

CASE STUDY

Custom Client portal for web app

The client was using a combination of Google Drive, Trello, and email threads to share project updates, invoices, and files with 15+ clients. This resulted in:

- Fragmented communication
- Missed deadlines and file confusion
- No centralized access for clients to track their project status

They needed a **secure, scalable, and brandable client portal** with minimal training required.

Solution

We designed and delivered a **custom client portal web application** that allowed:

Each client to log in securely

View project milestones, files, deadlines, invoices

Real-time updates by internal agency team

Automatic email notifications on key actions

Admin panel to manage clients, projects, and uploads

Tech Stack

Establish specific learning goals for each of your courses and subjects/topics.

Layer	Technology used
Frontend	React.js, Tailwind CSS
Backend	Node.js + Express.js
Database	PostgreSQL (hosted by Supabase)
Authentication	Firebase Auth (Google & Email)
File Storage	AWS S3
CI/CD	Github Actions , Render, Netlify
Monitoring	Sentry

Key Features

- **Role-based login** – Admin vs Client
- **Dynamic Project Dashboard** – Project status, due dates, attached files
- **Invoice View & Download** – Stripe + PDF support
- **File Uploads & Auto-Expiry** – Time-based expiration for sensitive files
- **Notification System** – Email & in-app alerts

Why Not Off-the-Shelf Tools?

Tools Tried by Client	Limitation
Trello	No client login control, not scalable
Google Drive + Docs	Poor structure, no automation

Asana Free Plan	Too restrictive for client view
Client Portal SaaS	Too costly for scaling to 50+ clients

DevOps Approach

Environment Setup: Separate staging and production environments

CI/CD Pipelines: Automated testing + deployment with GitHub Actions

Monitoring: Integrated alerts using Sentry and downtime monitoring

Scalability: Backend deployed on Render with autoscaling; frontend on Netlify

Results

- 100% drop in "email chaos" for the agency
- 15+ clients started using the portal in week 1
- Reduced their onboarding time by 50%
- Files, updates, invoices – everything centralized in one secure place