

Code Challenge: CRUD API for a Bookstore

Objective:

Develop a CRUD (Create, Read, Update, Delete) API using Node.js and Express for a bookstore. Users should be able to perform transactions to buy books. Note we are not expecting something perfect and this should be done within a **couple days**. We are more interested to see how you handle working building and maintaining an API. We do not like challenges that are not straight to the point so focus more on delivery than perfection.

Questions can be asked to

jeffrey@twotone.co and al@twotone.co

Requirements:

Must be written in a Node environment using Express.

Database:

Use any database of your choice (e.g., MySQL, PostgreSQL, SQLite).

Create a books collection/table with the following fields: id, title, author, price, and stockQuantity.

Create a transactions collection/table with the following fields: id, bookId, userId, quantity, and transactionDate.

API Endpoints:

GET /books: Retrieve all books.

GET /books/:id: Retrieve a specific book by its ID.

POST /books: Add a new book.

PUT /books/:id: Update a book.

DELETE /books/:id: Remove a book.

POST /transactions: Purchase a book. This should decrease the stockQuantity of the purchased book and create a new record in the transactions table.

Unit Tests:

Write unit tests for each of the above endpoints using a testing library of your choice (e.g., Jest, Mocha).

Please also write in the README future improvements you'd like to make to the project if any.

Submission:

Zip your project directory or share the repo with both Alessandro and Jeffrey.

Write a brief README detailing any setup instructions or considerations.

Submit via email to:

nz@twotone.co

jeffrey@twotone.co

al@twotone.co