cvss-scores.html

```
{% extends "base.html" %}
{% block content %}
<div style="max-width:1400px;margin:0 auto 32px auto;padding-top:20px;">
<h1 style="color:#63a4ff;">Understanding CVSS Scores</h1>
<div style="color:#e2e8f0; font-size:1.07em; margin-bottom:28px; margin-
top:9px; line-height:1.66;">
CVSS scores help you measure, compare, and prioritize vulnerabilities. Use the
range and severity to decide: Patch now, or monitor?
</div>

<h2 style="color:#cdd7ff;">Score Breakdown</h2>
<table id="cvss-score-table" style="color:#e3e8f0;background:linear-
gradient(135deg, #232b45 0%, #1e2640 100%);border-
radius:12px;width:75%;margin-bottom:18px; border-collapse:collapse;border: 1px
solid rgba(99, 164, 255, 0.1);box-shadow: 0 6px 24px rgba(0,0,0,0.3);">
<tr style="background:#232b45;">
<th style="text-align:center;padding:12px 8px;border-radius:12px 0 0 0;">Score
Range</th>
<th style="text-align:center;padding:12px 8px;">Severity</th>
<th style="text-align:center;padding:12px 8px;">What this means</th>
<th style="text-align:center;padding:12px 8px;border-radius:0 12px 0
0;">Examples</th>
</tr>
<tr class="cvss-score-row" data-severity="CRITICAL" tabindex="0"
style="background:rgba(38, 49, 89, 0.4);cursor:pointer;">
<td style="text-align:center;padding:10px 8px;">9.0 – 10.0</td>
<td style="text-align:center;padding:10px 8px;">
<span class="cvss-badge" style="background:#f55855;">Critical</span>
</td>
<td class="cvss-meaning-cell" style="text-align:center;padding:10px
8px;">Immediate action needed.</td>
<td style="text-align:center;padding:10px 8px;"><a href="{{
url_for('vulnerabilities', severity='CRITICAL') }}" class="cvss-link-cve"
style="color:#f55855;text-decoration:underline;">Show Critical CVEs</a></td>
</tr>
<tr class="cvss-score-row" data-severity="HIGH" tabindex="0"
style="background:rgba(38, 49, 89, 0.4);cursor:pointer;">
<td style="text-align:center;padding:10px 8px;">7.0 – 8.9</td>
<td style="text-align:center;padding:10px 8px;">
<span class="cvss-badge" style="background:#f8a541;">High</span>
</td>
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<td class="cvss-meaning-cell" style="text-align:center;padding:10px 8px;">Patch as soon as possible.</td>
<td style="text-align:center;padding:10px 8px;"><a href="{{ url_for('vulnerabilities', severity='HIGH') }}" class="cvss-link-cve" style="color:#f8a541;text-decoration:underline;">Show High CVEs</a></td>
</tr>
<tr class="cvss-score-row" data-severity="MEDIUM" tabindex="0" style="background:rgba(38, 49, 89, 0.4);cursor:pointer;">
<td style="text-align:center;padding:10px 8px;">4.0 - 6.9</td>
<td style="text-align:center;padding:10px 8px;">
<span class="cvss-badge" style="background:#3b8ded;">Medium</span>
</td>
<td class="cvss-meaning-cell" style="text-align:center;padding:10px 8px;">Review and patch soon.</td>
<td style="text-align:center;padding:10px 8px;"><a href="{{ url_for('vulnerabilities', severity='MEDIUM') }}" class="cvss-link-cve" style="color:#3b8ded;text-decoration:underline;">Show Medium CVEs</a></td>
</tr>
<tr class="cvss-score-row" data-severity="LOW" tabindex="0" style="background:rgba(38, 49, 89, 0.4);cursor:pointer;">
<td style="text-align:center;padding:10px 8px;border-radius:0 0 0 12px;">0.1 - 3.9</td>
<td style="text-align:center;padding:10px 8px;">
<span class="cvss-badge" style="background:#42d392;">Low</span>
</td>
<td class="cvss-meaning-cell" style="text-align:center;padding:10px 8px;">Monitor for now.</td>
<td style="text-align:center;padding:10px 8px;border-radius:0 0 12px 0;"><a href="{{ url_for('vulnerabilities', severity='LOW') }}" class="cvss-link-cve" style="color:#42d392;text-decoration:underline;">Show Low CVEs</a></td>
</tr>
</table>
<div id="cvss-breakdown-tip" style="display:none;position:absolute;background:#101828;color:#eaf4fb;border-radius:8px;padding:13px 15px;font-size:1.01em;min-width:210px;max-width:350px;box-shadow:0 3px 18px #0008;z-index:200;pointer-events:none;">
</div>
<div style="color:#a9adc1;font-size:1em;margin-bottom:18px;"><b>Tip:</b> When you see a <span style="color:#f55855;">Critical</span> or <span style="color:#f8a541;">High</span> CVSS, patch as soon as possible! <span style="color:#3b8ded;">Medium</span> and <span style="color:#42d392;">Low</span> still deserve attention but are less urgent.
</div>

<!-- ==== BEGIN IMPROVED CVSS CALCULATOR ==== -->
<h2 style="color:#cdd7ff;">Try the CVSS Calculator <span style="font-
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size:0.82em;color:#a9adc1;">(interactive demo)</span></h2>
<div id="cvss-calc-wrapper"
     style="background: linear-gradient(135deg,#232b45 0%, #1e2640 100%);
            padding: 18px;
            border-radius: 12px;
            margin-bottom: 28px;
            display: grid;
            grid-template-columns: 1fr 1fr 0.5fr;
            gap: 20px;
            align-items: start;
            box-shadow: 0 6px 24px rgba(0,0,0,0.3);
            border: 1px solid rgba(99, 164, 255, 0.1);
            width: 80%;">

  <!-- COLUMN 1: Form Controls -->
  <div style="display: flex; flex-direction: column; gap: 8px;">
    <form id="cvss-calc-form" autocomplete="off"
      style="display: flex; flex-direction: column; gap: 8px;">

    <div class="cvss-input-group">
      <label class="cvss-label">Attack Vector <span class="cvss-info"
title="How far does the attacker need to be?">?</span></label>
        <select name="AV" class="cvss-select">
          <option value="N">🌐 Network</option>
          <option value="A">📡 Adjacent</option>
          <option value="L">💻 Local</option>
          <option value="P">🔌 Physical</option>
        </select>
      </div>

      <div class="cvss-input-group">
        <label class="cvss-label">Attack Complexity <span class="cvss-info"
title="Is attack easy or requires trick?">?</span></label>
        <select name="AC" class="cvss-select">
          <option value="L">⚡ Low</option>
          <option value="H">🧩 High</option>
        </select>
      </div>

      <div class="cvss-input-group">
        <label class="cvss-label">Privileges Required <span class="cvss-info"
title="Do they need a login?">?</span></label>
        <select name="PR" class="cvss-select">
          <option value="N">🚫 None</option>
          <option value="L">👤 Low</option>
          <option value="H">👑 High</option>
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        </select>
      </div>

      <div class="cvss-input-group">
        <label class="cvss-label">User Interaction <span class="cvss-info"
title="Must a user click something?">?</span></label>
        <select name="UI" class="cvss-select">
          <option value="N">😶 None</option>
          <option value="R">✋ Required</option>
        </select>
      </div>

      <div class="cvss-input-group">
        <label class="cvss-label">Impact <span class="cvss-info" title="What
kind of damage?">?</span></label>
        <select name="Impact" class="cvss-select">
          <option value="H">💥 High (e.g. Code Exec)</option>
          <option value="L">📋 Low (e.g. Info Leak)</option>
        </select>
      </div>

      <div class="cvss-input-group">
        <label class="cvss-label">Scope <span class="cvss-info" title="Does
compromise spread?">?</span></label>
        <select name="S" class="cvss-select">
          <option value="U">📍 Unchanged</option>
          <option value="C">🔄 Changed</option>
        </select>
      </div>

      <button type="submit" class="cvss-calculate-btn">
        <span>⚡ Calculate Score</span>
      </button>
    </form>
  </div>

  <!-- COLUMN 2: Score Display -->
  <div style="display: flex; flex-direction: column; align-items: center;
justify-content: center; gap: 8px; padding: 5px;">
    <div id="cvss-calc-badge" aria-live="polite" style="margin-bottom: 2px;">
</div>
    <div style="position: relative; display: flex; align-items: center;
justify-content: center;">
      <canvas id="cvssScoreGauge" width="150" height="100" aria-label="CVSS
Score Gauge" style="background: none;"></canvas>
    </div>
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      <div id="cvssGaugeLabel" style="text-align: center; margin-top: -3px;
color: #a9adc1; font-size: 0.95em;"></div>
  </div>


  <!-- COLUMN 3: Preset Scenarios -->
  <div style="display: flex; flex-direction: column; gap: 8px; padding: 2px;
width: 300px;">
    <div style="font-weight: 700; color: #63a4ff; margin-bottom: 6px; font-
size: 1em;">
      🎯 Common Scenarios
    </div>
    <button class="cvss-preset-btn" data-preset="rce">
      <span class="preset-icon">🌐</span>
      <div class="preset-content">
        <div class="preset-title">Remote Code Execution</div>
        <div class="preset-desc">Network-based, no auth needed</div>
      </div>
    </button>
    <button class="cvss-preset-btn" data-preset="privesc">
      <span class="preset-icon">🔒</span>
      <div class="preset-content">
        <div class="preset-title">Privilege Escalation</div>
        <div class="preset-desc">Local access, scope change</div>
      </div>
    </button>
    <button class="cvss-preset-btn" data-preset="infoleak">
      <span class="preset-icon">🔍</span>
      <div class="preset-content">
        <div class="preset-title">Information Disclosure</div>
        <div class="preset-desc">Data leak, limited impact</div>
      </div>
    </button>
  </div>
</div>
<!-- ==== END CVSS CALCULATOR BLOCK ==== -->

<script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
<script>
document.querySelectorAll('.cvss-info').forEach(function(el){
el.setAttribute('tabindex','0');
el.style.display = 'inline-block';
el.style.transition = 'color 0.18s';
el.style.color = '#63a4ff';
el.style.borderRadius = '50%';
el.style.fontWeight = '900';
el.addEventListener('mouseover',function(){el.style.color='#fca311'});
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    el.addEventListener('mouseout',function(){el.style.color='#63a4ff'});
});

let gaugeChart = null;
const scoreAdvice = {
'CRITICAL': { msg: "Critical severity. Immediate action required — patch now
or take system offline if not fixable.", color: "#f55855" },
'HIGH':     { msg: "High severity. Patch quickly (ideally within days to a
week) to avoid active exploitation.", color: "#f8a541" },
'MEDIUM':   { msg: "Medium severity. Review and patch soon, especially if
combined with other risks.", color: "#3b8ded" },
'LOW':      { msg: "Low severity. Monitor and patch in next cycle, unless
actively targeted.", color: "#42d392" }
};

function drawScoreGauge(score, label, severity) {
const ctx = document.getElementById("cvssScoreGauge").getContext("2d");
if (gaugeChart) gaugeChart.destroy();

// Create gradient for the gauge
const gradient = ctx.createLinearGradient(0, 0, 170, 0);
gradient.addColorStop(0, scoreAdvice[severity].color);
gradient.addColorStop(1, scoreAdvice[severity].color + '80');

gaugeChart = new Chart(ctx, {
    type: 'doughnut',
    data: {
        datasets: [{
            data: [score, 10 - score],
            backgroundColor: [gradient, "rgba(35, 43, 69, 0.3)"],
            borderWidth: 0,
            cutout: "75%"
        }]
    },
    options: {
        circumference: 180,
        rotation: 270,
        plugins: {
            legend: { display: false },
            tooltip: { enabled: false }
        },
        animation: {
            animateRotate: true,
            duration: 800
        }
    }
```

```javascript
});

document.getElementById("cvssGaugeLabel").innerHTML =
    `<div style="font-size: 2em; font-weight: 800; color:
${scoreAdvice[severity].color}; text-shadow: 0 2px 4px
rgba(0,0,0,0.3);">${score.toFixed(1)}</div>
    <div style="font-weight: 600; color: ${scoreAdvice[severity].color}; font-
size: 1em; margin-top: -3px;">${label}</div>`;
}

function updateCalcBadge(score, severity) {
    const badge = document.getElementById("cvss-calc-badge");
    if (!severity) { badge.style.display = "none"; return; }

    const icons = { CRITICAL: '🚨', HIGH: '⚠️', MEDIUM: '❗', LOW: '🔵' };

    badge.innerHTML = `<div style="background: linear-gradient(135deg,
${scoreAdvice[severity].color}, ${scoreAdvice[severity].color}dd);
                                    color: white;
                                    padding: 6px 14px;
                                    border-radius: 16px;
                                    font-weight: 700;
                                    font-size: 0.95em;
                                    display: inline-flex;
                                    align-items: center;
                                    gap: 6px;
                                    box-shadow: 0 3px 12px rgba(0,0,0,0.2);
                                    border: 1px solid rgba(255,255,255,0.2);">
    ${icons[severity]} ${score.toFixed(1)} — ${severity.charAt(0) +
severity.slice(1).toLowerCase()}
    </div>`;
    badge.style.display = '';
}

const cvssCalcForm = document.getElementById('cvss-calc-form');
cvssCalcForm.addEventListener('submit', function(e){
e.preventDefault();
function s(v, mapping){return mapping[v]||0;}
const AV = s(this.AV.value, {N:0.85,A:0.62,L:0.55,P:0.2});
const AC = s(this.AC.value, {L:0.77,H:0.44});
const PR = s(this.PR.value, {N:0.85,L:0.62,H:0.27});
const UI = s(this.UI.value, {N:0.85,R:0.62});
const S = this.S.value;
const ImpactConf = this.Impact.value === 'H' ? 0.56 : 0.22;
const ImpactInteg = this.Impact.value === 'H' ? 0.56 : 0.22;
const ImpactAvail = this.Impact.value === 'H' ? 0.56 : 0.22;
```

```javascript
let impact = 6.42 * ImpactConf * ImpactInteg * ImpactAvail;
if (S === 'C') impact = 7.52 * (ImpactConf - 0.029) - 3.25 *
Math.pow(ImpactConf - 0.02, 15);
let exploitability = 8.22 * AV * AC * PR * UI;
let baseScore = 0;
if (impact <= 0) { baseScore = 0; }
else { if (S === 'U') baseScore = Math.min(impact + exploitability, 10); else
baseScore = Math.min(1.08 * (impact + exploitability), 10); }
baseScore = Math.round(baseScore * 10) / 10;
let sev = "LOW";
if(baseScore>=9)sev="CRITICAL"; else if(baseScore>=7)sev="HIGH"; else
if(baseScore>=4)sev="MEDIUM";
updateCalcBadge(baseScore, sev);
drawScoreGauge(baseScore, sev.charAt(0)+sev.slice(1).toLowerCase(), sev);
});
cvssCalcForm.dispatchEvent(new Event('submit'));

// Preset buttons
document.querySelectorAll('.cvss-preset-btn').forEach(function(btn){
btn.onclick = function(){
if(btn.dataset.preset==="rce"){
cvssCalcForm.AV.value="N";
cvssCalcForm.AC.value="L";
cvssCalcForm.PR.value="N";
cvssCalcForm.UI.value="N";
cvssCalcForm.Impact.value="H";
cvssCalcForm.S.value="U";
} else if(btn.dataset.preset==="privesc") {
cvssCalcForm.AV.value="L";
cvssCalcForm.AC.value="L";
cvssCalcForm.PR.value="L";
cvssCalcForm.UI.value="N";
cvssCalcForm.Impact.value="H";
cvssCalcForm.S.value="C";
} else if(btn.dataset.preset==="infoleak") {
cvssCalcForm.AV.value="N";
cvssCalcForm.AC.value="L";
cvssCalcForm.PR.value="N";
cvssCalcForm.UI.value="N";
cvssCalcForm.Impact.value="L";
cvssCalcForm.S.value="U";
}
cvssCalcForm.dispatchEvent(new Event('submit'));
};
});
</script>
```

```
<style>
/* Existing styles */
.cvss-badge { color:#fff; border-radius:12px; padding:3px 13px; font-
size:0.93em; font-weight:600; display:inline-block;}
.cvss-score-row:focus, .cvss-score-row:active { outline:none;
background:rgba(35, 43, 69, 0.8) !important; }
.cvss-info { cursor:help !important; border-bottom:1px dotted #63a4ff; margin-
left:2px; font-size:0.97em; }

/* New improved styles for calculator */
.cvss-input-group {
  display: flex;
  flex-direction: column;
  gap: 3px;
}

.cvss-label {
  font-weight: 600;
  color: #cdd7ff;
  font-size: 0.9em;
  display: flex;
  align-items: center;
  gap: 4px;
}

.cvss-select {
  background: #232b45;
  border: 1px solid rgba(99, 164, 255, 0.2);
  border-radius: 6px;
  padding: 6px 10px;
  color: #e3e8f0;
  font-size: 0.9em;
  cursor: pointer;
  transition: all 0.2s ease;
  outline: none;
}

.cvss-select:hover {
  border-color: rgba(99, 164, 255, 0.4);
  background: #232b45;
}

.cvss-select:focus {
  border-color: #63a4ff;
  box-shadow: 0 0 0 2px rgba(99, 164, 255, 0.2);
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}

/* Fix dropdown options visibility */
.cvss-select option {
  background: #1e2640;
  color: #e3e8f0;
  padding: 6px;
}

.cvss-calculate-btn {
  background: linear-gradient(135deg, #63a4ff 0%, #4d8ef7 100%);
  border: none;
  border-radius: 8px;
  padding: 8px 16px;
  color: white;
  font-weight: 700;
  font-size: 0.95em;
  cursor: pointer;
  transition: all 0.2s ease;
  margin-top: 4px;
  box-shadow: 0 3px 12px rgba(99, 164, 255, 0.3);
}

.cvss-calculate-btn:hover {
  transform: translateY(-1px);
  box-shadow: 0 4px 16px rgba(99, 164, 255, 0.4);
}

.cvss-calculate-btn:active {
  transform: translateY(0);
}

.cvss-preset-btn {
  background: #232b45;
  border: 1px solid rgba(99, 164, 255, 0.15);
  border-radius: 8px;
  padding: 8px 12px;
  cursor: pointer;
  transition: all 0.25s ease;
  display: flex;
  align-items: center;
  gap: 10px;
  text-align: left;
  width: 100%;
}
```

```css
.cvss-preset-btn:hover {
  border-color: rgba(99, 164, 255, 0.3);
  background: #232b45;
  transform: translateY(-1px);
  box-shadow: 0 3px 12px rgba(0, 0, 0, 0.2);
}

.preset-icon {
  font-size: 1.2em;
  display: flex;
  align-items: center;
  justify-content: center;
  min-width: 20px;
}

.preset-content {
  display: flex;
  flex-direction: column;
  gap: 1px;
}

.preset-title {
  color: #63a4ff;
  font-weight: 600;
  font-size: 0.9em;
  line-height: 1.2;
}

.preset-desc {
  color: #a9adc1;
  font-size: 0.75em;
  line-height: 1.2;
}

/* Responsive adjustments */
@media (max-width: 1024px) {
  #cvss-calc-wrapper {
    grid-template-columns: 1fr;
    gap: 20px;
    text-align: center;
  }
}
</style>

<div style="text-align:center; margin:2.5em 0 1em 0;">
  <a href="{{ url_for('index') }}" style="color:#63a4ff; padding:0.8em 2em;
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border-radius:6px; font-weight:600; text-decoration:none;">
    ← Back to Dashboard
  </a>
</div>

{% endblock %}
```