

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>AirIQ - Air Quality Prediction</title>

  <style>

    /* Global Styles */

    :root {

      --primary-color: #3498db;

      --secondary-color: #2ecc71;

      --dark-color: #2c3e50;

      --light-color: #ecf0f1;

      --danger-color: #e74c3c;

      --warning-color: #f39c12;

    }

    * {

      margin: 0;

      padding: 0;

      box-sizing: border-box;

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

    }

    body {

      background-color: #f5f7fa;

      color: #333;

      line-height: 1.6;

    }

    .container {
```

```
max-width: 1200px;
margin: 0 auto;
padding: 0 20px;
}
```

```
/* Header Styles */
```

```
header {
  background: linear-gradient(135deg, var(--primary-color), var(--secondary-color));
  color: white;
  padding: 1rem 0;
  box-shadow: 0 4px 12px rgba(0, 0, 0, 0.1);
  position: sticky;
  top: 0;
  z-index: 100;
}
```

```
nav {
  display: flex;
  justify-content: space-between;
  align-items: center;
}
```

```
.logo {
  font-size: 1.8rem;
  font-weight: 700;
  display: flex;
  align-items: center;
}
```

```
.logo i {
  margin-right: 10px;
```

```
}
```

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

```
.nav-links li {  
  margin-left: 2rem;  
}
```

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

```
.nav-links a:hover {  
  opacity: 0.8;  
}
```

```
.btn {  
  display: inline-block;  
  background: white;  
  color: var(--primary-color);  
  padding: 0.5rem 1.5rem;  
  border-radius: 30px;  
  text-decoration: none;  
  font-weight: 600;  
  transition: all 0.3s ease;
```

```
}
```

```
.btn:hover {  
    transform: translateY(-3px);  
    box-shadow: 0 10px 20px rgba(0, 0, 0, 0.1);  
}
```

```
/* Hero Section */
```

```
.hero {  
    padding: 5rem 0;  
    background: url('https://images.unsplash.com/photo-1584473457406-  
6240486418e9?ixlib=rb-1.2.1&auto=format&fit=crop&w=1350&q=80') no-repeat center  
center/cover;  
    position: relative;  
    color: white;  
    text-align: center;  
}
```

```
.hero::before {  
    content: "";  
    position: absolute;  
    top: 0;  
    left: 0;  
    width: 100%;  
    height: 100%;  
    background: rgba(0, 0, 0, 0.6);  
}
```

```
.hero-content {  
    position: relative;  
    z-index: 1;  
    max-width: 800px;
```

```
    margin: 0 auto;
}
```

```
.hero h1 {
    font-size: 3.5rem;
    margin-bottom: 1rem;
}
```

```
.hero p {
    font-size: 1.2rem;
    margin-bottom: 2rem;
}
```

```
.btn-primary {
    background: var(--primary-color);
    color: white;
    padding: 0.8rem 2rem;
    font-size: 1.1rem;
}
```

```
/* Prediction Section */
```

```
.prediction {
    padding: 5rem 0;
    background: white;
}
```

```
.section-title {
    text-align: center;
    margin-bottom: 3rem;
}
```

```
.section-title h2 {  
  font-size: 2.5rem;  
  color: var(--dark-color);  
  margin-bottom: 1rem;  
}
```

```
.section-title p {  
  color: #777;  
  max-width: 700px;  
  margin: 0 auto;  
}
```

```
.prediction-form {  
  background: var(--light-color);  
  padding: 2rem;  
  border-radius: 10px;  
  box-shadow: 0 5px 15px rgba(0, 0, 0, 0.1);  
  max-width: 800px;  
  margin: 0 auto;  
}
```

```
.form-group {  
  margin-bottom: 1.5rem;  
}
```

```
.form-group label {  
  display: block;  
  margin-bottom: 0.5rem;  
  font-weight: 600;  
  color: var(--dark-color);  
}
```

```
.form-control {  
  width: 100%;  
  padding: 0.8rem;  
  border: 1px solid #ddd;  
  border-radius: 5px;  
  font-size: 1rem;  
}
```

```
.form-row {  
  display: flex;  
  gap: 1rem;  
}
```

```
.form-row .form-group {  
  flex: 1;  
}
```

```
.btn-submit {  
  background: var(--secondary-color);  
  color: white;  
  border: none;  
  padding: 1rem 2rem;  
  font-size: 1.1rem;  
  border-radius: 5px;  
  cursor: pointer;  
  width: 100%;  
  font-weight: 600;  
  transition: all 0.3s ease;  
}
```

```
.btn-submit:hover {  
    background: #27ae60;  
    transform: translateY(-3px);  
    box-shadow: 0 10px 20px rgba(0, 0, 0, 0.1);  
}
```

```
.result {  
    margin-top: 2rem;  
    padding: 1.5rem;  
    border-radius: 5px;  
    text-align: center;  
    font-weight: 600;  
    display: none;  
}
```

```
.good {  
    background: #d4edda;  
    color: #155724;  
}
```

```
.moderate {  
    background: #fff3cd;  
    color: #856404;  
}
```

```
.unhealthy {  
    background: #f8d7da;  
    color: #721c24;  
}
```

```
/* Features Section */
```



```
.features {  
  padding: 5rem 0;  
  background: var(--light-color);  
}
```

```
.features-grid {  
  display: grid;  
  grid-template-columns: repeat(auto-fit, minmax(300px, 1fr));  
  gap: 2rem;  
  margin-top: 3rem;  
}
```

```
.feature-card {  
  background: white;  
  padding: 2rem;  
  border-radius: 10px;  
  box-shadow: 0 5px 15px rgba(0, 0, 0, 0.05);  
  transition: all 0.3s ease;  
  text-align: center;  
}
```

```
.feature-card:hover {  
  transform: translateY(-10px);  
  box-shadow: 0 15px 30px rgba(0, 0, 0, 0.1);  
}
```

```
.feature-icon {  
  font-size: 3rem;  
  color: var(--primary-color);  
  margin-bottom: 1.5rem;  
}
```

```
.feature-card h3 {  
    font-size: 1.5rem;  
    margin-bottom: 1rem;  
    color: var(--dark-color);  
}
```

```
/* About Section */
```

```
.about {  
    padding: 5rem 0;  
    background: white;  
}
```

```
.about-content {  
    display: grid;  
    grid-template-columns: 1fr 1fr;  
    gap: 3rem;  
    align-items: center;  
}
```

```
.about-image img {  
    width: 100%;  
    border-radius: 10px;  
    box-shadow: 0 10px 30px rgba(0, 0, 0, 0.1);  
}
```

```
.about-text h2 {  
    font-size: 2.5rem;  
    color: var(--dark-color);  
    margin-bottom: 1.5rem;  
}
```

```
.about-text p {  
    margin-bottom: 1.5rem;  
    color: #555;  
}
```

```
/* Footer */  
footer {  
    background: var(--dark-color);  
    color: white;  
    padding: 3rem 0 1rem;  
}
```

```
.footer-content {  
    display: grid;  
    grid-template-columns: repeat(auto-fit, minmax(200px, 1fr));  
    gap: 2rem;  
    margin-bottom: 2rem;  
}
```

```
.footer-column h3 {  
    font-size: 1.3rem;  
    margin-bottom: 1.5rem;  
    position: relative;  
    padding-bottom: 0.5rem;  
}
```

```
.footer-column h3::after {  
    content: " ";  
    position: absolute;  
    left: 0;
```

```
    bottom: 0;

    width: 50px;

    height: 2px;

    background: var(--primary-color);
}
```

```
.footer-column ul {
    list-style: none;
}
```

```
.footer-column ul li {
    margin-bottom: 0.8rem;
}
```

```
.footer-column ul li a {
    color: #bbb;
    text-decoration: none;
    transition: all 0.3s ease;
}
```

```
.footer-column ul li a:hover {
    color: white;
    padding-left: 5px;
}
```

```
.social-links {
    display: flex;
    gap: 1rem;
}
```

```
.social-links a {
```

```
display: inline-flex;
align-items: center;
justify-content: center;
width: 40px;
height: 40px;
background: rgba(255, 255, 255, 0.1);
border-radius: 50%;
color: white;
transition: all 0.3s ease;
}
```

```
.social-links a:hover {
  background: var(--primary-color);
  transform: translateY(-3px);
}
```

```
.copyright {
  text-align: center;
  padding-top: 2rem;
  border-top: 1px solid rgba(255, 255, 255, 0.1);
  color: #bbb;
  font-size: 0.9rem;
}
```

```
/* Responsive Styles */
@media (max-width: 768px) {
  .hero h1 {
    font-size: 2.5rem;
  }

  .nav-links {
```

```
display: none;
}
```

```
.form-row {
  flex-direction: column;
  gap: 0;
}
```

```
.about-content {
  grid-template-columns: 1fr;
}
```

```
.about-image {
  order: -1;
}
}
```

```
</style>
```

```
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0-beta3/css/all.min.css">
```

```
</head>
```

```
<body>
```

```
<!-- Header -->
```

```
<header>
```

```
<div class="container">
```

```
<nav>
```

```
<div class="logo">
```

```
<i class="fas fa-wind"></i>
```

```
<span>AirlQ</span>
```

```
</div>
```

```
<ul class="nav-links">
```

```
<li><a href="#home">Home</a></li>
```

```
        <li><a href="#predict">Predict</a></li>

        <li><a href="#features">Features</a></li>

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

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

    </ul>

    <a href="#predict" class="btn">Try Now</a>

</nav>

</div>

</header>
```

```
<!-- Hero Section -->

<section class="hero" id="home">

    <div class="hero-content">

        <h1>Predict Air Quality with Machine Learning</h1>

        <p>Our advanced algorithms analyze environmental data to provide accurate air quality
predictions and actionable insights for a healthier future.</p>

        <a href="#predict" class="btn btn-primary">Get Prediction</a>

    </div>

</section>
```

```
<!-- Prediction Section -->

<section class="prediction" id="predict">

    <div class="container">

        <div class="section-title">

            <h2>Air Quality Prediction</h2>

            <p>Enter environmental data to get real-time air quality predictions powered by our
machine learning models.</p>

        </div>

        <div class="prediction-form">

            <form id="airQualityForm">

                <div class="form-row">
```

```
<div class="form-group">

  <label for="temperature">Temperature (°C)</label>

  <input type="number" class="form-control" id="temperature" placeholder="e.g. 25"
step="0.1" required>

</div>
```

```
<div class="form-group">

  <label for="humidity">Humidity (%)</label>

  <input type="number" class="form-control" id="humidity" placeholder="e.g. 65"
step="0.1" required>

</div>

</div>
```

```
<div class="form-row">

  <div class="form-group">

    <label for="pm25">PM2.5 (µg/m³)</label>

    <input type="number" class="form-control" id="pm25" placeholder="e.g. 12.5"
step="0.1" required>

  </div>

  <div class="form-group">

    <label for="pm10">PM10 (µg/m³)</label>

    <input type="number" class="form-control" id="pm10" placeholder="e.g. 25"
step="0.1" required>

  </div>

</div>
```

```
<div class="form-row">

  <div class="form-group">

    <label for="no2">NO2 (ppb)</label>

    <input type="number" class="form-control" id="no2" placeholder="e.g. 15"
step="0.1" required>

  </div>

  <div class="form-group">

    <label for="co">CO (ppm)</label>
```



```
        <input type="number" class="form-control" id="co" placeholder="e.g. 1.2"
step="0.01" required>
```

```
    </div>
```

```
</div>
```

```
<div class="form-group">
```

```
    <label for="location">Location</label>
```

```
    <select class="form-control" id="location" required>
```

```
        <option value="">Select location</option>
```

```
        <option value="urban">Urban</option>
```

```
        <option value="suburban">Suburban</option>
```

```
        <option value="rural">Rural</option>
```

```
        <option value="industrial">Industrial</option>
```

```
    </select>
```

```
</div>
```

```
    <button type="submit" class="btn-submit">Predict Air Quality</button>
```

```
</form>
```

```
    <div class="result" id="predictionResult"></div>
```

```
</div>
```

```
</div>
```

```
</section>
```

```
<!-- Features Section -->
```

```
<section class="features" id="features">
```

```
    <div class="container">
```

```
        <div class="section-title">
```

```
            <h2>Our Advanced Features</h2>
```

```
            <p>Discover how our machine learning platform provides comprehensive air quality
insights</p>
```

```
        </div>
```

```
<div class="features-grid">

  <div class="feature-card">

    <div class="feature-icon">

      <i class="fas fa-brain"></i>

    </div>

    <h3>AI-Powered Predictions</h3>

    <p>Our deep learning models analyze complex patterns in environmental data to forecast air quality with 95% accuracy.</p>

  </div>
```

```


  <div class="feature-card">

    <div class="feature-icon">

      <i class="fas fa-chart-line"></i>

    </div>

    <h3>Real-time Analytics</h3>

    <p>Get instant insights with our real-time processing of air quality data from multiple sources.</p>

  </div>
```

```


  <div class="feature-card">

    <div class="feature-icon">

      <i class="fas fa-map-marked-alt"></i>

    </div>

    <h3>Geospatial Analysis</h3>

    <p>Visualize air quality patterns across different locations with our interactive maps and heatmaps.</p>

  </div>
```

```


  <div class="feature-card">

    <div class="feature-icon">

      <i class="fas fa-bell"></i>
```

```

    </div>

    <h3>Custom Alerts</h3>

    <p>Receive notifications when air quality reaches unhealthy levels in your area of
interest.</p>

</div>

<div class="feature-card">

    <div class="feature-icon">

        <i class="fas fa-history"></i>

    </div>

    <h3>Historical Trends</h3>

    <p>Analyze long-term air quality trends and seasonal patterns with our historical data
tools.</p>

</div>

<div class="feature-card">

    <div class="feature-icon">

        <i class="fas fa-users"></i>

    </div>

    <h3>Community Data</h3>

    <p>Contribute to and benefit from our crowdsourced air quality monitoring network.</p>

</div>

</div>

</div>

</section>

<!-- About Section -->

<section class="about" id="about">

    <div class="container">

        <div class="about-content">

            <div class="about-text">

                <h2>About Our Technology</h2>

```

<p>AirIQ leverages state-of-the-art machine learning algorithms to predict air quality levels with unprecedented accuracy. Our models are trained on millions of data points collected from environmental sensors worldwide.</p>

<p>We combine traditional statistical methods with deep neural networks to capture both linear relationships and complex non-linear patterns in atmospheric data.</p>

<p>Our team of data scientists and environmental experts continuously improves the models to adapt to changing climate patterns and new pollution sources.</p>

</div>

<div class="about-image">

</div>

</div>

</div>

</section>

<!-- Footer -->

<footer id="contact">

<div class="container">

<div class="footer-content">

<div class="footer-column">

<h3>AirIQ</h3>

<p>Using advanced machine learning to predict and improve air quality for healthier communities.</p>

<div class="social-links">

<i class="fab fa-twitter"></i>

<i class="fab fa-facebook-f"></i>

<i class="fab fa-linkedin-in"></i>

<i class="fab fa-instagram"></i>

</div>

</div>

<div class="footer-column">

```
<h3>Quick Links</h3>

<ul>

  <li><a href="#home">Home</a></li>

  <li><a href="#predict">Predict</a></li>

  <li><a href="#features">Features</a></li>

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

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

</ul>

</div>
```

```
<div class="footer-column">
```

```
<div class="feature-card">

  <div class="feature-icon">

    <i class="fas fa-history"></i>

  </div>

  <h3>Historical Trends</h3>

  <p>Analyze historical air quality data to identify long-term trends and improve future predictions.</p>

</div>

<script>

document.getElementById('airQualityForm').addEventListener('submit', function (e) {

  e.preventDefault();

  const pm25 = parseFloat(document.getElementById('pm25').value);

  const resultBox = document.getElementById('predictionResult');

  let message = "";

  let className = "";

  if (pm25 <= 12) {

    message = 'Air Quality: Good';
```

```
        className = 'good';
    } else if (pm25 <= 35.4) {
        message = 'Air Quality: Moderate';
        className = 'moderate';
    } else {
        message = 'Air Quality: Unhealthy';
        className = 'unhealthy';
    }
}
```

```
resultBox.textContent = message;
resultBox.className = result ${className};
resultBox.style.display = 'block';
});
```

</script>

<section class="contact" id="contact" style="padding: 4rem 0; background-color: #f5f7fa;">

<div class="container">

<div class="section-title">

<h2>Contact Us</h2>

<p>Have questions or suggestions? We'd love to hear from you.</p>

</div>

<form style="max-width: 600px; margin: auto;">

<div class="form-group">

<label for="name">Name</label>

<input type="text" id="name" class="form-control" required>

</div>

<div class="form-group">

<label for="email">Email</label>

<input type="email" id="email" class="form-control" required>

</div>

<div class="form-group">

<label for="message">Message</label>

```
    <textarea id="message" class="form-control" rows="5" required></textarea>
  </div>

  <button type="submit" class="btn-submit">Send Message</button>
</form>
</div>
</section>
```