**Project:** “NTSA Custom Plates”

**Goal:** Build a full-stack web app (like VicRoads’ custom-plate service) for the Kenyan NTSA. Use the plit-repo pattern —**Node + Express API** and **React (Vite) front-end** living in sibling folders.

**Back-end (server-plates/)**

* **Stack:** Node 18, Express, Postgress.
* **Core entities:** Plate (special / standard custom / prestige, price, previewURL), Order (items[], total, status), User (JWT auth; reuse ShareLyft pattern).
* **Routes:**
  + GET /api/v1/plates – list all plates by type.
  + POST /api/v1/plates/preview – return SVG/PNG preview for user-entered text.
  + POST /api/v1/orders – create order & kick off payment.
* **Middleware:** CORS, auth, global error handler.
* **Env vars:** PORT, MONGO\_URI, JWT\_SECRET.
* **Dev tooling:** nodemon, ESLint, Jest + SuperTest.
* **Start cmd:** npm run dev.

**Front-end (client-plates/)**

* **Stack:** React 18 with Vite; React Router; Axios.
* **Pages:**
  1. **Hero/Landing** – pick plate tier, CTA to customise.
  2. **Customize** – live plate renderer, price display.
  3. **Cart** – line items, shipping options (Free / Express +500 KES / Pick-up).
  4. **Checkout** – personal-info form + payment (Card or M-Pesa).
* **State:** React Context for cart + auth.
* **API base:** /api/v1 proxied to localhost:9000 in dev (vite.config.js).
* **Build cmd:** npm run build.

**Misc**

* **Design system:** follow provided Figma (greens, soft mint, 12-col grid).
* **Repo layout:** two standalone Git repos (ntsa-plates-api, ntsa-plates-ui) with GitHub Actions for lint/test/deploy.
* **Run locally:**

bash

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concurrently \

"npm --prefix server-plates run dev" \

"npm --prefix client-plates run dev"

* **Target deploy:** API on Render/Fly.io, UI on Netlify/Vercel; MongoDB Atlas.

**Task:** Generate the initial scaffolding (folder tree, boilerplate code, sample models/routes/pages, env samples, README snippets) so I can plug in business logic next.

**PAGES**

**1. Hero / Landing**

* **NTSA-branded top bar** with primary CTA “Order Plate.”
* Bold headline “Order Your Custom License Plate Online,” quick-select chips for the three product tiers (Special, Standard Custom, Prestige Custom), and a secondary CTA “Drive to Choose a Style.”
* Clean 12-column grid, lots of white/soft-mint negative space, big hero car photo anchoring the page.

**2. How It Works**

Numbered four-step explainer:

1. Choose plate type
2. Enter plate details
3. Preview plate (live render)
4. Secure checkout  
   A sticky-looking button lets users jump straight back to the plate-type selector.

**3. Choose a Plate Type**

Three side-by-side cards:

* **Special Number** (K sh 20 K)
* **Standard Custom** (K sh 40 K)
* **Prestige Custom** (K sh 20 K)  
  Each card shows sample Kenyan flag plates, then a CTA arrow button that moves the user forward.

**4. Customize Your Plate**

* Live editable plate text field → renders the plate immediately.
* Price reiterated.
* Large car mock-up underneath to give context.

**5. Cart**

* Line-item list of chosen plates (image, qty stepper, price, subtotal).
* Right-side summary box for shipping method (Free, Express + 500 KES, Pick-Up).
* Checkout CTA.

**6. Payment**

* Personal-info form left, payment-method form right (Card vs M-Pesa).
* Single “Place Order” CTA at the bottom.
* Footer copyright note.