Full Stack Mini App with Docker Compose

Project Description

This project is a small full-stack web application built with Node.js, MongoDB, and a minimal frontend using HTML and JavaScript. The goal was to containerize the entire application using Docker Compose, making it easy to run everything with a single command.

Technologies Used

- Backend: Node.js + Express.js

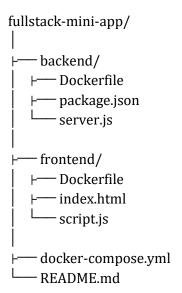
- Database: MongoDB

- Frontend: HTML + JavaScript- Docker + Docker Compose

Features

- Add a new note
- Display all notes
- Delete note by ID (optional)
- Data is persisted in MongoDB Docker container

Project Structure



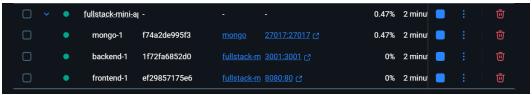
A How to Run the App

- 1. Open terminal and navigate to the root of the project folder.
- 2. Run the following command: docker-compose up --build

- 3. Open your browser and go to http://localhost:8080
- 4. Add or view notes.
- 5. Data is saved into MongoDB and can be viewed with MongoDB Compass.

Screenshots

Below are the screenshots showing the Docker containers running and the saved note confirmation:



```
PROBLEMS
                  DEBUG CONSOLE
                                 TERMINAL
          OUTPUT
                                           PORTS
     "c":"NETWORK", "id":51800,
                                    "ctx":"conn3","msg":"client m
etadata", "attr": { "remote": "172.19.0.3:54538", "client": "conn3", "ne
gotiatedCompressors":[],"doc":{"driver":{"name":"nodejs|Mongoose"
,"version":"5.9.2|7.8.6"},"platform":"Node.js v18.20.8, LE","os":
{"name": "linux", "architecture": "x64", "version": "5.15.167.4-micros
oft-standard-WSL2", "type": "Linux"}}}}
frontend-1 | 172.19.0.1 - - [24/Apr/2025:08:00:41 +0000] "GET /
HTTP/1.1" 304 0 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) Ap
pleWebKit/537.36 (KHTML, like Gecko) Chrome/135.0.0.0 Safari/537.
frontend-1 | 172.19.0.1 - - [24/Apr/2025:08:00:41 +0000] "GET /s
cript.js HTTP/1.1" 304 0 "http://localhost:8080/" "Mozilla/5.0 (W
indows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko
) Chrome/135.0.0.0 Safari/537.36" "-"
              Saved note: {
backend-1
                text: 'Test nga Roza',
                _id: new ObjectId("6809efb2f95ae6e8f0609345"),
backend-1
                 _v: 0
backend-1
backend-1
v View in Docker Desktop o View Config w Enable Watch
```