

📁 ROOT

```
lua  
  
citypulse/  
|__ app/  
|__ components/  
|__ lib/  
|__ models/  
|__ public/  
|__ .env.local  
|__ package.json  
|__ next.config.ts  
|__ tsconfig.json  
└__ README.md
```

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💬 app/ — FRONTEND + BACKEND (Next.js App Router)

```
pgsql  
  
app/  
|__ layout.tsx          # Global layout (Navbar wrapper)  
|__ page.tsx            # Landing / intro page  
|__ globals.css
```

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🔒 AUTHENTICATION

```
pgsql  
  
app/(auth)/  
|__ login/  
|   |__ page.tsx      # Email + password login  
|__ register/  
|   |__ page.tsx      # Signup + role selection + govt ID upload  
|__ verify/  
    |__ page.tsx       # Verification pending / approved screen
```

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CITIZEN PORTAL

perl

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```
app/(citizen)/
|   layout.tsx           # Citizen sidebar layout
|   dashboard/
|   |   page.tsx         # Profile, stats, issue list
|   report/
|   |   page.tsx         # Raise new issue form
|   my-issues/
|   |   page.tsx         # History + status tracking
|   map/
|   |   page.tsx         # Issue density / heatmap
```

AUTHORITY PORTAL (DEPARTMENT-BASED)

python

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```
app/(authority)/
|   layout.tsx           # Authority sidebar layout
|   dashboard/
|   |   page.tsx         # Issues grouped by status/category/urgency
|   incidents/
|   |   page.tsx         # Incident list (department filtered)
|   |   [id]/
|   |   |   page.tsx      # Incident detail + activity log
|   staff/
|   |   page.tsx         # Staff allocation
|   proof/
|   |   page.tsx         # View staff uploaded images
|   reports/
|   |   page.tsx         # Completed work (read-only history)
```

🛠 FIELD STAFF PORTAL

bash

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```
app/(staff)/
|__ layout.tsx          # Staff sidebar (mobile friendly)
|__ dashboard/
|   |__ page.tsx        # Assigned work list
|__ incidents/
|   |__ [id]/
|       |__ page.tsx    # Update status + upload proof
```

 AUTHORITY PORTAL (DEPARTMENT)

🌐 app/api/ — BACKEND API (CORE LOGIC)

bash

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```
app/api/
|__ auth/
|   |__ login/route.ts
|   |__ register/route.ts

|__ users/
|   |__ me/route.ts      # Current user info
|   |__ verify/route.ts  # Govt ID submission

|__ incidents/
|   |__ route.ts         # GET (list), POST (create issue)
|   |__ [id]/
|       |__ route.ts      # GET incident detail
|       |__ assign/route.ts # Authority assigns staff
|       |__ status/route.ts # Status transitions
|       |__ proof/route.ts # Staff uploads work images
|       |__ logs/route.ts  # Activity log (immutable)
```

```
|── grouping/
|   └── route.ts          # Duplicate detection + frequency
|
|── metrics/
|   └── route.ts          # Stats for dashboards
|
└── public/
    └── incidents/route.ts # Anonymized public data
```



components/ — UI BUILDING BLOCKS

markdown

```
components/
├── layout/
│   ├── Navbar.tsx
│   ├── Sidebar.tsx
│   └── RoleLayout.tsx
|
├── incidents/
│   ├── IncidentCard.tsx
│   ├── IncidentList.tsx
│   ├── StatusBadge.tsx
│   ├── UrgencyBadge.tsx
│   └── ActivityTimeline.tsx
|
└── forms/
    ├── IssueForm.tsx
    ├── AssignStaffForm.tsx
    ├── StatusUpdateForm.tsx
    ├── ProofUploadForm.tsx
    └── VerificationForm.tsx
```

```
|── dashboard/
|   ├── StatsCards.tsx
|   ├── ProfileCompletion.tsx
|   └── Charts.tsx
|
└── maps/
    ├── LocationPicker.tsx
    └── Heatmap.tsx
```

```
⌚ models/ — DATABASE SCHEMAS (MongoDB)
```

arduino

```
models/
├── User.ts          # name, email, role, department, verified
├── Incident.ts      # category, location, status, urgency, reportCount
├── IncidentReport.ts # individual citizen submissions
├── ActivityLog.ts   # append-only audit logs
└── WorkProof.ts     # staff uploaded images
```



lib/ — CORE BUSINESS LOGIC

bash

```
lib/
├── db.ts                      # MongoDB connection
|
├── services/
│   ├── incident.service.ts    # create, assign, resolve
│   ├── workflow.service.ts    # status rules
│   ├── grouping.service.ts    # duplicate detection
│   ├── urgency.service.ts     # frequency → urgency
│   ├── audit.service.ts       # immutable logging
│   └── verification.service.ts
|
├── auth/
│   ├── permissions.ts         # role-based access
│   └── department.ts          # department filtering
|
└── utils/
    ├── location.ts            # geo radius logic
    ├── anonymize.ts
    └── profile.ts
```



```
└── constants/
    ├── roles.ts
    ├── status.ts
    ├── urgency.ts
    ├── departments.ts
    └── categories.ts
```



public/ — STATIC FILES

```
cpp

public/
├── logo/
│   └── citypulse.svg
├── placeholders/
│   ├── issue.png
│   └── proof.png
└── favicon.ico
```

I need you to reorganize my Next.js project structure to match a specific architecture. Please reorganize the `app` and `api` directories as follows.

Important:

1. Use Route Groups
2. `(name)` for organization.
3. For
4. `(authority)` and
5. `(field-staff)`, you **MUST** create a sub-folder with the same name (or similar) inside the route group to avoid "parallel page" routing conflicts (e.g., `app/(authority)/authority/dashboard`).

Target Structure

App Directory (`app/`)

- **Root:** `layout.tsx`, `page.tsx`, `globals.css`
- **(auth) (Authentication)**
 - `/login/page.tsx`
 - `/register/page.tsx` (Note: rename from `signup` if necessary)
 - `/verify/page.tsx`
- **(citizen) (Citizen Portal)**
 - `layout.tsx` (Internal sidebar for citizens)
 - `/dashboard/page.tsx`
 - `/report/page.tsx`

- `/my-reports/page.tsx`
- `/map/page.tsx`
- **(authority) (Authority Portal - Namespaced)**
 - `layout.tsx` (Sidebar for authority)
 - `/authority/dashboard/page.tsx` (URL: `/authority/dashboard`)
 - `/authority/incidents/page.tsx`
 - `/authority/incidents/[id]/page.tsx`
 - `/authority/staff/page.tsx`
 - `/authority/proof/page.tsx`
 - `/authority/metrics/page.tsx`
- **(field-staff) (Field Staff Portal - Namespaced)**
 - `layout.tsx` (Mobile-friendly navbar)
 - `/field/assignments/page.tsx` (URL: `/field/assignments`)
 - `/field/incidents/[id]/page.tsx`

API Directory (app/api/)

- `auth/`: `login/route.ts`, `register/route.ts`, `verify-otp/route.ts`
- `users/`: `me/route.ts`, `verify/route.ts`
- `incidents/`: `route.ts`, `[id]/route.ts`, `[id]/status/route.ts`, `[id]/proof/route.ts`
- `groups/`: `route.ts`
- `verification/`: `route.ts`, `[id]/approve/route.ts`
- `metrics/`: `route.ts`
- `public/`: `incidents/route.ts`

Instructions

1. **Move existing files** to their best matching locations in this new structure.
2. **Create placeholder pages** for any missing routes (e.g., field staff pages, specific authority pages).
3. **Update imports** in any moved files to ensure relative paths (like `../../../../lib/...`) are correct.
4. **Update API calls** in your frontend pages to match the new API routes (e.g., `/api/auth/signup -> /api/auth/register`).
5. **Update layout.tsx files** in the new groups to link to the correct URLs (e.g., link to `/authority/dashboard` not just `/dashboard`).