

Technical Overview – MyKeeper Notes App

1. Project Overview

MyKeeper is a secure, self-hosted note-taking web application. It allows users to create, manage, and delete personal notes through an intuitive interface. The application is built with:

- **Frontend:** React
 - **Backend:** Node.js + Express
 - **Database:** PostgreSQL
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2. Architecture

The app follows a **full-stack architecture** with clear separation of concerns.

Frontend (React):

- Displays the user interface.
- Handles routing and state management.
- Communicates with the backend via REST API.

Backend (Node.js + Express):

- Provides API endpoints for notes and user authentication.
- Validates user credentials and issues JWT tokens.
- Handles CRUD operations on notes.

Database (PostgreSQL):

- Stores user information and notes.
 - Secured with environment variables to protect credentials.
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3. Data Flow

1. User signs up or logs in.
2. Backend verifies credentials and responds with a JWT.
3. JWT is stored client-side and sent with each request.
4. Authenticated requests allow users to:

- Create new notes.
- View their notes.
- Delete notes.

5. Data is stored and retrieved from PostgreSQL.

4. Security Features

- Passwords hashed before storage.
- JWT-based session handling.
- Environment variables to hide sensitive data.
- Recommended practice to log out after use.