# **API Project: Comments & Posts Management**

# Simple Overview

This project is a RESTful API built with Node.js and Express.js. It provides endpoints to manage users, posts, and comments. The API is designed for learning purposes and demonstrates basic CRUD operations with in-memory data storage.

#### Description

This API allows users to:

- Manage posts and comments.
- Retrieve posts by user or post ID.
- Add, retrieve, and manage comments associated with posts or users.
- Use query parameters and route parameters to filter data.

The project is beginner-friendly and demonstrates the use of Express.js middleware, route handling, and modular code organization.

#### **Getting Started**

#### **Dependencies**

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

- Node.is (v14 or higher recommended)
- npm (comes with Node.js)
- A modern operating system (e.g., Windows 10, macOS, or Linux)

#### Installing

- 1. Clone the repository:
- 2. bash

```
git clone https://github.com/your-repo-name.git
cd your-repo-name
```

- 3. Install dependencies:
- 4. bash

```
npm install
```

- 5. Ensure the following files are present:
  - app.js (or index.js) for the main server logic.
  - routes/ directory containing route files (comments.js, posts.js, users.js).
  - data/ directory containing mock data logic (comments.js, posts.js, etc.).

### **Executing Program**

To run the program locally:

- 1. Start the server using nodemon.js:
- 2. bash

npm start

- 3. Or if you're using nodemon:
- 4. bash

npx nodemon app.js

- 5. Open Postman or any API testing tool to interact with the API.
- 6. Use the following base URL for requests:

http://localhost:3000/api

- 7. Example Endpoints:
  - GET /api/comments: Retrieve all comments.
  - bash
  - POST /api/comments: Add a new comment.

#### Help

If you encounter issues:

- 1. Ensure your Node.js version is up-to-date.
- 2. Verify that no other application is using port 3000.
- 3. Check that all required dependencies are installed by running:
- 4. bash

npm install

#### For additional debugging, use:

bash
npx nodemon app.js

This will restart the server automatically when changes are made.

### **Version History**

- 0.2
  - Added comments functionality (basic CRUD operations).
  - Improved error handling for invalid routes.
  - See commit history for details.
- 0.1
  - Initial release with basic user and post management.

#### License

This project is licensed under the MIT License - see the LICENSE.md file for details.

## Acknowledgments

Special thanks to:

- <u>Node.js</u> for providing a robust runtime environment.
- Express.js for simplifying server-side development.
- <u>Postman</u> for making API testing easy.