

Assignment 2 Documentation

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Project Overview

This is a full-stack web application for user authentication and management,

The project includes a RESTful API backend with a React vite frontend and has been deployed on Vercel.

➤ Features

- Authentication: Secure user login/signup using JSON Web Tokens (JWT).
- REST API: API endpoints for handling user data and authentication.
- Database Integration: data storage with MongoDB (remote).
- Middleware: CORS handling for and JWT authentication.
- Frontend: Dynamic UI built with React.

➤ Project Structure

○ Backend

- Controllers: Handle login and signup logic for user (UserController.js).
- Routes: Define user API endpoints (userRoutes.js).
- Models: MongoDB schema for storing user data (UserSchema.js).
- Middleware:
- CORS: Manage cross-origin requests.
- authenticateJWT: Validate tokens for secure access.
- generateJWT: Create secure tokens for user sessions.

- Server: Initializes Express, connects to MongoDB, and uses middleware and routes.

- **Frontend (Not required in assignment)**

- Pages: Contains one page i.e. Signin_Signup .
- App.jsx: Main application component containing routes.
- main.jsx: Entry point for application frontend.