CODING:

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<!doctype html>
<html lang="en">
<head>
 <meta charset="utf-8" />
 <meta name="viewport" content="width=device-width, initial-scale=1" />
 <title>Login — Example Authentication</title>
 <style>
  :root{
   --bg:#0f1724;
   --card:#0b1220;
   --accent:#6ee7b7;
   --muted:#9aa4b2;
   --danger:#ff6b6b;
   --glass: rgba(255,255,255,0.04);
   font-family: Inter, ui-sans-serif, system-ui, -apple-system, "Segoe UI", Roboto, "Helvetica Neue",
Arial:
  *{box-sizing:border-box}
  html,body {height:100%}
  body {
   margin:0;
   background: radial-gradient(1200px 600px at 10% 10%, rgba(110,231,183,0.06), transparent),
          radial-gradient(900px 500px at 90% 90%, rgba(99,102,241,0.04), transparent),
           var(--bg);
   color:#e6eef6;
   -webkit-font-smoothing:antialiased;
   -moz-osx-font-smoothing:grayscale;
   display:flex;
   align-items:center;
   justify-content:center;
   padding:24px;
  .card {
   width:100%;
   max-width:420px;
   background:linear-gradient(180deg, rgba(255,255,255,0.02), rgba(255,255,255,0.01));
   border-radius:12px;
   padding:28px;
   box-shadow: 0 8px 30px rgba(2,6,23,0.7);
   border:1px solid rgba(255,255,255,0.03);
  h1 {margin:0 0 6px;font-size:20px}
  p.lead {margin:0 0 20px;color:var(--muted);font-size:13px}
  label {display:block;font-size:13px;margin-bottom:6px;color:#cbd6e3}
  .input{
   width:100%;
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padding:12px 12px;
   border-radius:8px;
   background:var(--glass);
   border:1px solid rgba(255,255,255,0.03);
   color:inherit;
   outline:none;
   font-size:14px;
  input:focus {box-shadow:0 0 0 4px rgba(110,231,183,0.06);border-color:rgba(110,231,183,0.18)}
  .row{display:flex;gap:10px}
  .field{margin-bottom:14px}
  .actions {display:flex;align-items:center;justify-content:space-between;margin-top:6px}
  .btn {
   appearance:none;
   border:0;
   padding:10px 14px;
   border-radius:8px;
   background:linear-gradient(90deg,var(--accent), #60a5fa);
   color:#042027;
   font-weight:600;
   cursor:pointer;
  .btn:disabled{opacity:0.6;cursor:not-allowed}
  .link {background:none;border:0;color:var(--muted);cursor:pointer;font-size:13px}
  .small{font-size:13px;color:var(--muted)}
  .error{color:var(--danger);font-size:13px;margin-top:6px}
  .success {color:#8ef0a8;font-size:13px;margin-top:6px}
  .pw-wrap {position:relative}
  .pw-toggle {
   position:absolute;right:8px;top:8px;padding:6px;border-
radius:6px;border:0;background:none;color:var(--muted);cursor:pointer;font-size:13px
  .footer{margin-top:18px;text-align:center;color:var(--muted);font-size:13px}
  @media (max-width:480px) {.card {padding:18px}}
 </style>
</head>
<body>
 <main class="card" role="main" aria-labelledby="login-title">
  <h1 id="login-title">Welcome back</h1>
  Sign in to continue to <strong>Example App</strong>.
  <form id="loginForm" autocomplete="on" novalidate>
   <div class="field">
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<label for="email">Email</label>
    <input id="email" name="email" type="email" inputmode="email" class="input"
placeholder="you@example.com" required aria-required="true">
   </div>
   <div class="field pw-wrap">
    <label for="password">Password</label>
    <input id="password" name="password" type="password" class="input" placeholder="Enter your
password" required aria-required="true" minlength="6">
    <button type="button" id="togglePw" class="pw-toggle" aria-label="Show
password">Show</button>
   </div>
   <div class="field row" style="align-items:center;justify-content:space-between;margin-bottom:2px">
     <label style="display:flex;align-items:center;gap:8px">
      <input type="checkbox" id="remember" name="remember"> <span class="small"> Remember
me</span>
    </label>
    <button type="button" class="link" id="forgotBtn">Forgot?</button>
   </div>
   <div class="field">
    <button class="btn" id="submitBtn" type="submit">Sign in</button>
    <div id="status" role="status" aria-live="polite"></div>
   </div>
   <div class="field" style="text-align:center;margin-top:8px">
    <div class="small">Or sign in with</div>
    <div class="row" style="margin-top:8px">
     <button type="button" class="btn" style="flex:1">Google</button>
      <button type="button" class="btn" style="flex:1;opacity:0.9">GitHub</button>
    </div>
   </div>
  </form>
  <div class="footer">Don't have an account? <button class="link" id="signupBtn">Create
one</button></div>
 </main>
 <script>
  // ====== Simple front-end auth demo =
  // This file demonstrates an accessible, responsive login form with client-side validation
  // and a fetch() call to a backend endpoint (/api/auth/login). The backend should perform
  // real authentication (password hashing, rate-limits, issuing JWT or setting secure HttpOnly cookie).
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  // IMPORTANT security notes (backend responsibilities):
  // - Store passwords using Argon2 / bcrypt with a strong work factor.
  // - Use HTTPS only and set cookies with Secure; HttpOnly; SameSite=Strict (or Lax where
appropriate).
  // - Implement rate-limiting and account lockouts for repeated failed attempts.
  // - For SPAs, prefer setting refresh token in an HttpOnly cookie and returning short-lived access token.
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const form = document.getElementById('loginForm');
  const email = document.getElementById('email');
  const pw = document.getElementById('password');
  const toggle = document.getElementById('togglePw');
  const status = document.getElementById('status');
  const submitBtn = document.getElementById('submitBtn');
  // Toggle password visibility (accessible)
  toggle.addEventListener('click', () => {
   const isPw = pw.type === 'password';
   pw.type = isPw ? 'text' : 'password';
   toggle.textContent = isPw ? 'Hide' : 'Show';
   toggle.setAttribute('aria-pressed', String(isPw));
  1);
  // Basic client-side validation helper
  function validate() {
   status.textContent = ":
   if (!email.value) { status.textContent = 'Please enter your email.'; status.className='error'; return false
   if (!pw.value) { status.textContent = 'Please enter your password.'; status.className='error'; return
false }
   if (pw.value.length < 6) { status.textContent = 'Password must be at least 6 characters.';
status.className='error'; return false }
   return true;
  // On submit -> send credentials to backend
  form.addEventListener('submit', async (e) => {
   e.preventDefault();
   if (!validate()) return;
   submitBtn.disabled = true;
   const originalText = submitBtn.textContent;
   submitBtn.textContent = 'Signing in...';
   status.textContent = ";
     // Example payload. In production only send what is required.
     const payload = {
      email: email.value.trim().toLowerCase(),
      password: pw.value,
      remember: document.getElementById('remember').checked
     };
     // Use fetch to call your backend authentication endpoint
     const res = await fetch('/api/auth/login', {
      method: 'POST',
      headers: { 'Content-Type': 'application/json' },
      credentials: 'include', // include cookies if your backend sets HttpOnly cookie
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body: JSON.stringify(payload)
     });
     const data = await res.json().catch(()=>({}}));
     if (!res.ok) {
      // Backend should return useful error codes/messages like 401, 429, etc.
      status.className = 'error';
      status.textContent = data?.message || ('Login failed (' + res.status + ')');
      submitBtn.disabled = false;
      submitBtn.textContent = originalText;
      return;
     // On success: backend may set HttpOnly refresh cookie and return a short-lived access token
     // For SPA: store access token in memory (not localStorage) and use it for API calls; refresh via
cookie.
     status.className = 'success';
     status.textContent = 'Signed in successfully - redirecting...';
     // Optionally, backend returns { redirect: '/dashboard' }
     const redirectTo = data?.redirect | '/dashboard';
     setTimeout(()=>{ window.location.href = redirectTo }, 700);
    } catch (err) {
     console.error(err);
     status.className = 'error';
     status.textContent = 'Network error. Please try again.';
     submitBtn.disabled = false;
     submitBtn.textContent = originalText;
  });
  // Small handlers for demo buttons (replace with real flows)
  document.getElementById('forgotBtn').addEventListener('click', (;)=>{ alert('Open forgot-password
flow (backend)') });
  document.getElementById('signupBtn').addEventListener('click', ()=>{ window.location.href =
'/signup' });
  // Accessibility: focus first field on load
  window.addEventListener('load', ()=> email.focus());
 </script>
</body>
</html>
```