

DevOps Pipeline Simulator (CI/CD Visual Runner)

A full-stack simulation tool to create, visualize, and run CI/CD pipelines with live status updates and streamed logs.

Features

Frontend (React + Vite + Tailwind + Framer Motion)

- Modern dashboard UI
- Sidebar navigation
- Collapsible sidebar with animation
- Page transitions
- Responsive design

Backend (Node.js + Express + MongoDB + Socket.io)

- REST APIs
- Real-time log streaming
- Pipeline execution simulation

CI/CD Logic

Pipeline -> Stage -> Job log streaming

Tech Stack

Frontend: React, Vite, TailwindCSS, Framer Motion, React Router

Backend: Node.js, Express, Socket.IO

Database: MongoDB

Setup Instructions

1. Clone repo
2. Install server dependencies:
`cd server`
`npm install`
3. Configure .env:
`MONGO_URI=mongodb://127.0.0.1:27017/devops-simulator`
`PORT=4000`
4. Start backend:
`npm run dev`
5. Install client dependencies:
`cd ../client`
`npm install`
6. Start frontend:
`npm run dev`

Access at:
<http://localhost:5173/>