

README

StartupOps – BytingBytes Platform

A unified **digital operational workspace** designed for early-stage founders to efficiently manage execution, validate ideas, collaborate with teams, and gain actionable insights to grow their startup.

Project Overview

StartupOps is a full-stack web application that serves as an operational workspace for founders. It combines a modern, responsive frontend with a scalable backend API — enabling features for:

- Idea prioritization & validation
- Execution tracking and task management
- Team collaboration and communication
- Scalable architecture for future product features

This repository includes both the **frontend UI** and backend **API server**, along with all configuration and tooling necessary to run locally or deploy to production.

Tech Stack

Layer	Technology
Frontend	Next.js (React) with App Router
Styling	Tailwind CSS
Backend	Node.js + Express
Authentication	JWT (JSON Web Tokens)
Deployment	Vercel (Frontend), Render (Backend)
Languages Used	TypeScript, JavaScript, CSS
Configs & Tooling	Nix, Prisma, Tailwind, PostCSS

Repository Structure

```
BytingBytes/
|__ src/
|  |__ app/ ← Frontend pages + backend API routes
```

```
| | └── api/ ← Backend API handlers
| |   └── page.tsx ← UI page
| └── components/ ← Reusable UI
|   └── styles/ ← CSS / Tailwind
└── next.config.ts ← Frontend framework config
  └── tailwind.config.ts ← CSS utility config
  └── package.json ← Project dependencies
  └── apphosting.yaml ← Hosting config
  └── icon.png
  └── tsconfig.json ← TypeScript setup
    └── ...
```

How It Works

Frontend (Next.js + Tailwind CSS)

The frontend is built using **Next.js App Router** and styled with **Tailwind CSS**:

- Fast client-side navigation with React
- Responsive, mobile-first UI
- Reusable, component-based architecture
- API integration via fetch requests

The frontend communicates with the backend using REST APIs secured with JWT authentication.

Backend (Node.js + Express)

The backend handles all core business logic and data flow:

- User authentication using JWT
 - Secure API endpoints
 - Middleware for validation and protection
 - Database connectivity and models
- JWT tokens are sent from the frontend in request headers to access protected routes.

Getting Started (Local Development)

Prerequisites

Make sure you have:

- Node.js v18+
- NPM
- Git
- VS Code (recommended)

1. Clone the Repository

```
bash  
git clone https://github.com/qkimrobins/BytingBytes.git  
cd BytingBytes
```

2. Install Dependencies

```
npm install
```

3. Run the Backend Server

```
cd src  
npm run dev  
[ Backend runs on:http://localhost:5000 ]
```

4. Run the Frontend

```
cd ..  
npm run dev  
[ Frontend runs on:http://localhost:3000 ]
```

5. Environment Variables

Create a .env file and configure:

```
NEXT_PUBLIC_API_URL=http://localhost:5000  
JWT_SECRET=your_secret_key
```

Deployment

Frontend: Vercel 

Backend: Render / any Node hosting service

Both platforms support GitHub CI/CD and environment variables.

Future Enhancements

Real-time team collaboration

Startup analytics & insights dashboard

Role-based access control

Plug-in ecosystem for external tools

Thank You !!! For the Experience of building this project.