

# CloudDocSaver Pro

CloudDocSaver Pro is a **free MERN stack cloud document manager** that allows users to securely upload, manage, and download their **images and PDFs**. Users can tag, favorite, pin, version, resize, convert, and download files in multiple formats. Email notifications are sent on upload and download. All storage is handled using **Google Drive free tier (15 GB)**.

## Features

### Core Features

- User authentication with JWT and email-based 2FA
- Upload images (JPG, PNG, GIF) and PDFs only
- Maximum upload size: more than 10 MB per file
- Tag documents (personal, educational, governmental, office)
- Document preview and details
- Resize/compress documents (images or PDFs)
- Download in multiple formats (PDF, JPG, PNG)
- Prompt user for custom size/pixels when downloading resized images
- Manual delete documents
- Favorites & Pin important documents
- Versioning (keep track of updates)
- Bulk download as ZIP
- Search documents by title or tags
- Drag-and-drop upload
- Responsive design for desktop & mobile

### Extra Features

- Automatic tag suggestions based on filename/content
- Email notifications on upload and download
- Analytics: Storage usage per tag, Most uploaded file types
- Feedback page: Users can leave rating & feedback on dashboard

## Tech Stack

Layer	Technology / Library	Notes
Frontend	React, Tailwind CSS, React Router, Framer Motion	Responsive and animated UI
Backend	Node.js, Express.js	REST API
Database	MongoDB Atlas Free Tier	512 MB free storage
File Storage	Google Drive Free Tier (15 GB)	Only images and PDFs
Authentication	JWT + bcrypt, Email-based 2FA	OTP sent via Nodemailer
Email	Nodemailer + Gmail SMTP	Free 100 emails/day limit
File Processing	Sharp (images), pdf-lib/pdfkit (PDF), adm-zip (bulk download)	Free libraries
Hosting	Frontend: Vercel/Netlify, Backend: Railway/Render	Free-tier hosting

## Folder Structure

cloud-docsaver/ ■■■■ backend/ ■■■■ src/ ■■■■ app.js ■■■■ server.js ■■■■ config/  
■■■■ db.js ■■■■ mailer.js ■■■■ models/ ■■■■ User.js ■■■■  
Document.js ■■■■ routes/ ■■■■ auth.routes.js ■■■■ doc.routes.js ■■■■  
feedback.routes.js ■■■■ controllers/ ■■■■ auth.controller.js ■■■■  
doc.controller.js ■■■■ feedback.controller.js ■■■■ middleware/ ■■■■ auth.js ■■■■  
■■■■ multer.js ■■■■ services/ ■■■■ file.service.js ■■■■ pdf.service.js ■■■■  
image.service.js ■■■■ email.service.js ■■■■ frontend/ ■■■■ src/ ■■■■ components/ ■■■■  
■■■■ FeedbackForm.jsx ■■■■ pages/ ■■■■ App.jsx ■■■■ index.jsx ■■■■  
tailwind.config.js ■■■■ README.md

## Installation

### Backend

cd backend npm install Create a .env file: PORT=8080 MONGO\_URI= JWT\_ACCESS\_SECRET=  
SMTP\_HOST=smtp.gmail.com SMTP\_PORT=587 SMTP\_USER= SMTP\_PASS=  
FROM\_EMAIL="CloudDocSaver " GOOGLE\_DRIVE\_FOLDER\_ID= Run the backend: npm run dev

### Frontend

cd frontend npm install npm run dev Open <http://localhost:5173> to view the app.

## Usage

1. Register and login (2FA via email OTP) 2. Upload images or PDFs via drag-and-drop 3. Add tags, description, and optional pin/favorite 4. View document details, resize, download, or delete manually 5. Search documents using the search bar 6. Bulk download multiple files as ZIP 7. View analytics for storage and file types 8. Leave feedback via the Feedback Form on dashboard

## Development Roadmap

- Phase 1: Core Setup & MVP Features
- Phase 2: Document Management Enhancements
- Phase 3: Resize, Conversion & Custom Downloads
- Phase 4: Bulk Actions, Analytics & Automation
- Phase 5: UI Polish, Mobile Optimization & Deployment
- Phase 6: Feedback & Continuous Improvement

## Notes

\* Only manual deletion is allowed; no auto-expiry. \* Upload size >10 MB per file is supported. \*  
Google Drive Free Tier: 15 GB storage \* MongoDB Atlas Free Tier: 512 MB storage \* Gmail SMTP:  
~100 emails/day