

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/>