

MERN Stack Project

Introduction

This project is a full-stack web application built with the MERN stack (MongoDB, Express.js, React, Node.js). It uses Tailwind CSS for styling and the Vite development server to run the frontend.

Features

- Frontend: Developed using React and styled with Tailwind CSS for a modern, responsive UI.
- Backend: Built with Node.js and Express.js, integrated with MongoDB for database management.
- Development Server: Vite is used to run the development server for faster builds and hot-reloading.
- MongoDB Integration: MongoDB is connected using MongoDB Compass for database management.

Requirements

Before running the project, ensure you have the following installed:

- Node.js (v14 or higher)
- MongoDB (with a running instance or use MongoDB Atlas)
- Vite for frontend development
- MongoDB Compass for managing the database

Setup Instructions

Backend Setup

1. Navigate to the backend directory:
`cd backend`
2. Ensure your .env file is correctly configured with:
 - MONGO_URI: MongoDB connection string
 - PORT: Port number for the server (default is 5000)
3. Install the necessary dependencies:
`npm install`
4. Start the backend server:

`npm start`

If everything is set up correctly, you should see:

Server is running on port 5000

MongoDB is Connected: localhost

Frontend Setup

1. Navigate to the frontend directory:

`cd frontend`

2. Install the necessary dependencies:

`npm install`

3. Run the frontend development server:

`npm run dev`

4. Open your browser and navigate to `http://localhost:3000` to view the application.

Project Structure

Backend

- `/models`: Mongoose models for MongoDB collections.
- `/routes`: API routes for handling client requests.
- `.env`: Environment variables for MongoDB connection and server configurations.
- `server.js`: The entry point for the backend application.

Frontend

- `/src`: Contains React components and Tailwind CSS styles.
- `/components`: Reusable React components.
- `vite.config.js`: Vite configuration file.

Demo of the project: [Video Link](#)