h3>School Management System</h3>

<p>Created with Python. It helps in managing student records, attendance, and grades efficiently.</p>

</div>

<div class="project-card">

<h3>Airline Management System</h3>

<p>Written in C. It handles flight bookings, passenger records, and check-in processes.</p>

</div>

</div>

</section>

<!--Contact Section →

<section id="contact">

<h2>Contact Me</h2>

```
<form>

  <input type="text" placeholder="Your Name" required />

  <input type="email" placeholder="Your Email" required />

  <textarea placeholder="Your Message..." rows="5" required></textarea>

  <button type="submit">Send Message</button>

</form>

</section>
```

```
<!--Footer -->
```

```
<footer>
```

```
  <p>© 2025 Sneha Shekhar Kalyankar. All rights reserved.</p>
```

```
</footer>
```

```
</body>
```

```
</html>
```