

# Frontend Structure & Setup

## Project Structure

```
frontend/
├── Dockerfile
├── nginx.conf
├── package.json
├── index.html
├── vite.config.js
└── src/
    ├── main.jsx      # Entry point
    ├── App.jsx       # Main app component
    └── api/
        └── client.js   # API client with auth
    ├── components/
        ├── Layout.jsx    # Main layout with navigation
        ├── ProtectedRoute.jsx # Auth route wrapper
        └── ui/           # Reusable UI components
            ├── Button.jsx
            ├── Input.jsx
            ├── Card.jsx
            └── Modal.jsx
    ├── pages/
        ├── Login.jsx     # Login/Register page
        ├── Dashboard.jsx # Projects list
        ├── Project.jsx   # Single project view
        ├── Chat.jsx       # Chat interface
        ├── Profile.jsx    # User profile
        └── Admin.jsx      # Admin panel (admin only)
    └── contexts/
        └── AuthContext.jsx # Authentication state
    └── utils/
        └── storage.js     # LocalStorage helpers
```

## Tech Stack

- **React 18** - UI framework
- **Vite** - Build tool (fast, modern)
- **React Router** - Navigation
- **Tailwind CSS** - Styling
- **Axios** - API requests
- **Lucide React** - Icons

## Features

### For All Users:

- Login & Registration
- Project management (CRUD)
- Chat interface with AI
- Real-time messaging
- Share projects/chats
- User profile

### For Admin Users (Additional Tab):

- Create new users
- View all users
- Add/manage API keys
- View usage statistics
- Enable/disable keys

## Navigation Structure

Regular User View:



Admin User View:



# Installation

```
bash  
  
cd frontend  
npm install  
npm run dev
```

## Build for Production

```
bash  
  
npm run build
```

This creates optimized static files in `dist/` directory.