# Simple Blog Application - Project Execution README

## Overview

This project is a full-stack web application that enables users to Create, Read, Update, and Delete (CRUD) blog posts. It uses a modern JavaScript stack (React, Node.js, Express.js, and MongoDB Atlas) with containerized deployment via Docker and cloud hosting on Render.

## Tech Stack

• Frontend: React.js, HTML5, CSS3
• Backend: Node.js, Express.js
• Database: MongoDB Atlas (cloud-hosted NoSQL) with Mongoose
• Deployment/Containerization: Docker, Render
• Version Control: GitHub

## Features

• Create, view, update, and delete blog posts.
• Responsive design with dynamic rendering using React.
• RESTful API communication between frontend and backend.
• Cloud database connectivity with MongoDB Atlas.
• Secure configuration using .env file.
• Containerized deployment using Docker.
• Deployed on Render for public access.

## Project Setup and Execution

1. Clone the repository:
git clone https://github.com/M-612/blog-.git

2. Backend Setup:
cd backend
npm install
Create a .env file with MONGO_URI and PORT
npm start

3. Frontend Setup:
cd frontend
npm install
npm start
Application runs on http://localhost:3000

4. Deployment:
Backend and frontend hosted on Render with MongoDB Atlas connection.

## Future Enhancements

- Add authentication and user roles.
- Integrate comment and like system.
- Use a rich text editor for blog creation.
- Implement search, filter, and tag features.
- Add analytics dashboard and PWA support.
- Extend scalability with Kubernetes.

## Team Members

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