

Experiment 2 :Portfolio Website

Index Html

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Tanishq's Portfolio</title>
<link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;600&display=swa
p" rel="stylesheet">
<style>
  body {
    font-family: 'Poppins', sans-serif;
    margin: 0;
    padding: 0;
    background-color: #f8fafc;
    color: #222;
  }

  /* Navbar */
  .navbar {
    display: flex;
    justify-content: space-between;
    align-items: center;
    background-color: #0a74da;
    padding: 15px 30px;
    color: white;
  }

  .logo {
    font-size: 1.4rem;
    font-weight: 600;
  }

  .nav-links {
    list-style: none;
    display: flex;
    gap: 20px;
  }
```

```
.nav-links li a {
  color: white;
  text-decoration: none;
  transition: 0.3s;
}

.nav-links li a:hover {
  color: #ffdd57;
}

.menu-toggle {
  display: none;
  font-size: 1.5rem;
  cursor: pointer;
}

/* Hero */
#hero {
  background: linear-gradient(120deg, #0a74da, #00c3ff);
  color: white;
  text-align: center;
  padding: 100px 20px;
}

.btn {
  display: inline-block;
  background-color: white;
  color: #0a74da;
  padding: 10px 20px;
  border-radius: 25px;
  text-decoration: none;
  transition: 0.3s;
}

.btn:hover {
  background-color: #ffdd57;
  color: #222;
}

/* Sections */
section {
  padding: 60px 20px;
  max-width: 900px;
  margin: auto;
}
```

```
}

h2 {
  color: #0a74da;
  text-align: center;
  margin-bottom: 20px;
}

.projects-grid {
  display: grid;
  grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));
  gap: 20px;
}

.project-card {
  background-color: white;
  border-radius: 10px;
  box-shadow: 0 2px 6px rgba(0,0,0,0.1);
  padding: 20px;
  transition: 0.3s;
}

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

/* Contact Form */
form {
  display: flex;
  flex-direction: column;
  gap: 10px;
}

input, textarea {
  padding: 10px;
  border: 1px solid #ccc;
  border-radius: 6px;
}

button {
  background-color: #0a74da;
  color: white;
  border: none;
  padding: 12px;
```

```

    border-radius: 6px;
    cursor: pointer;
    transition: 0.3s;
}

button:hover {
    background-color: #084e9e;
}

footer {
    text-align: center;
    background-color: #0a74da;
    color: white;
    padding: 15px 0;
}

/* Mobile Menu */
@media (max-width: 768px) {
    .nav-links {
        display: none;
        flex-direction: column;
        background-color: #0a74da;
        text-align: center;
    }
    .nav-links.show {
        display: flex;
    }
    .menu-toggle {
        display: block;
    }
}
</style>
</head>
<body>
<!-- Navigation Menu -->
<header>
<nav class="navbar">
<div class="logo">Tanishq's Portfolio</div>
<div class="menu-toggle" id="menu-toggle">☰</div>
<ul class="nav-links" id="nav-links">
<li><a href="#hero">Home</a></li>
<li><a href="#about">About</a></li>
<li><a href="#projects">Projects</a></li>
<li><a href="#contact">Contact</a></li>

```

```
</ul>
</nav>
</header>

<!-- Hero Section -->
<section id="hero">
<div class="hero-content">
<h1>Hi, I am Tanishq Saxena.</h1>
<p>I build modern, responsive, and user-friendly websites that follow UX
principles and UI designs.</p>
<a href="#projects" class="btn">View My Work</a>
</div>
</section>

<!-- About Section -->
<main>
<section id="about">
<h2>About Me</h2>
<p>I am a passionate web developer skilled in HTML, CSS, and JavaScript. I love
creating websites that are clean, efficient, and engaging. In my free time, I
explore new design trends and contribute to open-source projects. I also love
to create UI and UX designs for websites and mobile apps on Figma.</p>
</section>

<!-- Projects Section -->
<section id="projects">
<h2>My Projects</h2>
<div class="projects-grid">
<div class="project-card">
<h3>Portfolio Website</h3>
<p>A responsive personal portfolio built with HTML, CSS, and JavaScript.</p>
</div>
<div class="project-card">
<h3>To-do App</h3>
<p>A task management app with local storage support.</p>
</div>
<div class="project-card">
<h3>Blog Website</h3>
<p>A simple blogging site with styled components and comments.</p>
</div>
</div>
</section>

<!-- Contact Section -->
```

```

<section id="contact">
<h2>Contact Me</h2>
<form>
<label for="name">Name</label>
<input type="text" id="name" placeholder="Enter your name" required>
<label for="email">Email</label>
<input type="email" id="email" placeholder="Enter your email" required>
<label for="message">Message</label>
<textarea id="message" rows="5" placeholder="Write your message..."
required></textarea>
<button type="submit">Send Message</button>
</form>
</section>
</main>

<!-- Footer -->
<footer>
<p>&copy; 2025 MyPortfolio. All rights reserved.</p>
</footer>

<!-- JavaScript for Navbar Toggle -->
<script>
const menuToggle = document.getElementById('menu-toggle');
const navLinks = document.getElementById('nav-links');
menuToggle.addEventListener('click', () => {
  navLinks.classList.toggle('show');
});
</script>
</body>
</html>

```

Style.css

```

:root {
  --primary-color: #1a1a2e;
  --secondary-color: #16213e;
  --accent-gradient: linear-gradient(135deg, #667eea 0%, #764ba2 100%);
  --accent-gradient-alt: linear-gradient(135deg, #f093fb 0%, #f5576c 100%);
  --dark-bg: #0f0f23;
  --card-bg: #1a1a2e;
  --text-color: #f1f1f3;
  --text-muted: #a1a1aa;

```

```
--max-width: 1200px;
--gradient-border: linear-gradient(135deg, #667eea, #764ba2, #f093fb,
#f5576c);
}

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

html { scroll-behavior: smooth; }

body {
  font-family: 'Poppins', Arial, sans-serif;
  line-height: 1.6;
  color: var(--text-color);
  background: var(--dark-bg);
}

/* Navbar */
.navbar {
  background: linear-gradient(135deg, var(--primary-color) 0%,
var(--secondary-color) 100%);
  display: flex;
  justify-content: space-between;
  align-items: center;
  padding: 15px 50px;
  position: relative;
  box-shadow: 0 2px 20px rgba(102, 126, 234, 0.2);
}

.logo {
  color: white;
  font-size: 1.5rem;
  font-weight: bold;
}

.nav-links {
  list-style: none;
  display: flex;
}

.nav-links li { margin: 0 15px; }
```

```
.nav-links a {
  text-decoration: none;
  color: white;
  transition: all 0.3s ease;
  font-weight: 500;
}

.nav-links a:hover {
  color: transparent;
  background: var(--accent-gradient);
  background-clip: text;
  -webkit-background-clip: text;
  filter: brightness(1.2);
}

.menu-toggle {
  display: none;
  font-size: 1.8rem;
  color: white;
  cursor: pointer;
}

/* Hero Section */
#hero {
  background: linear-gradient(135deg, var(--dark-bg) 0%, var(--primary-color)
50%, var(--secondary-color) 100%);
  height: 85vh;
  display: flex;
  justify-content: center;
  align-items: center;
  text-align: center;
  color: white;
  position: relative;
  overflow: hidden;
}

#hero::before {
  content: '';
  position: absolute;
  top: 0; left: 0; right: 0; bottom: 0;
  background: var(--accent-gradient);
  opacity: 0.12;
  z-index: 1;
}
```



```
}

.hero-content {
  position: relative;
  z-index: 2;
  animation: fadeIn 2s ease-in;
}

.hero-content h1 {
  font-size: 3rem;
  margin-bottom: 20px;
}

.hero-content p {
  font-size: 1.2rem;
  margin-bottom: 25px;
  color: #dcdce2;
}

.btn {
  background: var(--accent-gradient);
  color: white;
  padding: 12px 30px;
  text-decoration: none;
  font-weight: bold;
  border-radius: 30px;
  transition: all 0.3s ease;
  box-shadow: 0 4px 15px rgba(102, 126, 234, 0.4);
  border: 2px solid transparent;
}

.btn:hover {
  background: var(--accent-gradient-alt);
  transform: translateY(-2px);
  box-shadow: 0 6px 20px rgba(240, 147, 251, 0.4);
}

/* Sections */
section {
  max-width: var(--max-width);
  margin: auto;
  padding: 60px 20px;
}
```

```
section h2 {
  background: var(--accent-gradient);
  background-clip: text;
  -webkit-background-clip: text;
  color: transparent;
  text-align: center;
  margin-bottom: 30px;
  font-size: 2.5rem;
  letter-spacing: 1px;
}

#about {
  background: linear-gradient(135deg, var(--secondary-color) 0%,
var(--primary-color) 100%);
  border-top: 2px solid transparent;
  border-image: var(--gradient-border) 1;
}

/* Projects */
.projects-grid {
  display: grid;
  grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));
  gap: 25px;
}

.project-card {
  background: linear-gradient(135deg, var(--card-bg) 0%, var(--secondary-color)
100%);
  padding: 25px;
  border-radius: 15px;
  box-shadow: 0 8px 25px rgba(0, 0, 0, 0.3);
  transition: all 0.3s ease;
  border: 1px solid rgba(102, 126, 234, 0.2);
  position: relative;
  overflow: hidden;
}

.project-card::before {
  content: '';
  position: absolute;
  top: 0; left: 0; right: 0; bottom: 0;
  background: var(--accent-gradient);
  opacity: 0;
  transition: opacity 0.3s ease;
```

```
    z-index: 1;
}

.project-card:hover::before { opacity: 0.08; }

.project-card h3, .project-card p {
    position: relative;
    z-index: 2;
}

.project-card h3 {
    color: var(--text-color);
    margin-bottom: 15px;
}

.project-card p {
    color: var(--text-muted);
}

.project-card:hover {
    transform: translateY(-10px) scale(1.02);
    box-shadow: 0 15px 35px rgba(102, 126, 234, 0.3);
    border-color: rgba(102, 126, 234, 0.5);
}

/* Contact */
form {
    display: flex;
    flex-direction: column;
    max-width: 600px;
    margin: auto;
}

form label {
    color: var(--text-color);
    margin-bottom: 5px;
    font-weight: bold;
}

input, textarea {
    padding: 15px;
    margin: 10px 0 20px;
    border: 2px solid rgba(102, 126, 234, 0.3);
    border-radius: 10px;
}
```

```

    background: var(--card-bg);
    color: var(--text-color);
    transition: all 0.3s ease;
}

input::placeholder, textarea::placeholder { color: var(--text-muted); }

input:focus, textarea:focus {
    border-image: var(--accent-gradient) 1;
    box-shadow: 0 0 20px rgba(102, 126, 234, 0.3);
    outline: none;
}

button {
    background: var(--accent-gradient);
    color: white;
    border: none;
    padding: 15px;
    font-size: 1rem;
    cursor: pointer;
    border-radius: 25px;
    transition: all 0.3s ease;
    font-weight: bold;
    box-shadow: 0 4px 15px rgba(102, 126, 234, 0.4);
}

button:hover {
    background: var(--accent-gradient-alt);
    transform: translateY(-2px);
    box-shadow: 0 6px 20px rgba(240, 147, 251, 0.4);
}

/* Footer */
footer {
    background: linear-gradient(135deg, var(--primary-color) 0%, var(--dark-bg)
100%);
    color: white;
    text-align: center;
    padding: 30px;
    position: relative;
}

footer::before {
    content: '';

```

```

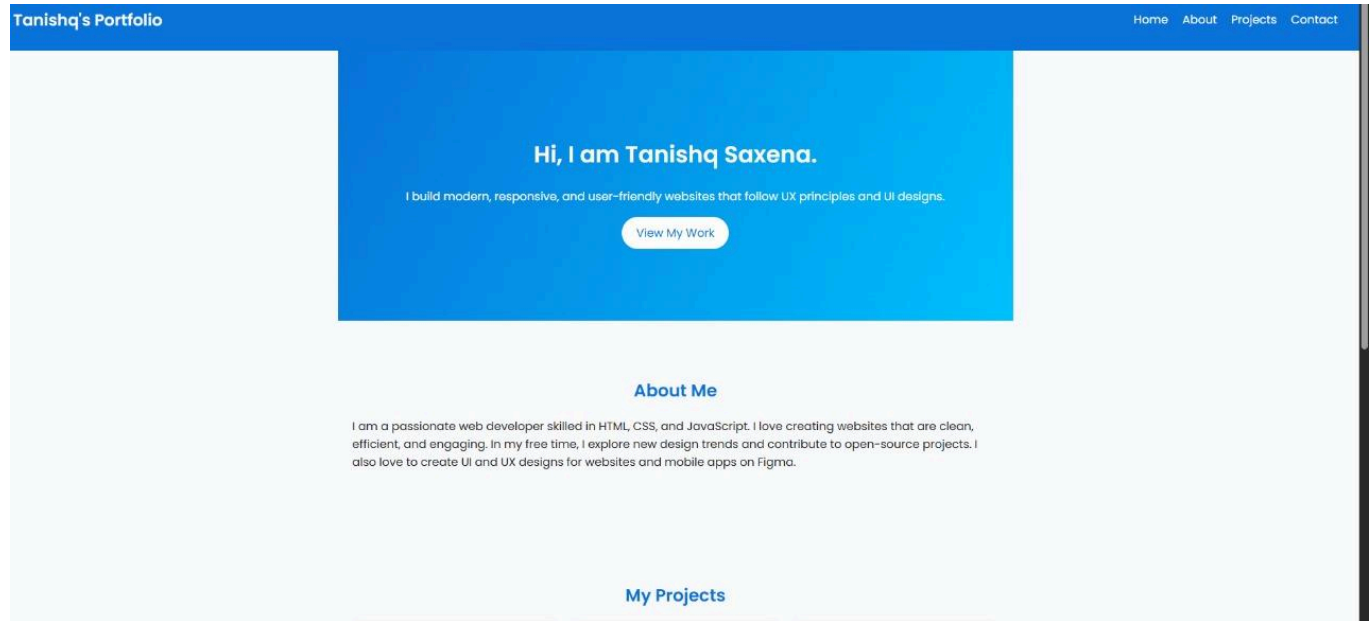
position: absolute;
top: 0;
left: 0;
right: 0;
height: 3px;
background: var(--accent-gradient);
opacity: 0.9;
}

/* Animation */
@keyframes fadeIn {
  from { opacity: 0; transform: translateY(-20px); }
  to { opacity: 1; transform: translateY(0); }
}

/* Responsive */
@media (max-width: 768px) {
  .menu-toggle { display: block; }
  .nav-links {
    flex-direction: column;
    display: none;
    background: linear-gradient(135deg, var(--primary-color) 0%,
var(--secondary-color) 100%);
    position: absolute;
    top: 60px;
    right: 0;
    width: 100%;
    text-align: center;
    box-shadow: 0 4px 20px rgba(102, 126, 234, 0.3);
  }
  .nav-links.show { display: flex; }
  .nav-links li { margin: 15px 0; }
}

```

Result-



Experiment 3: To Do List

INDEX.HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8" />
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title>To-Do List</title>

<!-- Google Font -->
<link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;600&display=swap"
rel="stylesheet">

<style>
:root {
  --primary-color: #1a1a2e;
  --secondary-color: #16213e;
  --accent-gradient: linear-gradient(135deg, #667eea 0%, #764ba2 100%);
  --accent-gradient-alt: linear-gradient(135deg, #f093fb 0%, #f5576c 100%);
  --dark-bg: #0f0f23;
  --card-bg: #1a1a2e;
  --text-color: #f1f1f3;
  --text-muted: #a1a1aa;
```

```
}

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

body {
  font-family: 'Poppins', sans-serif;
  background: var(--dark-bg);
  color: var(--text-color);
  display: flex;
  justify-content: center;
  align-items: center;
  height: 100vh;
}

.todo-container {
  background: linear-gradient(135deg, var(--secondary-color) 0%,
var(--primary-color) 100%);
  padding: 40px;
  border-radius: 15px;
  box-shadow: 0 8px 25px rgba(0,0,0,0.4);
  width: 90%;
  max-width: 400px;
  text-align: center;
  border: 1px solid rgba(102,126,234,0.3);
}

h1 {
  background: var(--accent-gradient);
  -webkit-background-clip: text;
  color: transparent;
  font-size: 1.8rem;
  margin-bottom: 25px;
}

.input-section {
  display: flex;
  justify-content: space-between;
  gap: 10px;
}

input {
  flex: 1;
  padding: 10px;
  border-radius: 8px;
}
```

```
border: 2px solid rgba(102,126,234,0.3);
background: var(--card-bg);
color: var(--text-color);
font-size: 1rem;
transition: all 0.3s ease;
}

input:focus {
  border-image: var(--accent-gradient) 1;
  outline: none;
  box-shadow: 0 0 10px rgba(102,126,234,0.4);
}

button {
  background: var(--accent-gradient);
  color: white;
  border: none;
  padding: 10px 18px;
  border-radius: 8px;
  cursor: pointer;
  font-weight: 600;
  transition: all 0.3s ease;
  box-shadow: 0 3px 12px rgba(102,126,234,0.3);
}

button:hover {
  background: var(--accent-gradient-alt);
  transform: translateY(-2px);
  box-shadow: 0 5px 18px rgba(240,147,251,0.4);
}

.task-counter {
  margin: 15px 0;
  font-size: 0.95rem;
  color: var(--text-muted);
}

ul {
  list-style: none;
  padding: 0;
  margin-top: 15px;
  text-align: left;
}
```



```

li {
  background: var(--card-bg);
  border: 1px solid rgba(102,126,234,0.2);
  padding: 10px;
  border-radius: 8px;
  margin-bottom: 10px;
  display: flex;
  justify-content: space-between;
  align-items: center;
  transition: all 0.3s ease;
}

li:hover {
  transform: translateY(-2px);
  border-color: rgba(102,126,234,0.5);
}

li.completed {
  text-decoration: line-through;
  color: var(--text-muted);
  opacity: 0.7;
}

.clear-btn {
  width: 100%;
  margin-top: 15px;
  background: var(--accent-gradient-alt);
  padding: 12px;
  border-radius: 25px;
}

.clear-btn:hover {
  background: var(--accent-gradient);
}
</style>
</head>

<body>
  <div class="todo-container">
    <h1>📝 My To-Do List</h1>
    <div class="input-section">
      <input type="text" id="taskInput" placeholder="Enter a new task..." />
      <button id="addBtn">Add</button>
    </div>

```

```

<div class="task-counter">
  <span id="taskCount">0 tasks</span>
</div>
<ul id="taskList"></ul>
<button id="clearAllBtn" class="clear-btn">Clear All</button>
</div>

<script>
  const taskInput = document.getElementById('taskInput');
  const addBtn = document.getElementById('addBtn');
  const taskList = document.getElementById('taskList');
  const taskCount = document.getElementById('taskCount');
  const clearAllBtn = document.getElementById('clearAllBtn');

  function updateCount() {
    const count = taskList.children.length;
    taskCount.textContent = count + (count === 1 ? " task" : " tasks");
  }

  addBtn.addEventListener('click', () => {
    const taskText = taskInput.value.trim();
    if (taskText === "") return;

    const li = document.createElement('li');
    li.textContent = taskText;

    li.addEventListener('click', () => {
      li.classList.toggle('completed');
    });

    const deleteBtn = document.createElement('button');
    deleteBtn.textContent = "✕";
    deleteBtn.style.background = "transparent";
    deleteBtn.style.color = "#f5576c";
    deleteBtn.style.border = "none";
    deleteBtn.style.cursor = "pointer";
    deleteBtn.style.fontSize = "1.1rem";
    deleteBtn.addEventListener('click', () => {
      li.remove();
      updateCount();
    });

    li.appendChild(deleteBtn);
    taskList.appendChild(li);
  });

```

```

        taskInput.value = "";
        updateCount();
    });

    clearAllBtn.addEventListener('click', () => {
        taskList.innerHTML = "";
        updateCount();
    });

    updateCount();
</script>
</body>
</html>

```

STYLE.CSS

```

body {
    font-family: "Segoe UI", Arial, sans-serif;
    background: linear-gradient(135deg, #43cea2, #185a9d); /* Changed gradient to teal-blue */
    display: flex;
    justify-content: center;
    align-items: center;
    min-height: 100vh;
    margin: 0;
    padding: 20px;
}

.todo-container {
    background: #ffffff;
    padding: 30px;
    border-radius: 20px;
    width: 100%;
    max-width: 450px;
    box-shadow: 0 15px 40px rgba(0, 0, 0, 0.15); /* slightly stronger shadow */
}

h1 {
    text-align: center;
    color: #222;
    margin-bottom: 25px;
    font-size: 1.9rem;
    letter-spacing: 0.5px;
}

```

```
.input-section {
  display: flex;
  gap: 10px;
  margin-bottom: 20px;
}

#taskInput {
  flex: 1;
  padding: 12px 15px;
  border: 2px solid #d0d0d0;
  border-radius: 10px;
  font-size: 14px;
  transition: border-color 0.3s ease, box-shadow 0.3s ease;
}

#taskInput:focus {
  outline: none;
  border-color: #43cea2;
  box-shadow: 0 0 5px rgba(67, 206, 162, 0.5);
}

#addBtn {
  background: #43cea2;
  color: white;
  border: none;
  padding: 12px 20px;
  border-radius: 10px;
  cursor: pointer;
  font-weight: 600;
  transition: all 0.3s ease;
}

#addBtn:hover {
  background: #38b38d;
  transform: translateY(-1px);
}

.task-counter {
  text-align: center;
  margin-bottom: 20px;
  color: #555;
  font-size: 14px;
}
```

```
#taskList {
  list-style: none;
  padding: 0;
  margin: 0 0 25px 0;
  max-height: 300px;
  overflow-y: auto;
}

.task-item {
  padding: 15px;
  background: #f7f9fc;
  margin-bottom: 10px;
  border-radius: 10px;
  display: flex;
  align-items: center;
  gap: 12px;
  transition: all 0.3s ease;
  cursor: pointer;
}

.task-item:hover {
  background: #eef3f8;
  transform: translateY(-2px);
}

.task-item.completed {
  background: #d1f2eb;
  opacity: 0.9;
}

.task-checkbox {
  width: 20px;
  height: 20px;
  border: 2px solid #ccc;
  border-radius: 50%;
  position: relative;
  flex-shrink: 0;
  transition: all 0.3s ease;
}

.task-item.completed .task-checkbox {
  background: #20c997;
  border-color: #20c997;
}
```

```
}

.task-checkbox::after {
  content: '✓';
  position: absolute;
  top: 50%;
  left: 50%;
  transform: translate(-50%, -50%) scale(0);
  color: white;
  font-weight: bold;
  font-size: 12px;
  transition: transform 0.2s ease;
}

.task-item.completed .task-checkbox::after {
  transform: translate(-50%, -50%) scale(1);
}

.task-text {
  flex: 1;
  font-size: 15px;
  color: #333;
  transition: all 0.3s ease;
}

.task-item.completed .task-text {
  text-decoration: line-through;
  color: #6c757d;
}

.delete-btn {
  background: #ff5c5c;
  color: white;
  border: none;
  padding: 6px 10px;
  border-radius: 6px;
  cursor: pointer;
  font-size: 12px;
  transition: all 0.3s ease;
  opacity: 0;
}

.task-item:hover .delete-btn {
  opacity: 1;
}
```

```

}

.delete-btn:hover {
  background: #e14b4b;
  transform: scale(1.05);
}

.clear-btn {
  width: 100%;
  padding: 12px;
  background: #3a3f47;
  color: white;
  border: none;
  border-radius: 10px;
  cursor: pointer;
  font-weight: 600;
  transition: all 0.3s ease;
}

.clear-btn:hover {
  background: #2f343a;
}

.clear-btn:disabled {
  background: #ccc;
  cursor: not-allowed;
}

@media (max-width: 500px) {
  .todo-container {
    padding: 20px;
    margin: 10px;
  }

  .input-section {
    flex-direction: column;
  }

  .delete-btn {
    opacity: 1;
  }
}

```

SCRIPT.JSS

```
// Select elements
```

```

const taskInput = document.getElementById("taskInput");
const addBtn = document.getElementById("addBtn");
const taskList = document.getElementById("taskList");
const clearAllBtn = document.getElementById("clearAllBtn");
const taskCount = document.getElementById("taskCount");

// Load tasks when page loads
document.addEventListener("DOMContentLoaded", loadTasks);

// Event listeners
addBtn.addEventListener("click", addTask);
taskInput.addEventListener("keypress", (e) => {
  if (e.key === "Enter") addTask();
});
clearAllBtn.addEventListener("click", clearAllTasks);

// Add a new task
function addTask() {
  const taskText = taskInput.value.trim();

  if (taskText === "") {
    showToast("⚠ Please enter a task!");
    return;
  }

  const li = document.createElement("li");
  li.className = "task-item";
  li.innerHTML = `
    <div class="task-checkbox"></div>
    <span class="task-text">${taskText}</span>
    <button class="delete-btn">Delete</button>
  `;

  // Toggle completion
  li.addEventListener("click", (e) => {
    if (e.target.classList.contains("delete-btn")) return;
    li.classList.toggle("completed");
    updateTaskCount();
    saveTasks();
  });

  // Delete task
  const deleteBtn = li.querySelector(".delete-btn");
  deleteBtn.addEventListener("click", (e) => {

```



```

    e.stopPropagation();
    li.classList.add("fade-out");
    setTimeout(() => {
        li.remove();
        updateTaskCount();
        saveTasks();
    }, 200);
});

taskList.appendChild(li);
taskInput.value = "";
updateTaskCount();
saveTasks();

showToast("✅ Task added!");
}

// Clear all tasks
function clearAllTasks() {
    if (taskList.children.length === 0) {
        showToast("❗ No tasks to clear!");
        return;
    }

    if (confirm("Are you sure you want to delete all tasks?")) {
        taskList.innerHTML = "";
        updateTaskCount();
        saveTasks();
        showToast("🗑️ All tasks cleared!");
    }
}

// Update counter text and button state
function updateTaskCount() {
    const total = taskList.children.length;
    taskCount.textContent = `${total} task${total !== 1 ? "s" : ""}`;
    clearAllBtn.disabled = total === 0;
}

// Save tasks to localStorage
function saveTasks() {
    const tasks = [];
    taskList.querySelectorAll(".task-item").forEach((li) => {
        tasks.push({

```

```

        text: li.querySelector(".task-text").textContent,
        completed: li.classList.contains("completed"),
    });
});
localStorage.setItem("tasks", JSON.stringify(tasks));
}

// Load tasks from localStorage
function loadTasks() {
    const saved = localStorage.getItem("tasks");
    if (saved) {
        const tasks = JSON.parse(saved);
        tasks.forEach((task) => {
            const li = document.createElement("li");
            li.className = `task-item ${task.completed ? "completed" : ""}`;
            li.innerHTML = `
                <div class="task-checkbox"></div>
                <span class="task-text">${task.text}</span>
                <button class="delete-btn">Delete</button>
            `;

            // Toggle completion
            li.addEventListener("click", (e) => {
                if (e.target.classList.contains("delete-btn")) return;
                li.classList.toggle("completed");
                updateTaskCount();
                saveTasks();
            });

            // Delete task
            const deleteBtn = li.querySelector(".delete-btn");
            deleteBtn.addEventListener("click", (e) => {
                e.stopPropagation();
                li.classList.add("fade-out");
                setTimeout(() => {
                    li.remove();
                    updateTaskCount();
                    saveTasks();
                }, 200);
            });

            taskList.appendChild(li);
        });
    }
}

```

```

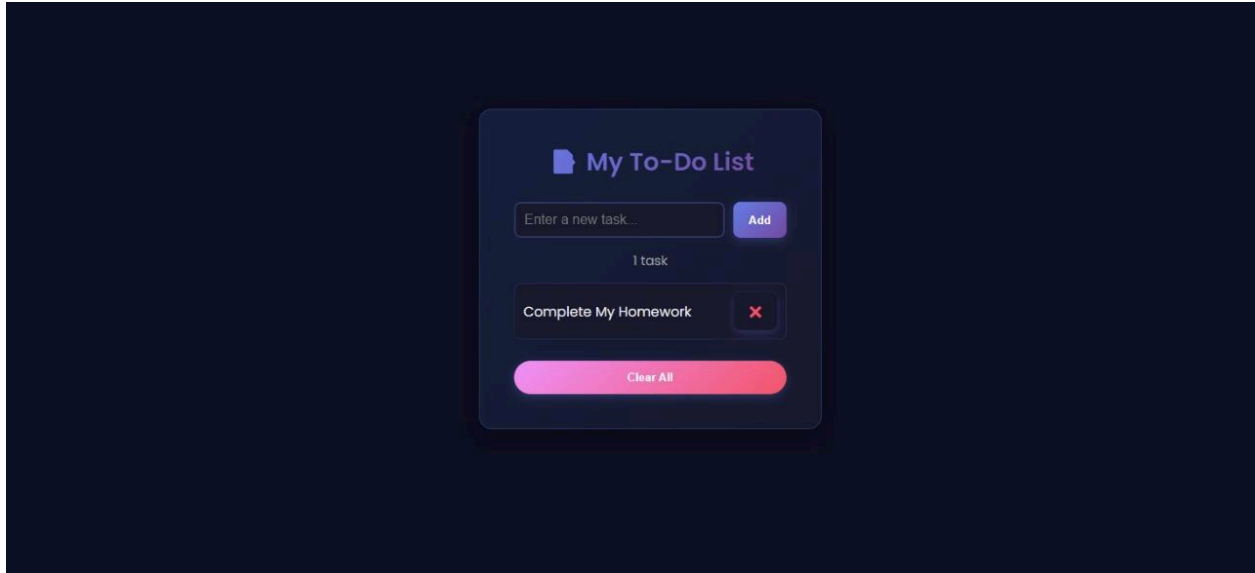
    updateTaskCount();
}

// --- Optional Toast Notification ---
function showToast(message) {
    const toast = document.createElement("div");
    toast.textContent = message;
    toast.style.position = "fixed";
    toast.style.bottom = "25px";
    toast.style.left = "50%";
    toast.style.transform = "translateX(-50%)";
    toast.style.background = "rgba(67, 206, 162, 0.95)";
    toast.style.color = "#fff";
    toast.style.padding = "10px 20px";
    toast.style.borderRadius = "8px";
    toast.style.fontSize = "14px";
    toast.style.fontWeight = "600";
    toast.style.boxShadow = "0 4px 10px rgba(0,0,0,0.2)";
    toast.style.zIndex = "1000";
    toast.style.opacity = "0";
    toast.style.transition = "opacity 0.3s ease";

    document.body.appendChild(toast);
    setTimeout(() => (toast.style.opacity = "1"), 100);
    setTimeout(() => {
        toast.style.opacity = "0";
        setTimeout(() => toast.remove(), 300);
    }, 1800);
}

```

Result-



Experiment 4:Optimizing a Webpage for SEO and Accessibility

Unoptimized

```
<!DOCTYPE html>
<html>
<head>
<title>Page</title>
</head>
<body>
<div>
<div>Premium Soft Drink Shop</div>
<div>
<div>Home</div>
<div>Products</div>
<div>About</div>
<div>Contact</div>
</div>
</div>
<div>
<div>Welcome to Premium Soft Drink Shop</div>
<div>Discover the World's Finest Soft Drinks</div>
<div>Experience exceptional taste with our carefully crafted selection of refreshing soft
drinks made from natural ingredients and authentic flavors sourced globally.</div>
<div>Click here</div>
</div>
<div>
```

```
<div>Our Premium Soft Drink Collection</div>
<div>
<div>Classic Lemon Sparkle</div>
<div>Refreshing and tangy drink with real lemon extracts and sparkling fizz for the
perfect
summer vibe.</div>
<div>lemon-sparkle.jpg</div>
</div>
<div>
<div>Cola Fusion Original</div>
<div>Rich and balanced cola flavor made with pure cane sugar and natural spices, a
perfect
blend of sweetness and energy.</div>
<div>cola-fusion.jpg</div>
</div>
</div>
<div>About Our Soft Drink Journey</div>
<div>Since 2010, we've been passionate about creating the best-tasting soft drinks
while
promoting eco-friendly production and sustainable ingredient sourcing. Our partnerships
with
local producers ensure freshness and quality in every sip.</div>
</div>
<div>
<div>Contact Premium Soft Drink Shop</div>
<div>Phone: +1 (234) 567-8890</div>
<div>Email: info@softdrinkshop.com</div>
<div>Address: 123 Sparkle Avenue, Soda City, SC 12345</div>
<div>Facebook</div>
<div>Instagram</div>
<div>2025 Premium Soft Drink Shop. All rights reserved.</div>
</div>
</body>
</html>
```

Optimized

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

```
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Premium Soft Drinks - Best Refreshing Beverages | Soft Drink Shop</title>
<meta name="description" content="Discover premium soft drinks made with natural
flavors
and real ingredients. Explore our range of classic and modern beverages with free
shipping
on orders over $50.">
<meta name="keywords" content="soft drinks, beverages, premium soda, natural
drinks, sparkling drinks">
<meta name="author" content="Soft Drink Shop">
<meta property="og:title" content="Premium Soft Drinks - Best Refreshing Beverages">
<meta property="og:description" content="Discover premium soft drinks crafted from
natural
flavors and ingredients.">
<meta property="og:type" content="website">
<meta property="og:url" content="https://www.softdrinkshop.com">
<meta property="og:image"
content="https://www.softdrinkshop.com/images/softdrinkhero.jpg">
<link rel="canonical" href="https://www.softdrinkshop.com">
</head>
<body>
<header>
<nav>
<h1>Premium Soft Drink Shop</h1>
<ul>
<li><a href="#home" title="Home page">Home</a></li>
<li><a href="#products" title="Our soft drink products">Products</a></li>
<li><a href="#about" title="About our company">About</a></li>
<li><a href="#contact" title="Contact information">Contact</a></li>
</ul>
</nav>
</header>
<main>
<section id="home">
<h1>Welcome to Premium Soft Drink Shop</h1>
<h2>Discover the World's Finest Soft Drinks</h2>
<p>Experience exceptional taste with our carefully curated selection of refreshing soft
drinks made from natural ingredients and authentic flavors sourced globally.</p>
```

```
<a href="#products" title="Browse our soft drink collection">Shop Our Drink
Collection</a>
</section>
<section id="products">
<h2>Our Premium Soft Drink Collection</h2>
<article>
<h3>Classic Lemon Sparkle</h3>
<p>Refreshing and tangy drink with real lemon extracts and sparkling fizz for the perfect
summer vibe.</p>

</article>
<article>
<h3>Cola Fusion Original</h3>
<p>Rich and balanced cola flavor made with pure cane sugar and natural spices, a
perfect
blend of sweetness and energy.</p>

</article>
</section>
<section id="about">
<h2>About Our Soft Drink Journey</h2>
<p>Since 2010, we've been passionate about crafting the finest soft drinks while
supporting
eco-friendly practices and sustainable ingredient sourcing. Our strong ties with local
producers ensure freshness, quality, and authentic flavor in every bottle.</p>
</section>
</main>
<footer id="contact">
<h2>Contact Premium Soft Drink Shop</h2>
<address>
<p>Phone: <a href="tel:+1234567890" title="Call us">+1 (234) 567-8890</a></p>
<p>Email: <a href="mailto:info@softdrinkshop.com" title="Send us an
email">info@softdrinkshop.com</a></p>
<p>Address: 123 Sparkle Avenue, Soda City, SC 12345</p>
</address>
<nav aria-label="Social media links">
<ul>
```

```
<li><a href="https://facebook.com/softdrinkshop" title="Follow us on Facebook"
rel="noopener">Facebook</a></li>
<li><a href="https://instagram.com/softdrinkshop" title="Follow us on Instagram"
rel="noopener">Instagram</a></li>
</ul>
</nav>
<p>&copy; 2025 Premium Soft Drink Shop. All rights reserved.</p>
</footer>
</body>
</html>
```

Experiment 5:Weather App API

Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8" />
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title>Weather App</title>
<style>
* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}

body {
  font-family: "Poppins", Arial, sans-serif;
  background: linear-gradient(135deg, #74b9ff, #0984e3);
  min-height: 100vh;
  display: flex;
  align-items: center;
  justify-content: center;
}

.container {
  background: #fff;
  padding: 30px;
  border-radius: 15px;
```



```
    box-shadow: 0 10px 25px rgba(0, 0, 0, 0.2);
    text-align: center;
    max-width: 400px;
    width: 90%;
    transition: 0.3s ease;
}

.container:hover {
    transform: translateY(-3px);
    box-shadow: 0 12px 28px rgba(0, 0, 0, 0.25);
}

h1 {
    color: #2d3436;
    margin-bottom: 20px;
}

.input-container {
    margin-bottom: 20px;
    display: flex;
    justify-content: center;
    flex-wrap: wrap;
    gap: 10px;
}

input {
    padding: 12px 15px;
    border: 2px solid #ddd;
    border-radius: 25px;
    width: 65%;
    font-size: 14px;
    outline: none;
    transition: border 0.3s;
}

input:focus {
    border-color: #74b9ff;
}

button {
    padding: 12px 20px;
    background: #74b9ff;
    color: white;
    border: none;
```

```
border-radius: 25px;
cursor: pointer;
font-weight: bold;
transition: 0.3s;
}

button:hover {
  background: #0984e3;
  transform: scale(1.05);
}

#result {
  background: #f8f9fa;
  padding: 20px;
  border-radius: 10px;
  margin-top: 20px;
  display: none;
  animation: fadeIn 0.5s ease;
}

#result h2 {
  color: #2d3436;
  margin-bottom: 15px;
}

#result p {
  margin: 8px 0;
  color: #636e72;
  font-size: 15px;
}

.error {
  color: #e84118 !important;
  font-weight: bold;
}

.loading {
  color: #0984e3;
  font-weight: bold;
}

@keyframes fadeIn {
  from { opacity: 0; transform: translateY(10px); }
  to { opacity: 1; transform: translateY(0); }
```

```

}

@media (max-width: 480px) {
  input {
    width: 100%;
  }
  button {
    width: 100%;
  }
}

</style>
</head>
<body>

<div class="container">
  <h1>🌤️ Weather App</h1>
  <div class="input-container">
    <input type="text" id="city" placeholder="Enter city name..." />
    <button id="getWeatherBtn">Get Weather</button>
  </div>
  <div id="result"></div>
</div>

<script>
const cityInput = document.getElementById("city");
const result = document.getElementById("result");
const btn = document.getElementById("getWeatherBtn");

// Main function
async function getWeather() {
  const city = cityInput.value.trim();

  if (!city) {
    showError("⚠️ Please enter a city name!");
    return;
  }

  const apiKey = "a0ff193dc9bd460ab5d54740251010"; // Replace with your WeatherAPI key
  const url =
    `https://api.weatherapi.com/v1/current.json?key=${apiKey}&q=${city}`;

  result.innerHTML = "<p class='loading'>Loading weather data...</p>";
  result.style.display = "block";

```

```

try {
  const response = await fetch(url);
  if (!response.ok) throw new Error("❌ City not found!");
  const data = await response.json();

  result.innerHTML = `
    <h2>${data.location.name}, ${data.location.country}</h2>
    <p><strong>🌡️ Temperature:</strong> ${data.current.temp_c}°C</p>
    <p><strong>☁️ Condition:</strong> ${data.current.condition.text}</p>
    <p><strong>💧 Humidity:</strong> ${data.current.humidity}%</p>
    <p><strong>💨 Wind Speed:</strong> ${data.current.wind_kph} km/h</p>
    <p><strong>🤖 Feels Like:</strong> ${data.current.feelslike_c}°C</p>
  `;
} catch (error) {
  showError(error.message);
}

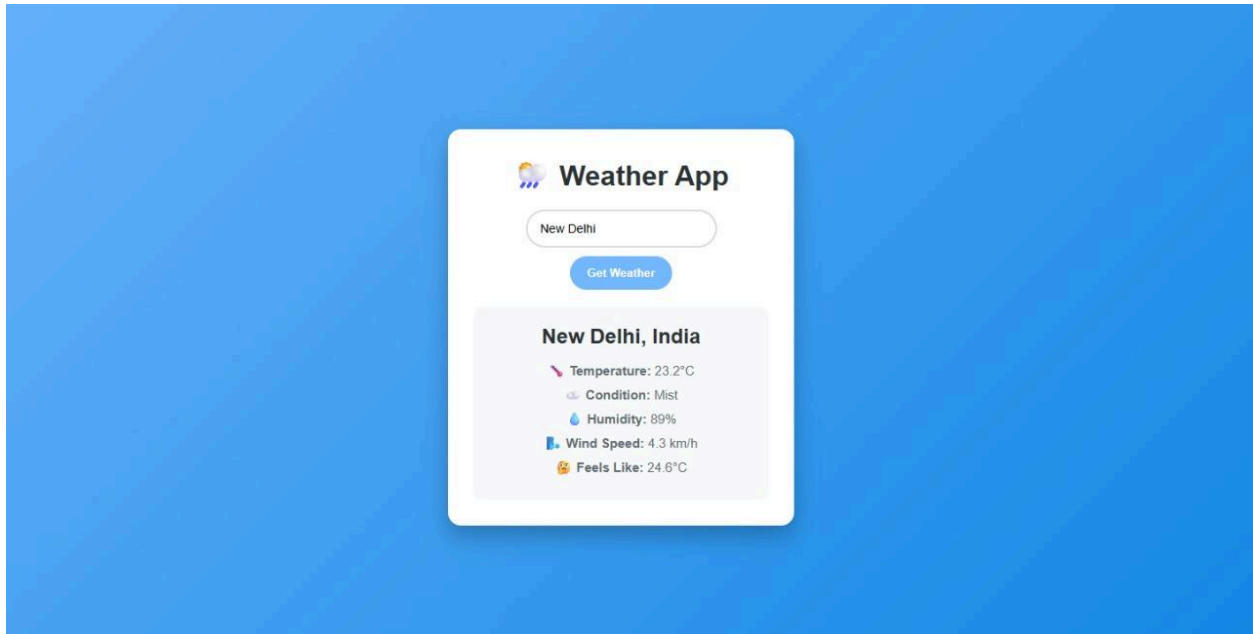
// Error display helper
function showError(message) {
  result.innerHTML = `<p class="error">${message}</p>`;
  result.style.display = "block";
}

// Allow Enter key
cityInput.addEventListener("keypress", (e) => {
  if (e.key === "Enter") getWeather();
});

btn.addEventListener("click", getWeather);
</script>
</body>
</html>

```

Result-



Experiment 6: Blog Website

Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<title>Cricket Blog</title>

<!-- Bootstrap 5 -->
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css"
rel="stylesheet">

<!-- Google Font -->
<link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;600;700&display=sw
ap" rel="stylesheet">

<style>
/* ===== Global Styles ===== */
body {
  font-family: 'Poppins', sans-serif;
  background: #f9f8ff;
```

```

    color: #333;
    line-height: 1.7;
    overflow-x: hidden;
}

a { text-decoration: none; }

/* ===== Navbar ===== */
.site-header {
    background: linear-gradient(90deg, #1e8449, #145a32);
    box-shadow: 0 2px 10px rgba(0, 0, 0, 0.2);
}

.site-header .navbar-brand,
.site-header .nav-link {
    color: #fff !important;
    transition: color 0.3s;
}

.site-header .nav-link:hover {
    color: #f9e79f !important;
}

/* ===== Hero Section ===== */
.hero {
    background: linear-gradient(135deg, #1e8449, #145a32);
    color: #fff;
    border-radius: 1.2rem;
    padding: 3rem 2rem;
    box-shadow: 0 6px 20px rgba(0, 0, 0, 0.15);
    position: relative;
    overflow: hidden;
}

.hero::after {
    content: '';
    position: absolute;
    top: -50%;
    right: -50%;
    width: 100%;
    height: 200%;
    background: rgba(255, 255, 255, 0.08);
    transform: rotate(25deg);
    animation: heroGlow 6s infinite alternate;
}

```

```

}

@keyframes heroGlow {
  0% { opacity: 0.3; }
  100% { opacity: 0.7; }
}

.hero .btn-light {
  color: #145a32;
  font-weight: 600;
  transition: all 0.3s;
}

.hero .btn-light:hover {
  background: #f9e79f;
  transform: translateY(-2px);
}

/* ===== Post Cards ===== */
.post-card {
  border: none;
  border-radius: 1rem;
  transition: all 0.4s ease;
}

.post-card:hover {
  transform: translateY(-6px);
  box-shadow: 0 10px 20px rgba(0, 0, 0, 0.15);
}

.post-card img {
  height: 200px;
  object-fit: cover;
  border-top-left-radius: 1rem;
  border-top-right-radius: 1rem;
}

/* ===== Sidebar ===== */
.sticky-sidebar {
  position: sticky;
  top: 1rem;
}

.sidebar-card {

```

```

border: none;
border-radius: 1rem;
background: #fff;
transition: all 0.3s;
}

.sidebar-card:hover {
  transform: translateY(-3px);
  box-shadow: 0 8px 18px rgba(0, 0, 0, 0.1);
}

/* ===== Footer ===== */
footer {
  background: #1c2833;
  color: #e9ecf5;
}

footer a {
  color: #f9e79f;
  transition: color 0.3s;
}

footer a:hover {
  color: #fff;
}

/* ===== Back To Top ===== */
#backToTop {
  right: 1rem;
  bottom: 1rem;
  display: none;
  z-index: 999;
  border-radius: 50%;
  box-shadow: 0 5px 15px rgba(0, 0, 0, 0.25);
  animation: fadeInUp 0.5s ease forwards;
}

@keyframes fadeInUp {
  from { transform: translateY(20px); opacity: 0; }
  to { transform: translateY(0); opacity: 1; }
}

/* ===== Scroll Animation ===== */
[data-animate] {

```



```

opacity: 0;
transform: translateY(30px);
transition: all 0.6s ease-out;
}
[data-animate].visible {
opacity: 1;
transform: translateY(0);
}

/* ===== Responsive ===== */
@media (max-width: 576px) {
.hero h1 { font-size: 1.8rem; }
}
@media (min-width: 1200px) {
.reading-container { max-width: 1220px; }
}
</style>
</head>
<body>

<!-- ===== Navbar ===== -->
<header class="site-header mb-4">
  <nav class="navbar navbar-expand-md container reading-container py-3">
    <a class="navbar-brand fw-bold fs-4" href="#">Cricket Blog</a>
    <button class="navbar-toggler border-0" type="button"
data-bs-toggle="collapse" data-bs-target="#navMenu">
      <span class="navbar-toggler-icon" style="filter: invert(100%);"></span>
    </button>
    <div class="collapse navbar-collapse" id="navMenu">
      <ul class="navbar-nav ms-auto fw-semibold">
        <li class="nav-item"><a class="nav-link" href="#">Home</a></li>
        <li class="nav-item"><a class="nav-link" href="#">Matches</a></li>
        <li class="nav-item"><a class="nav-link" href="#">Players</a></li>
        <li class="nav-item"><a class="nav-link" href="#">About</a></li>
      </ul>
    </div>
  </nav>
</header>

<!-- ===== Hero Section ===== -->
<section class="container reading-container mb-5">
  <div class="hero shadow" data-animate>
    <div class="row align-items-center">
      <div class="col-lg-8">

```

```

        <h1 class="fw-bold mb-3">Exploring the Future of World Cricket</h1>
        <p class="lead mb-4">Dive into the world where passion meets performance –
from match analyses and player stories to tactics shaping tomorrow’s cricketing
legends.</p>
        <a href="#posts" class="btn btn-light btn-lg">Discover Stories</a>
    </div>
    <div class="col-lg-4 d-none d-lg-block text-end">
        
        </div>
    </div>
</div>
</section>

<!-- ===== Main Content ===== -->
<main class="container reading-container">
    <div class="row g-4">

        <!-- Posts Section -->
        <div class="col-lg-8 order-2 order-lg-1">
            <h2 id="posts" class="fw-bold mb-3">Featured Articles</h2>
            <div class="row row-cols-1 row-cols-md-2 g-4">

                <div class="col" data-animate>
                    <article class="card post-card h-100 shadow-sm">
                        
                        <div class="card-body">
                            <h5 class="card-title">Game-Changing Strategies in Modern
Cricket</h5>
                            <p class="text-secondary">Explore how data analytics and bold
captaincy are redefining cricket tactics in both formats of the game.</p>
                            <a href="#" class="btn btn-primary btn-sm">Read more</a>
                        </div>
                        <div class="card-footer small text-muted">Published: Oct 25,
2025</div>
                    </article>
                </div>

                <div class="col" data-animate>
                    <article class="card post-card h-100 shadow-sm">

```

```

  <div class="card-body">
    <h5 class="card-title">How Technology is Making Cricket Safer</h5>
    <p class="text-secondary">Discover how sensors, smart helmets, and
better monitoring systems protect players on and off the field.</p>
    <a href="#" class="btn btn-primary btn-sm">Read more</a>
  </div>
  <div class="card-footer small text-muted">Published: Oct 18,
2025</div>
</article>
</div>

<div class="col" data-animate>
  <article class="card post-card h-100 shadow-sm">
    
    <div class="card-body">
      <h5 class="card-title">Cricket Trends That Define 2025</h5>
      <p class="text-secondary">From T20 leagues to young stars and
sustainable stadiums – see what’s driving cricket’s exciting evolution.</p>
      <a href="#" class="btn btn-primary btn-sm">Read more</a>
    </div>
    <div class="card-footer small text-muted">Published: Oct 10,
2025</div>
  </article>
</div>

<div class="col" data-animate>
  <article class="card post-card h-100 shadow-sm">
    
    <div class="card-body">
      <h5 class="card-title">The Rise of Voice & Fan Engagement in
Cricket</h5>
      <p class="text-secondary">Learn how commentators, fans, and
technology combine to make every match an interactive experience.</p>
      <a href="#" class="btn btn-primary btn-sm">Read more</a>
    </div>
    <div class="card-footer small text-muted">Published: Sep 28,
2025</div>
```

```

        </article>
    </div>
</div>
</div>

<!-- Sidebar -->
<aside class="col-lg-4 order-1 order-lg-2">
    <div class="sticky-sidebar">

        <div class="card sidebar-card mb-4" data-animate>
            <div class="card-body">
                <h5 class="card-title">About Cricket Blog</h5>
                <p class="text-secondary">We bring you stories, analyses, and updates
about cricket – from global tournaments to behind-the-scenes player journeys.</p>
            </div>
        </div>

        <div class="card sidebar-card mb-4" data-animate>
            <div class="card-body">
                <h5 class="card-title">Categories</h5>
                <div class="d-flex flex-wrap gap-2">
                    <a class="badge text-bg-primary" href="#">Matches</a>
                    <a class="badge text-bg-secondary" href="#">Players</a>
                    <a class="badge text-bg-success" href="#">Tactics</a>
                    <a class="badge text-bg-warning" href="#">History</a>
                    <a class="badge text-bg-info" href="#">World Cup</a>
                </div>
            </div>
        </div>

        <div class="card sidebar-card" data-animate>
            <div class="card-body">
                <h5 class="card-title">Newsletter</h5>
                <p class="text-secondary">Join 10,000+ cricket fans and get weekly
match insights, player interviews, and updates straight to your inbox.</p>
                <form class="row g-2">
                    <div class="col-12">
                        <input type="email" class="form-control"
placeholder="you@example.com">
                    </div>
                    <div class="col-12 d-grid">
                        <button class="btn btn-outline-success"
type="button">Subscribe</button>
                    </div>
                </form>
            </div>
        </div>
    </div>
</aside>

```

```

        </form>
      </div>
    </div>

    </div>
  </aside>
</div>
</main>

<!-- Back To Top -->
<button id="backToTop" class="btn btn-success position-fixed">↑</button>

<!-- ===== Footer ===== -->
<footer class="mt-5 py-4">
  <div class="container reading-container small d-flex justify-content-between flex-column flex-md-row gap-2">
    <span>&copy; 2025 Cricket Insights – All rights reserved.</span>
    <span>
      <a href="#" class="me-3">Privacy</a>
      <a href="#">Contact</a>
    </span>
  </div>
</footer>

<!-- Bootstrap JS -->
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"
></script>

<!-- ===== Custom JS ===== -->
<script>
// Back-to-top button
const btn = document.getElementById('backToTop');
window.addEventListener('scroll', () => {
  btn.style.display = window.scrollY > 400 ? 'inline-block' : 'none';
});
btn.addEventListener('click', () =>
  window.scrollTo({ top: 0, behavior: 'smooth' })
);

// Scroll fade-in animation
const animateEls = document.querySelectorAll('[data-animate]');
const observer = new IntersectionObserver(entries => {
  entries.forEach(entry => {

```

```

    if (entry.isIntersecting) entry.target.classList.add('visible');
  });
}, { threshold: 0.2 });
animateEls.forEach(el => observer.observe(el));
</script>
</body>
</html>

```

Result-

