



# NocoDB Project Structure

The open-source alternative to Airtable. NocoDB turns any database into a smart spreadsheet. Its architecture features a powerful Node.js core and a highly interactive Vue.js frontend, organized in a modern pnpm monorepo.

Updated 2025-12-30

#nocodb#no-code#vuejs#nodejs#monorepo#database-gui#open-source

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## Project Directory



**nocodb/**

- ▼  **packages/** Core monorepo p...
- ▼  **nocodb/** The main backen...
-  **src/** Backend source ...
-  package.json
- ▼  **nc-gui/** Main spreadshee...
-  **src/** Frontend source...
-  **nocodb-sdk/** Official SDK
-  **nc-lib-gui/** Shared frontend...
-  **scripts/** Build and dev s...
-  **tests/** Global test sui...
-  package.json Root workspace ...
-  pnpm-workspace.yaml



## Repository Info

**Repository** - [nocodb/nocodb](#)

**Stars** - 45k+

**License** - AGPL-3.0

**Last Analyzed** - December 2025



## Tech Stack

**Backend** - Node.js (Express)

**Frontend** - Vue.js / Nuxt

**Language** - TypeScript / JavaScript

**Database Support** - MySQL, PostgreSQL, SQLite, MS-SQL

**ORM** - Knex.js



## Architecture Notes

NocoDB is designed to be extremely portable, often distributed as a single Docker image or npm package. To achieve this, its monorepo structure is optimized for bundling. The `nocodb` package contains the core logic for database introspection and spreadsheet-like operations, while `nc-gui` handles the complex UI state required for the spreadsheet view. They use pnpm and Lerna to manage the internal dependencies and build process across the packages.



## Key Directories

**packages/nocodb/** - The core engine that handles database connectivity and metadata management

**packages/nc-gui/** - A high-performance Vue application that mimics the Airtable user experience

**packages/nocodb-sdk/** - Provides a type-safe way to interact with NocoDB programmatically

**packages/nc-lib-gui/** - A shared library of UI elements used across the frontend applications



## Why This Structure?

NocoDB is an excellent reference for building complex, data-heavy web applications. It shows how to manage a large Vue.js codebase alongside a robust Node.js backend. Its 'spreadsheet-as-an-interface' approach provides great insights into state management and performance optimization.