

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=swap" 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">

Home

About

Projects

Contact

```
</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%, #f55576c 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: '';

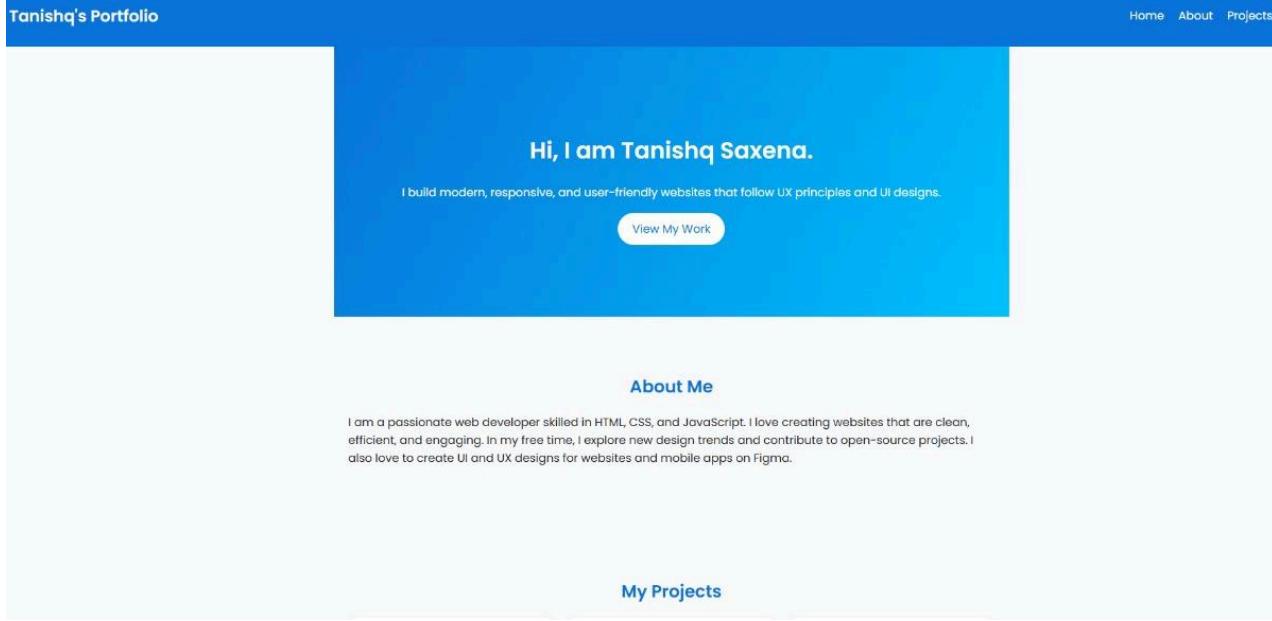
```

```
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);
  });
</script>
```

```

    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>
    <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({
            title: taskInput.value,
            completed: li.classList.contains("completed")
        });
    });
    localStorage.setItem("tasks", JSON.stringify(tasks));
}
```

```

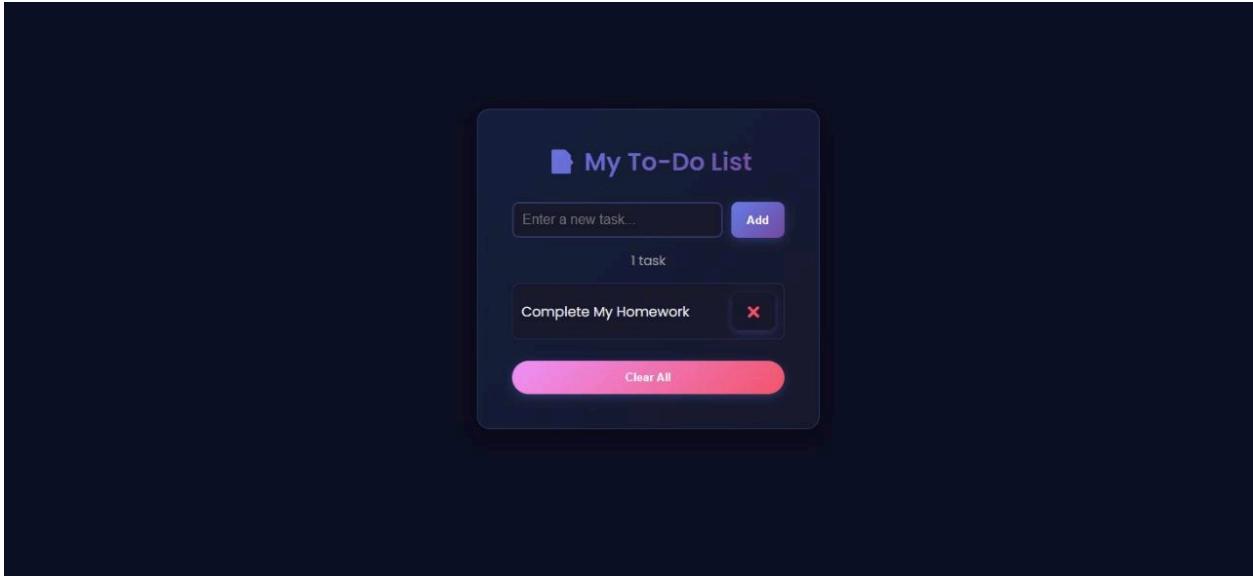
        text: li.querySelector(".task-text").textContent,
        completed: li.classList.contains("completed"),
    });
});
localStorage.setItem("tasks", JSON.stringify(tasks));
}

// 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>
<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="#" title="Home page">Home</a></li>
<li><a href="#" title="Our soft drink products">Products</a></li>
<li><a href="#" title="About our company">About</a></li>
<li><a href="#" 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";
}
```

```

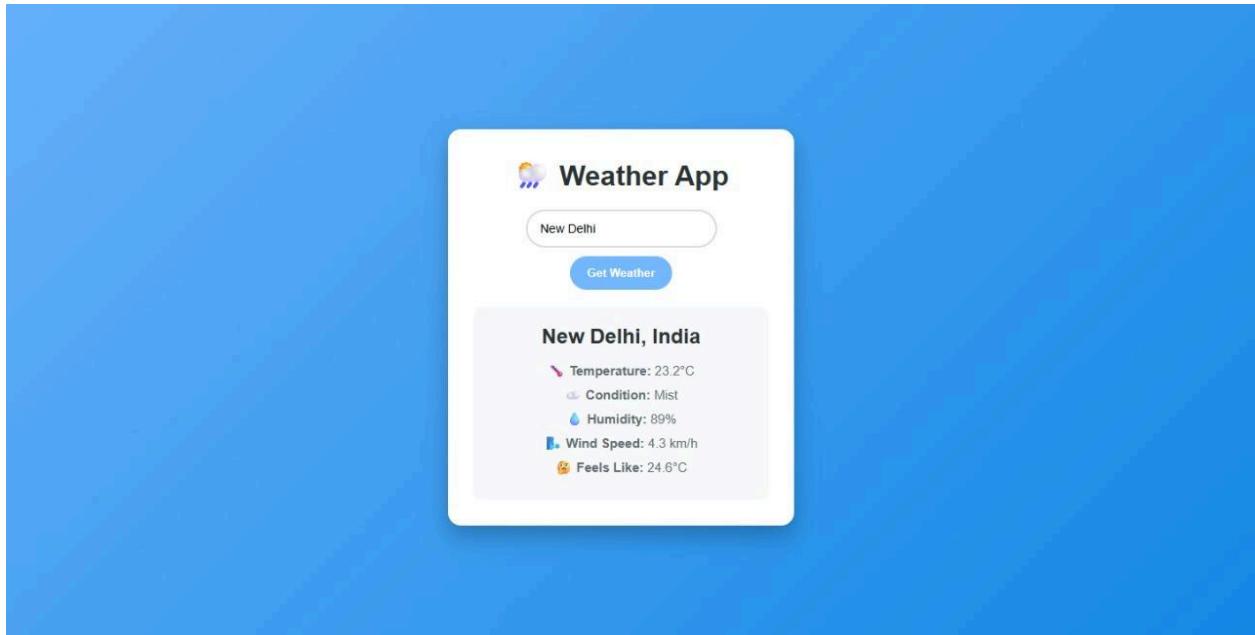
try {
    const response = await fetch(url);
    if (!response.ok) throw new Error("❌ City not found!");
    const data = await response.json();

    result.innerHTML =
        `

## ${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=swap"
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">

Cricket Blog

<button class="navbar-toggler border-0" type="button" data-bs-toggle="collapse" data-bs-target="#navMenu">

</button>

<div class="collapse navbar-collapse" id="navMenu">

<ul class="navbar-nav ms-auto fw-semibold">

<li class="nav-item">Home

<li class="nav-item">Matches

<li class="nav-item">Players

<li class="nav-item">About

</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>

<!-- 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>© 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-

The screenshot shows a website for 'Cricket Blog'. The header is dark green with the title 'Cricket Blog' on the left and navigation links 'Home', 'Matches', 'Players', and 'About' on the right. The main content area has a dark green background with a large white rectangular overlay. Inside this overlay, the title 'Exploring the Future of World Cricket' is displayed in bold white font. Below the title is a short description: 'Dive into the world where passion meets performance – from match analyses and player stories to tactics shaping tomorrow's cricketing legends.' A white button labeled 'Discover Stories' is centered below the description. To the right of the text is a small image of a basketball on an orange court. Below the main overlay, there's a section titled 'Featured Articles' with two cards: one showing a cricket match action and another showing cricket security. On the right side of the page, there's a sidebar with the heading 'About Cricket Blog' and a brief description of the blog's purpose.

Cricket Blog

Home Matches Players About

Exploring the Future of World Cricket

Dive into the world where passion meets performance – from match analyses and player stories to tactics shaping tomorrow's cricketing legends.

Discover Stories

Featured Articles

Cricket match action

Cricket security

About Cricket Blog

We bring you stories, analyses, and updates about cricket – from global tournaments to behind-the-scenes player journeys.