

#### Overview:

A fullstack discussion forum platform built using Next.js 14 with App Router for frontend, Pages Router for API backend, Google OAuth2 via NextAuth.js, PostgreSQL as database, and Prisma ORM. Users can sign in, create forums, post comments, and interact in a discussion-thread-like interface.

#### Tech Stack:

##### Frontend & Backend:

- Next.js 14 (App Router)
- API Routes via Pages Router
- TypeScript
- Tailwind CSS

##### Authentication:

- NextAuth.js with Google OAuth2

##### Database & ORM:

- PostgreSQL
- Prisma

#### Project Structure:

```
/app
  /api
    /auth [...nextauth]    # Google OAuth login/logout
    /forums                # Forum CRUD API
    /comments              # Comment CRUD API
  /forums
    [id]/page.tsx          # Forum detail page
    new/page.tsx           # Create forum form
    page.tsx               # Home page (list of forums)

/components
  AuthButton.tsx          # Google sign-in/sign-out button
  ForumCard.tsx           # Forum preview card
  CommentSection.tsx      # Comments UI for forums

/lib
  prisma.ts               # Prisma client instance
  auth.ts                 # NextAuth config

/types
  types.ts                # Shared type definitions
```

```
/prisma
  schema.prisma          # Database schema

middleware.ts             # Middleware for protecting routes
```

#### Features:

##### Authentication:

- Google OAuth via NextAuth.js
- Session-based login with client/server support
- Middleware to protect routes

##### Forums:

- Authenticated users can create and read forums
- View all forums and individual detail page

##### Comments:

- Authenticated users can comment on forums
- Comments displayed below each forum

#### Setup Instructions:

##### 1. Clone & Install:

```
$ git clone https://github.com/your-username/community-forums.git
$ cd community-forums
$ npm install
```

##### 2. Setup .env File:

```
DATABASE_URL=postgresql://user:pass@localhost:5432/forumsdb
NEXTAUTH_SECRET=your_secret
NEXTAUTH_URL=http://localhost:3000
GOOGLE_CLIENT_ID=your_google_client_id
GOOGLE_CLIENT_SECRET=your_google_client_secret
```

##### 3. Setup DB:

```
$ npx prisma generate
$ npx prisma migrate dev --name init
```

##### 4. Run Locally:

```
$ npm run dev
```

#### Notes:

- Add missing dependencies in useEffect hooks to avoid lint warnings.
- Avoid using `any` type prefer using proper interfaces/types.
- Disable ESLint on build using:

```
eslint: { ignoreDuringBuilds: true }
```

Future Improvements:

- Search/filter forums
- Likes/upvotes
- Threaded replies
- Responsive enhancements
- Admin dashboard

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