

Challenge Problem: Node.Js Engineer API Development

Functional Requirements:

1. Create Contact Endpoint:
 - Method: POST
 - Path: /contacts
 - Request Body: JSON object representing the contact
 - Response: JSON object of the created contact with an assigned ID
2. Get Contact by ID Endpoint:
 - Method: GET
 - Path: /contacts/{id}
 - Path Parameter: id (contact ID)
 - Response: JSON object of the contact with the provided ID
3. Delete Contact Endpoint:
 - Method: DELETE
 - Path: /contacts/{id}
 - Path Parameter: id (contact ID)
 - Response: No content (204 status code) upon successful deletion
4. Update Contact Endpoint:
 - Method: PUT
 - Path: /contacts/{id}
 - Path Parameter: id (contact ID)
 - Request Body: JSON object representing the updated contact
 - Response: JSON object of the updated contact

Non-functional Requirements:

- Use TypeScript
- Document the source code thoroughly using Jada Doc comments to explain the functionality and any important design decisions.
- Store contact data in a memory list for simplicity; persistence is not required.
- Do not implement any authorization logic (e.g., token-based authentication).
- Adhere to TypeScript best practices for naming conventions, code structure, and error handling.
- **Utilize code generation tools like Copilot, GPT, or others as much as possible to expedite development.**
- Provide an estimate of the time it took to complete the project.
- Include a POSTMAN collection with examples of how to call each endpoint.
- Nice to have the Unit testing (just a couple to prove you know how to implement them).

This challenge problem aims to assess your ability to develop a basic RESTful API using the Node.Js platform while adhering to best practices and documenting your code effectively.

Good luck!