**Completed (Rock-Solid Foundation)**

1. **Authentication System**
   * Secure login ✅
   * Multi-role accounts (admin/minter/demo) ✅
   * Token/session + 2FA support ✅
   * Redirect into mint page ✅
2. **Mint Form Backend Integration**
   * Multi-step upload → review → results ✅
   * API ready for Alpha Mint Engine ✅
   * Demo fallback mode ✅
   * File validation + secure handling ✅
3. **Visual Branding**
   * TrueMark logo + favicon ✅
   * Gold/Navy/Pearl scheme ✅
   * Merriweather + Open Sans ✅
   * Alpha CertSig footer across pages ✅

That’s huge. You’ve already got a secure, branded, functional minting site.

**🎯 Next Milestones (Critical for Real Value)**

1. **Certificate & Invoice PDF Generation** (this is where people see the *value*)
   * Right now: just text file download.
   * Needed: **PDF with TrueMark branding + Alpha CertSig seal**.
   * Library options:
     + **jsPDF (frontend)** → quick, but less “engraved” feel.
     + **ReportLab (backend Python)** → heavier, but lets you generate beautiful, engraved-style PDFs with seals, borders, etc.
2. **Testing Phase**
   * Use the demo creds to run through the full flow.
   * Confirm: upload → mint → NFT ID + cert preview → branded PDF invoice.
3. **Production Deployment**
   * Run **Alpha Mint Engine** backend (python app.py) on localhost:5000.
   * Frontend running on localhost:8080.
   * Expose via Cloudflare Tunnel for outside testers.

**🛠️ Immediate Next Step I’d Recommend**

Lock in **Certificate + Invoice PDF generation** *before* testing with outsiders.  
Because:

* A mint with only a text file feels unfinished.
* A minted NFT with a **TrueMark certificate PDF + branded invoice** feels premium and real.

⚡ My advice:

* Use **ReportLab** on the backend for PDFs (cleaner, more authoritative).
* Generate two outputs on mint:
  1. **Certificate PDF** (with gold seal + NFT ID).
  2. **Invoice PDF** (with transaction details + watermark).

Once that’s in → you’re production-ready for early adopters.

👉 Do you want me to **build you the Python ReportLab templates** for the **TrueMark Certificate + Invoice PDFs** (with seal, logo, fonts, and all the right fields) so you can drop them into the mint engine right now?