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<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Piano for Beginners</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 0;
      padding: 0;
      background-color: #f8f8f8;
      text-align: center;
    }
    header {
      background-color: #4CAF50;
      color: white;
      padding: 20px;
      font-size: 24px;
    }
    .content {
      padding: 20px;
    }
    .lesson, .exercise, .test, .song {
      background: white;
      padding: 15px;
      margin: 10px auto;
      width: 80%;
      max-width: 600px;
      border-radius: 5px;
      box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.1);
    }
    footer {
      margin-top: 20px;
      padding: 10px;
      background-color: #4CAF50;
      color: white;
    }
  </style>
</html>
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</style>
</head>
<body>
  <header>
    Learn to Play Piano
  </header>
  <div class="content">
    <div class="lesson">
      <h2>Lesson 1: Introduction to the Piano</h2>
      <p>Learn the layout of the keyboard and the names of the keys.</p>
    </div>
    <div class="exercise">
      <h2>Exercise 1: Identify the Keys</h2>
      <p>Try to find and name all the white and black keys on a piano or keyboard.</p>
    </div>
    <div class="test">
      <h2>Test 1: Key Recognition</h2>
      <p>Click the correct key when prompted.</p>
      <button onclick="alert('Correct!')">C</button>
      <button onclick="alert('Try again!')">D</button>
    </div>
    <div class="lesson">
      <h2>Lesson 2: Basic Finger Exercises</h2>
      <p>Start with simple exercises to improve finger dexterity.</p>
    </div>
    <div class="exercise">
      <h2>Exercise 2: Five-Finger Scale</h2>
      <p>Practice playing a C major five-finger scale with your right and left hands.</p>
    </div>
    <div class="test">
      <h2>Test 2: Play a Scale</h2>
      <p>The website will listen and check if you are playing the correct scale.</p>
      <button onclick="setupAudioRecognition()">Start Listening</button>
    </div>
    <div class="lesson">
      <h2>Lesson 3: Playing Simple Songs</h2>
      <p>Learn to play "Twinkle Twinkle Little Star" and other simple melodies.</p>
    </div>
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<div class="exercise">
  <h2>Exercise 3: Play a Simple Melody</h2>
  <p>Use your right hand to play "Mary Had a Little Lamb" slowly and steadily.</p>
</div>
<div class="song">
  <h2>Song: Twinkle Twinkle Little Star</h2>
  <p>Follow the notes and try to play along!</p>
</div>
</div>
<footer>
  &copy; 2025 LearnPiano. All rights reserved.
</footer>

<script>
  async function setupAudioRecognition() {
    if (!navigator.mediaDevices || !navigator.mediaDevices.getUserMedia) {
      console.error('Microphone access is not supported in this environment.');
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checking browser settings.');

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      alert('Your browser does not support microphone access. Try using Google Chrome or
    return;
  }
  try {
    const permissionStatus = await navigator.permissions.query({ name: 'microphone' });
    if (permissionStatus.state === 'denied') {
      alert('Microphone access has been blocked. Please enable it in your browser settings.');
```

return;

```
    }

    const stream = await navigator.mediaDevices.getUserMedia({ audio: true });
    const audioContext = new (window.AudioContext || window.webkitAudioContext)();
    const microphone = audioContext.createMediaStreamSource(stream);
    const analyser = audioContext.createAnalyser();
    analyser.fftSize = 2048;
    microphone.connect(analyser);

    const bufferLength = analyser.frequencyBinCount;
    const dataArray = new Uint8Array(bufferLength);
```

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function detectNotes() {
  analyser.getByteFrequencyData(dataArray);
  console.log('Captured audio frequencies:', dataArray);
  requestAnimationFrame(detectNotes);
}
detectNotes();
} catch (error) {
  console.error('Error accessing microphone:', error);
  if (error.name === 'NotAllowedError') {
    alert('Microphone access was denied. Please check your browser settings and allow
microphone access.');
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  }
}

document.addEventListener('DOMContentLoaded', () => {
  const micPermissionButton = document.createElement('button');
  micPermissionButton.innerText = 'Enable Microphone';
  micPermissionButton.onclick = setupAudioRecognition;
  document.body.appendChild(micPermissionButton);
});
</script>
</body>
</html>
```