

User Management API Documentation

Project Overview

This User Management API allows you to manage a list of users, including creating, retrieving, retrieving by id, updating, and deleting users. The API is built with Express.js and uses a dummy dataset to simulate user data, stored in a separate data file (`usersData.js`). Error handling and validation are also implemented.

Middleware functions are implemented to log request details, including the HTTP method, URL, and status code, improving visibility into the application's operations. Additional middleware ensures input validation by checking for required fields in both `POST` and `PUT` routes, enhancing data consistency.

Error handling mechanisms are in place to respond with appropriate HTTP status codes and clear error messages for cases like "user not found" or "invalid input," providing a user-friendly API experience. Data for the users is stored in an in-memory array, simplifying data handling and storage for this application.

Conclusion :

This project is a straightforward REST API that demonstrates fundamental backend principles. It includes essential features like CRUD routes, middleware, and error handling, providing a robust foundation for handling user data.

GitHub Link:

Project Structure

```
UserAPIManagement/  
├── controller/  
│   └── userController.js           # Controller with CRUD logic for  
user data  
├── middleware/  
│   └── logger.js                 # Middleware to log API requests  
├── routes/  
│   └── userRoutes.js             # Routes for handling  
user-related requests  
├── dummyData/  
│   └── usersData.js              # Dummy user data (array of user  
objects)  
├── .env                          # Environment variables  
├── app.js                        # Main app setup with middleware  
and error handling  
└── package.json                  # Node.js project config with  
dependencies
```