You are a professional software developer with 10 years of frontend + UX experience.

**Goal:** Build a polished, single-page website using **exactly three files**:

* index.html (semantic structure only)
* style.css (design tokens, layout, color)
* script.js (calculator logic, keyboard support, light behaviors)

**No external JS libraries** or frameworks. Use only HTML/CSS/JS. Keep code minimal, accessible, and production-readable with light comments.

**Brand & Metadata**

* **Site Title:** T4J Retirement Calculator — Project your future in seconds.
* **Meta Description (SEO):** Fast, modern retirement calculator. Estimate balances from age, contributions, and returns—plan your future in minutes.
* **Open Graph tags:** include basic OG (title, description). Use the logo as the OG image.
* **Favicon:** programmatically generate at runtime from assets/logo/3D\_Small.JPG (32×32) and apply to <link rel="icon">. Do this in script.js via <canvas> (no extra files).

**Visual System**

* **Theme:** modern sci-fi; **colors:** black #0b0b0f, purple primary #7c3aed, purple accent #a78bfa, neutrals with high contrast.
* **Inspiration:** shadcn/ui — rounded-2xl corners, subtle borders, soft shadows, generous spacing, focus rings.
* **Typography:** Inter if available, else system UI stack.
* **Tokens (CSS variables in :root):**
  + --bg:#0b0b0f; --card:#111117; --muted:#1a1a24; --border:#232333;
  + --fg:#e5e7eb; --fg-muted:#a1a1aa;
  + --primary:#7c3aed; --primary-2:#a78bfa;
  + --radius:1rem; --shadow:0 10px 25px rgba(0,0,0,.35); --ring:0 0 0 3px rgba(124,58,237,.35);
* **Effects:** subtle glow on hover/focus (respect prefers-reduced-motion).

**Page Sections (strict — no extras)**

1. **Header (logo only)**
   * Left-aligned logo: assets/logo/3D\_Small.JPG with alt "AIToolsT4J logo".
   * Compact bar with brand title as visually hidden text for a11y.
2. **Hero (calculator lives here)**
   * H1: T4J Retirement Calculator
   * Subheading: See how small monthly contributions grow over time—no sign-up.
   * Primary CTA button: Try the Calculator (scrolls to the calculator if not visible).
   * **Calculator Card** (centered, max-width 420px):
     + Top “screen” area: expression line (small), result line (large, right-aligned); overflow handled by auto-scroll and font scaling.
     + Keys: 7 8 9 ÷, 4 5 6 ×, 1 2 3 −, 0 . % +, +/-, CE, C, ⌫, =.
     + Buttons have proper roles, labels, and focus outlines.
3. **Social Proof**
   * Minimal row of **placeholder logos** (SVG boxes labeled “Your Logo”) and two compact metrics:
     + 5k+ projections run
     + Avg 2 minutes to insights
   * All decorative; accessible aria-hidden="true" where appropriate.
4. **Explainer Video (with one-liner aside)**
   * **YouTube iframe:** https://www.youtube.com/watch?v=TnB4uGYuN48
   * **Caption:** 9 Reasons Why Retirement Planning is Important
   * **Aside one-liner (effective text):**  
     Small, consistent contributions today beat big, late contributions tomorrow.
5. **Footer**
   * Copyright: © 2025 AIToolsT4J — All rights reserved.
   * **Contact us:** link to https://github.com/Marc13/AIMaker-Calculator-Web
   * **Simple financial disclaimer** (short, readable):  
     This tool provides educational estimates only and is not financial advice. Investment returns are not guaranteed. Consult a licensed professional for personalized guidance.

**Calculator Requirements (Retirement Projection)**

* **Inputs** (inline above keypad or in compact row; no extra form page):
  + Current age (default 30), Retirement age (default 67)
  + Current balance ($, default 0)
  + Monthly contribution ($, default 300)
  + Annual return % (default 7)
* **Behavior:** Project balance monthly using compound growth:
  + Monthly rate r = (1 + annual%)^(1/12) − 1
  + Iterate n = (retireAge − currentAge) \* 12 months:
    - balance = balance \* (1 + r) + monthlyContribution
* Show **final projected balance** in the screen’s result line (currency, USD with thousands separators).
* Keep the arithmetic keypad usable for quick math as well (i.e., users can still compute 12 × 300 etc.), but the **Retirement** calculation is the primary result when inputs are present and = is pressed. (Reasonable interpretation is OK; keep UX simple.)

**Keyboard support**

* Digits 0–9, + - \* / % .
* Enter → equals; Backspace → delete last; Escape → clear all; Delete or Alt+Backspace → CE; F9 or ± button → sign toggle.
* Visually indicate pressed buttons (aria-pressed where appropriate).

**Safety (no eval)**

* Implement a simple expression parser (operator map with precedence or shunting-yard) for keypad arithmetic.
* Clamp/handle divide by zero and large overflows (graceful “Error” state, recoverable with C).

**Accessibility**

* Semantic landmarks (header, main, section, footer).
* <button> elements with accessible labels, focus ring, and 44×44 hit targets on touch.
* High contrast ratios and prefers-reduced-motion support.
* Live region politely updates when results change.

**Responsiveness**

* Centered layout; calculator card max-width 420px; fluid on mobile/desktop.
* Grid collapses nicely in Social Proof and Video sections.

**Small Helpers in script.js**

* Smooth scroll for CTA.
* Keyboard shortcut tooltip (a tiny “?” icon near the calculator header that opens a small popover listing Enter, Esc, Backspace); dismiss with Esc.
* Favicon generator: draw logo to a 32×32 canvas, set <link rel="icon" href="data:image/png;base64,...">.

**Assets (paths are case-sensitive)**

assets/

logo/3D\_Small.JPG

**Deliverables**

* Only index.html, style.css, script.js.
* No extra images, fonts, or files beyond the referenced logo.
* Clean, commented code. Keep sections exactly as specified: **Header, Hero (with calculator), Social Proof, Video+Aside, Footer**—nothing more.